

Desktop Card Printers:

Installation Guide



July 2014
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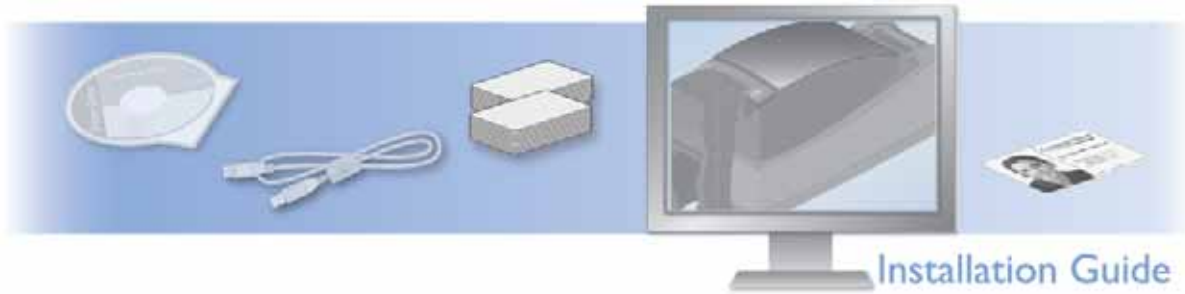
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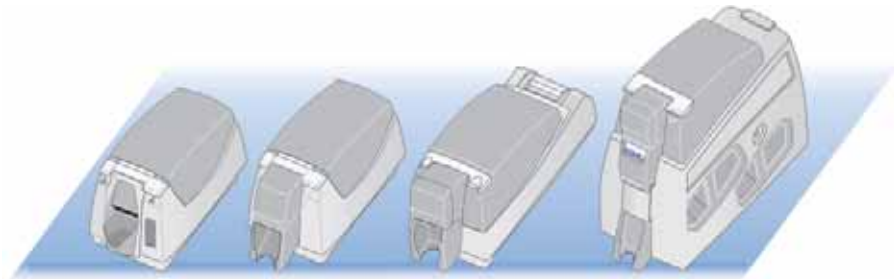


Introduction

This manual describes all the methods available for installing desktop card printers.

Desktop Card Printers

Desktop card printers apply personalization to plastic cards. Personalization includes printing, encoding magnetic stripe data, and reading or programming smart cards. Some printers also have one or two laminators, which apply a protective layer to cards.



A desktop card printer is a self-contained unit that receives data from a PC (or other computer), personalizes the card using the data, and ejects the card. Desktop card printers have one or two cards in them at a time, and are designed to issue cards where the user is, called on-demand printing or instant issuance.

About this Manual

This manual applies to desktop card printers and describes:

- The Card Printer Driver
- Supported Windows operating systems
- Preparing the printer for installation
- Windows installation

This manual is intended for anyone installing the desktop card printer. However, some procedures require a higher level of technical knowledge or experience. Use the following icons to guide you when choosing whether to perform a procedure yourself or to ask for assistance.



Operator: The green icon represents the Operator, who uses the printer to create cards and works at the direction of others in the organization.



Administrator: The tan icon represents the Administrator, who has responsibility for the system within the organization. The Administrator supervises the Operator in most cases.



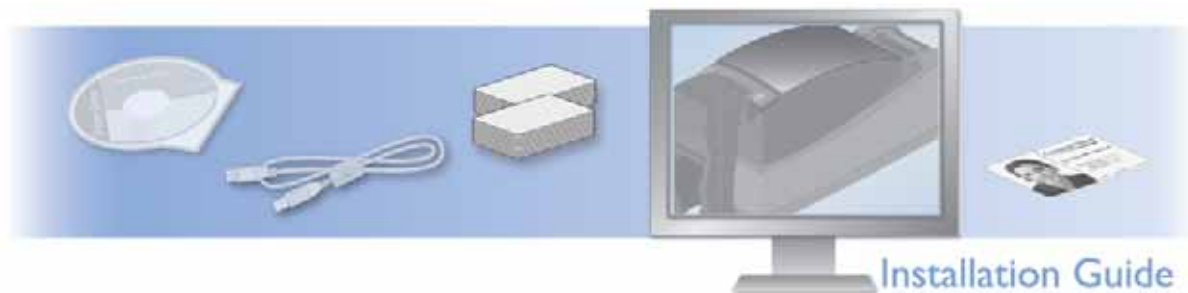
Service Provider: The blue icon represents the Service Provider, who has training and experience to solve many problems and to perform advanced setup tasks.

For More Information

The following information is available to help you use the desktop card printer:

- The *Quick Install Guide* is packaged in the carton with the printer. For the Kiosk Printer, a *Quick Reference Guide* is packaged in the carton. For most printers, the *Quick Install Guide* also is posted on the website.
- This manual, the *Desktop Card Printers: Installation Guide* (539808-001) is available from the website. It provides detailed information for all installation choices.
- For users of the Windows Card Printer Driver, *InfoCentral* is installed when the driver is installed. You can open it using the shortcut in the Start > Programs menu. *InfoCentral* is also available on the driver CD without installing the driver.
- For users of the OpenCard format, the OpenCard Option CD (558868-001) includes a Printer Guide (539398-001).
- The printhead is user-replaceable. Replacement printheads include instructions (539295-001) for replacing the printhead.
- A Firmware Update Program is available to use with the Windows Card Printer Driver and a firmware file. The download for the Firmware Update Program includes instructions (539745-001).
- The *Solutions Guide* (539707-001) provides detailed information for integrators. The *Solutions Guide* is available for download from the service website.





Before You Install

This section describes:

- Installation requirements
- Choosing your installation method
- Preparing the printer for installation

Installation Requirements

PC Requirements



Use a PC that meets or exceeds the following:

- A 32-or 64-bit processor, running at 2 GHz or faster
- Memory (RAM):
 - 1 GB or more for Windows XP
 - 2 GB or more for Windows 7, Windows 8.1, Windows Server 2008, or Windows Server 2012
- At least 15 GB free space on the hard drive
- One of the following operating systems with the latest service pack installed.
 - 32-bit:
 - ◁ Windows 7
 - ◁ Windows 8.1
 - ◁ Windows XP
 - ◁ Windows Server 2003 R2
 - 64-bit:
 - ◁ Windows 7
 - ◁ Windows 8.1
 - ◁ Windows Server 2008
 - ◁ Windows Server 2012 R2
- USB port or Ethernet network connection

If the printer does not have a built-in Ethernet port and you plan to use a direct network connection, you also need a print server.
- ID software to capture and organize the data to appear on each card.

Requirements for a Direct Network Connection



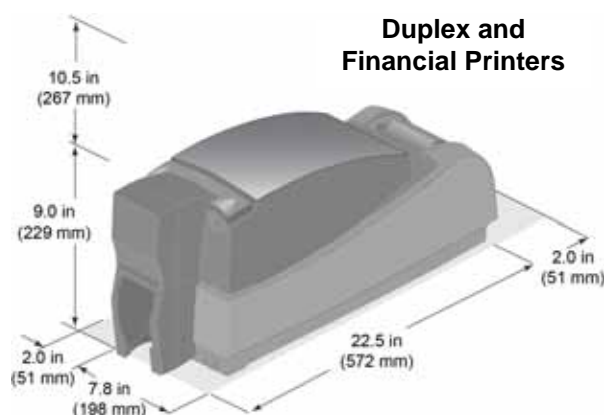
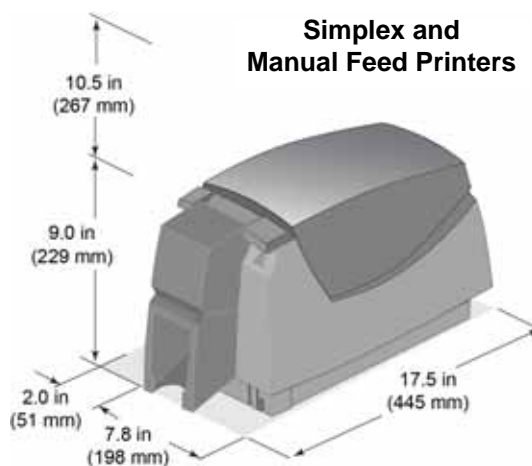
To install a printer using the Built-in Ethernet option, the following components are required:

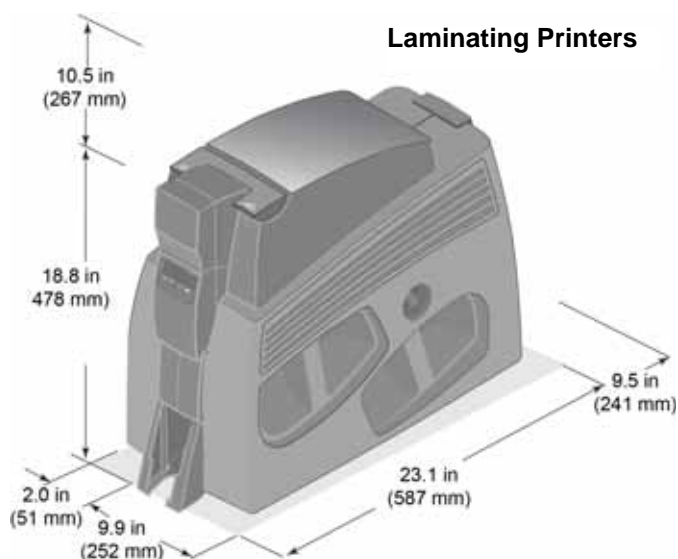
- An Ethernet network that uses the TCP/IP protocol and can run at 100 megabits per second, also called 100base-T. Printers also support 10base-T.
- A printer equipped with the Built-in Ethernet feature OR a print server. The HP Jetdirect 175x, revision C, print server has been tested.
- An Ethernet cable to connect the printer to the network. An Ethernet cable is not supplied with the printer.
- A PC that meets the requirements listed above, and is connected to, and communicating with, the network.
- You can connect up to 20 directly networked printers to one PC. If you need to install more than 20 printers on one PC, contact your service provider for assistance.

Site Requirements



- Maintain the minimum clearance around the printer as shown in the following illustrations.





- Place the printer in an environment with temperatures ranging from 60° F to 95° F (15° C to 35° C).
- Use a single phase, 3-wire, grounded receptacle.
- Keep all dust, dirt, food, and liquids away from the printer.
- Keep paper and foreign materials off the printer.
- Place the printer on a sturdy, level surface.
- Place the printer away from direct sunlight.
- Do not place the printer near heat ducts, fans, or other air vents.
- Do not use the printer for purposes other than the intended use.
- Prevent debris from entering the printer.
- Place the printer in a clean office environment, protected from any type of construction.

Electrical Requirements

The power supply is rated as follows:

Printer Model	Voltage, AC [#]	Cycle, Hz [#]	Amps
Manual Feed	100-120, 220-240	50-60	3.0
Simplex	100-120, 220-240	50-60	3.0
Duplex	100-120, 220-240	50-60	3.0
Laminating	100-120, 220-240	50-60	3.0
[#] . Self-adjusting			

Select Your Installation Method



Your installation method depends on how many users will print to the card printer, the operating system you use to send card data, and other decisions in your environment.

Will you print from a PC running a Windows operating system?

If yes, continue with ["Windows Installation Choices"](#).

Will you print monochrome cards using ASCII data and the OpenCard format?

If yes, see ["OpenCard Installation"](#).

Windows Installation Choices

Do you have a CD for installation or will you use downloaded files?

The printer ships with a CD in the printer carton. In most cases, install the driver from the CD. If you do not have access to the CD, you can install the driver from a downloaded file. See ["Obtaining the Downloaded File"](#) for more information about using downloaded files.

Will you use bidirectional (two-way) communication between the printer and driver?

The printer and driver are designed to use bidirectional communication. It is required to enable all the printer and driver features. Continue with these questions if you plan to use bidirectional communication.

If you do not plan to use bidirectional communication, see ["Unidirectional Printing"](#) for more information about installation options and instructions.

Will you connect the printer to the PC using a USB cable?

A local connection uses a USB cable between a port on the PC and the USB port on the printer. To install the printer using a local USB connection, see ["Installing the Driver Using a USB Connection"](#).

Will you connect the printer and PC to the network, with a network cable connecting the printer's network port to your network?

A direct network connection uses the optional built-in Ethernet port on the printer and a network port. To use a direct network connection, see ["Installing the Driver Using a Network Connection"](#).

Will you connect the printer to the network using a print server?

Printers with only a USB connection can be used over a network if the printer USB port is connected to a print server and the print server is connected to the network. To use a print server for networked printing, see ["Network Installation Using a Print Server"](#).

Will you connect the printer to the PC using a wireless connection?

Printers can connect wirelessly to a PC or to a network, using a wireless print server. To use a wireless connection for the printer, see ["Wireless Network Connection"](#).

Will you install more than one printer on a PC?

Do you want to send cards from one PC to two or more printers? You can install several printers on a PC, using a variety of connection methods.

For information about successfully using more than one printer from a PC, see ["Installing More than One Printer on a PC"](#).

Will you install one printer on the network, and print to it from several PCs?

You can connect one printer to several PCs on a network. There are no special concerns when sending cards from multiple PCs.

Do you want to use a printer pool, where the PC distributes the cards to the first available printer?

A printer pool collects all the card printers installed on one PC into a group and sends cards to the next available printer. To set up and use a printer pool, see ["Printer Pooling"](#).

Do you want to install the printer on one PC, and use it from another PC on the network (printer sharing)?

Printer sharing is a Windows feature that permits using resources on a different PC, when both PCs are installed on the same network. To install and use a shared printer, see ["Shared Printers"](#).

Do you want to use a newer driver in place of the one currently installed?

See ["Updates, Upgrades, and More"](#) for information about updates.

Preparing the Printer

This section describes:

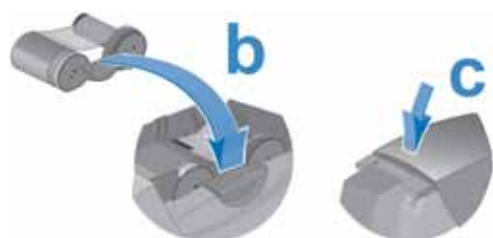
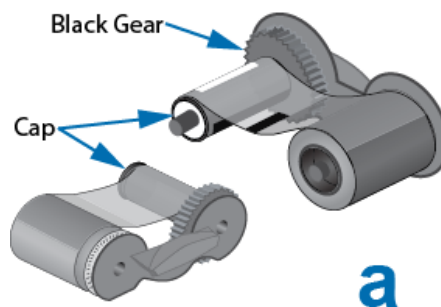
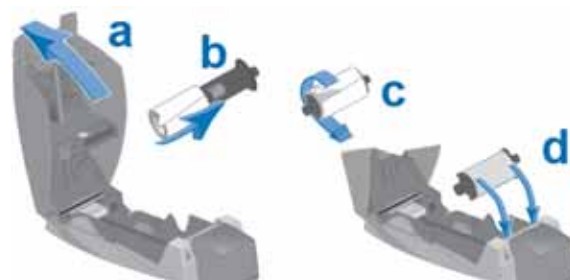
- ["Installing Supplies and Powering On the Printer"](#)
- ["Network Address Settings"](#)

Installing Supplies and Powering On the Printer

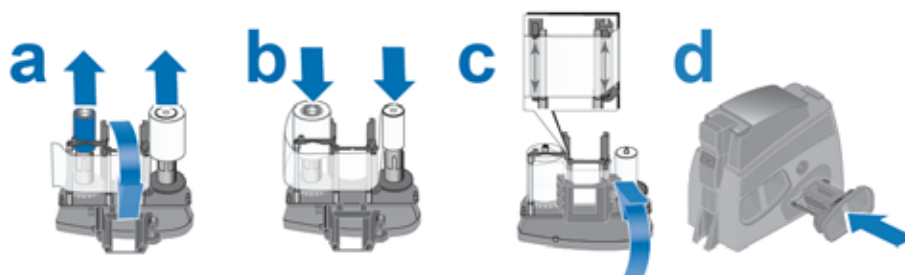


This section provides the steps for installing supplies and powering on the printer.

- 1 Unpack the printer.
- 2 Install the continuous cleaning sleeve.
- 3 Load the print ribbon on the cartridge.
 - Place the full spool near the slotted disk.
 - Place the empty spool with the cap near the black gear.
- 4 Install the loaded print ribbon cartridge in the printer.



- 5 Install the laminator supply material (if the printer has a laminator).



- 6 Load cards in the input hopper (if the printer has a hopper).

Do not connect the printer and PC at this time.

- 7 Power on the PC or host computer. Make sure it is fully operational before connecting the printer.



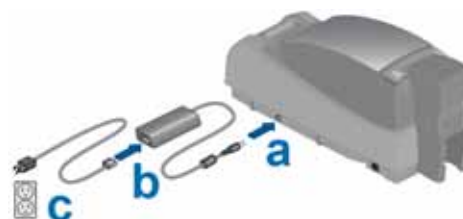
- 8 For a printer connected using the built-in Ethernet port on the printer, connect the network cable to the printer and to the network.

Important: For a printer connected using a USB cable or a print server, do not connect the USB cable at this time. Continue with step 9.

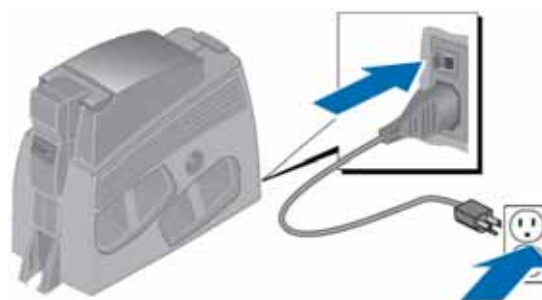


- 9 Power on the printer.

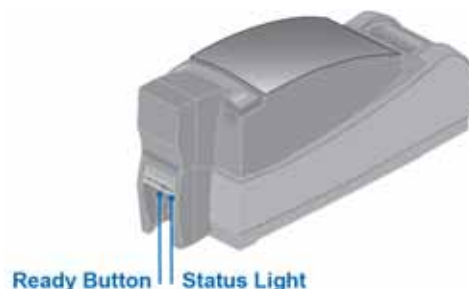
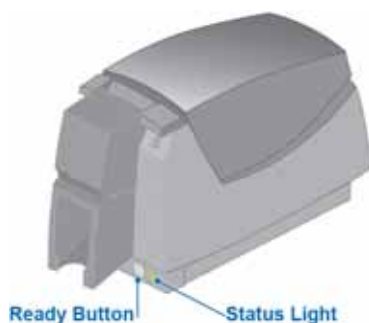
- Connect the power supply to the printer.
- Connect the power cable to the power supply.
- Connect the power cable to a facility power source.



- For printers with laminators, push the power switch to On.



- 10** When the printer powers on, the status light displays a series of patterns. The location of the status light depends on the printer model:



- 11** The status light displays the following:

- Amber when the printer is powered on.
- A series of colors as it initializes.
- Steady green when the printer is ready.



For printers connected using a USB cable between the printer and PC, continue with ["Installation on Windows"](#).

For printers connected over a network, continue with ["Network Address Settings"](#).

Network Address Settings

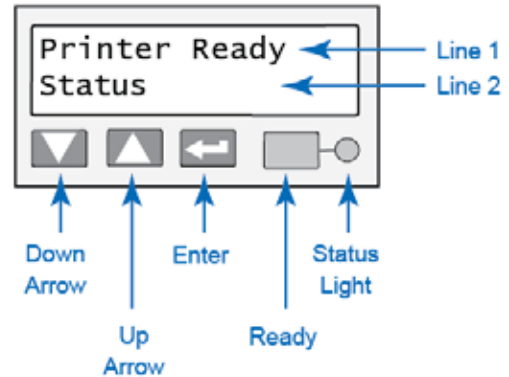
The Address Mode determines how the network address of the printer is assigned. The choices are DHCP and Static IP. DHCP (Dynamic Host Configuration Protocol) means that the network assigns the IP address to the printer. Static IP means that you set the IP address assigned by your network support personnel. Network support personnel can tell you whether the network uses DHCP or static IP addressing.

Locate the Current Address Mode

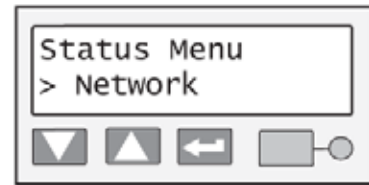
- 1** Make sure the printer is connected to the network using an Ethernet cable and is powered on.



- 2 Begin when the LCD panel shows "Printer Ready" on Line 1 of the display.
- 3 Press the Enter key to enter the menu system.
- 4 Make sure "Status" appears on Line 2 and press the Enter key.

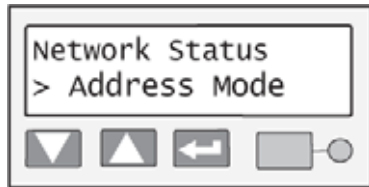


- 5 With "Status Menu" displayed on Line 1, press the Up or Down Arrow key to display "Network" on Line 2.



- 6 Press the Enter key. "Address Mode" displays on Line 2.

- 7 Press the Enter key to view the Address Mode. The options are DHCP or Static IP.



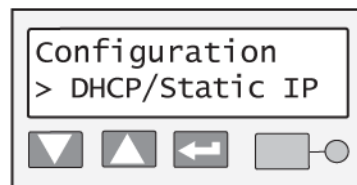
- If the Address Mode is DHCP and that is what you plan to use, continue with ["Retrieve DHCP Values"](#).
 - If the Address Mode is Static IP and you plan to use DHCP, see ["Change the Address Mode to DHCP"](#).
 - If the Address Mode is DHCP and you plan to use Static IP, see ["Change the Address Mode to Static IP"](#).
 - If the address mode is Static IP and that is what you plan use, see ["Change Static IP Values"](#).
- 8 Press the Enter key repeatedly to return to the Main Menu. "Exit" displays on Line 2. Continue with the section you selected in step 7.

Change the Address Mode to DHCP

- 1 With "Main Menu" displayed on line 1, press the Up or Down Arrow key to display "Configuration"
- 2 Press the Enter key to enter the Configuration menu.



- 3 With "Configuration" displayed on Line 1, press the Up or Down Arrow key to display "DHCP/Static IP" on Line 2.
- 4 Press the Enter key. The current Address Mode value displays on Line 2.
- 5 Press the Up or Down Arrow key to display DHCP.
- 6 Press the Enter key.
- 7 Apply/Restart" appears on Line 2. Press the Enter key to restart the printer.
- 8 Continue with ["Retrieve DHCP Values"](#).

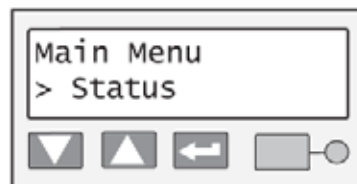


Retrieve DHCP Values

Continue with the following steps after confirming the Address Mode or changing the Address Mode to DHCP.

- 1 Begin when the LCD panel shows "Printer Ready" on Line 1 of the display.
- 2 Enter the Status menu.

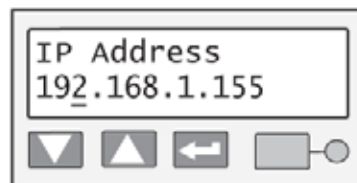
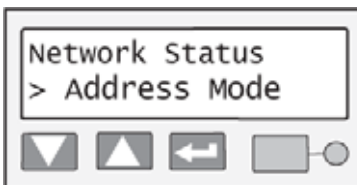
- With "Main Menu" displayed on line 1, press the Up or Down Arrow key to display "Status".
- Press the Enter key to enter the Status menu.



- With "Status Menu" displayed on Line 1, press the Up or Down Arrow key to display "Network" on Line 2.



- 3 Press the Enter key. "Address Mode" appears on Line 2.
- 4 Press the Up or Down Arrow key to display IP Address on Line 2.
- 5 Press the Enter key to display the IP Address.



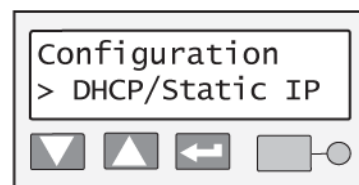
- 6 Write down the IP Address.
- 7 Press the Enter key to return to the Network Status menu. "Subnet Mask" displays on Line 2. Press the Enter key to display the Subnet Mask.
- 8 Press the Enter key to return to the Network Status menu. "Gateway Addr" displays on Line 2.
- 9 Press the Enter key to display the Gateway Address.
- 10 Press the Enter key to return to the Network Status menu. Press the Up or Down Arrow key to display "Exit" on Line 2.
- 11 Press the Enter key repeatedly to return to the "Printer Ready" display.



Change the Address Mode to Static IP

Continue with the following steps after determining the current Address Mode.

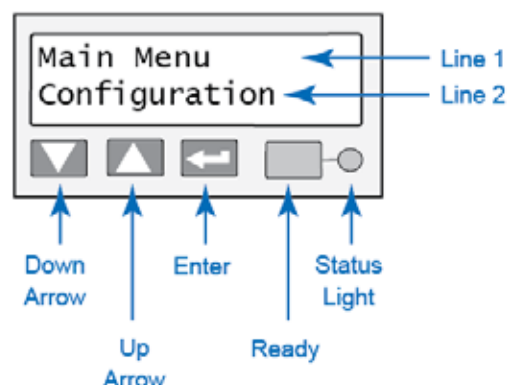
- 1 With "Main Menu" displayed on line 1, press the Up or Down Arrow key to display "Configuration".
- 2 Press the Enter key to enter the Configuration menu.
- 3 With "Configuration" displayed on Line 1, press the Up or Down Arrow key to display "DHCP/Static IP" on Line 2.
- 4 Press the Enter key. The current Address Mode value is displayed on Line 2.
- 5 Press the Up or Down Arrow key to display Static IP.
- 6 Press the Enter key. Continue with ["Change Static IP Values"](#).



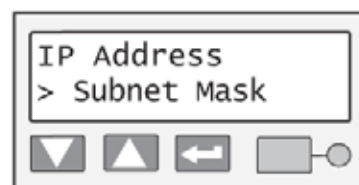
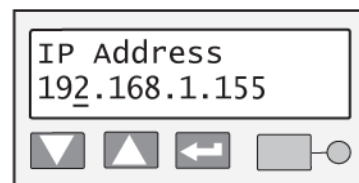
Change Static IP Values

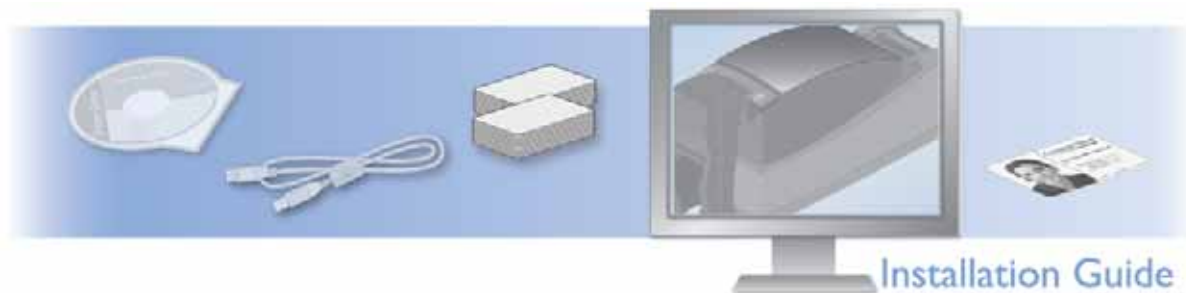
Continue with the following steps after setting the Address Mode to Static IP or verifying that the Address Mode is Static IP.

- 1 If needed, move to the Configuration menu.
 - With "Main Menu" displayed on line 1, press the Up or Down Arrow key to display "Configuration".
 - Press the Enter key to enter the Configuration menu.



- 2 With "Configuration" displayed on Line 1, press the Up or Down Arrow key to display "IP Address" on Line 2.
- 3 Press the Enter key to select IP Address.
- 4 The printer shows the current IP address and a cursor appears under the first byte of the address. (The address byte shows three digits when it can be changed and the cursor appears under the right-most digit.)
- 5 Press the Up or Down Arrow key to change the numbers of the IP address.
- 6 When the first byte is correct, press the Enter key to move to the second byte.
- 7 Repeat for the third and fourth byte of the IP address. After entering the fourth byte of the address and pressing the Enter key, "Subnet Mask" displays on Line 2 of the LCD panel.
- 8 Press the Enter key. The current Subnet Mask value appears with the cursor under the first byte. Set the subnet mask using the same process as the IP address. After entering the fourth byte and pressing the Enter key, "Gateway Addr" displays.
- 9 Press the Enter key. The current gateway address value appears with the cursor under the first byte. Set the gateway address using the same process as the IP address.
- 10 After entering the fourth byte of the gateway address and pressing the Enter key, "Apply/Restart" displays.
- 11 Press the Enter key to apply the values and restart the printer.





Installation on Windows

This section provides information about installing the printer and driver on a PC running a Windows operating system. See ["Windows Installation Choices"](#) for installation choices.

This section describes how to install the printer on a PC with a Windows® operating system. See the `releasenotes.rtf` file (delivered with the Card Printer Driver) for detailed information about supported Windows operating systems.

Installing on a Windows Operating System

- Bidirectional communication
 - ["Obtaining the Downloaded File"](#)
 - ["Installing the Driver Using a USB Connection"](#)
 - ["Installing the Driver Using a Network Connection"](#)
 - ["Network Installation Using a Print Server"](#)
 - ["Installing More than One Printer on a PC"](#)
 - ["Wireless Network Connection"](#)
 - ◁ ["Wireless Network Connection with an Existing Network"](#)
 - ◁ ["Wireless Network Connection with a Peer \(Ad Hoc\) Network"](#)
 - ◁ ["Install and Set Up the Wireless Print Server"](#)
 - ["Printing Cards Using Bidirectional Communication"](#)
- Unidirectional communication
 - ["Unidirectional Printing"](#)
 - ["Installing the Unidirectional Driver"](#)
- ["Printer Pooling"](#)
- ["Shared Printers"](#)

For troubleshooting, see ["Installation Troubleshooting"](#).

For information on updating an installed driver, see ["Updates, Upgrades, and More"](#).

Installing the Driver with Bidirectional Communication

You can install the driver either from the CD that ships with the printer or from a downloaded file.

Most of the installation process is the same whether you install from a downloaded file or from a CD. Use the following instructions to install the driver. Differences are noted where necessary.

You can install the driver using either of the following:

- ["Installing the Driver Using a USB Connection"](#)
- ["Installing the Driver Using a Network Connection"](#)

Obtaining the Downloaded File



The printer ships with a CD in the printer carton. In most cases, you install the driver from the CD. If you do not have access to the CD, you can install the driver from a downloaded file.

Before installing the printer, do the following:

- 1 Obtain the download file using one of the following methods:
 - Go to the Drivers and Downloads page of the website (or the Products page for the printer) and select the driver for your printer and operating system. If the License Agreement displays, accept the agreement. Save the file to a location on your PC, such as C:\Temp.
 - Receive the file on a portable storage medium, such as a CD or USB drive, and copy it to your hard drive.
 - Receive the file by email and save it to your hard drive.

Tips for Success

- The downloaded file has a name similar to "XP_Series_XXBIT_XX_x.exe."
- You can use the same downloaded file to install the driver on multiple PCs. The license agreement you accept during download applies to all installations of the driver.

Installing the Driver Using a USB Connection



- 1 Prepare the printer for installation. See "[Preparing the Printer](#)" for the steps to follow.
- 2 Log on to the PC as a user with Administrator access.
- 3 Do one of the following:
 - If you are installing from a downloaded file, locate the file on the PC. Double-click the downloaded file to start the card printer installation.

OR

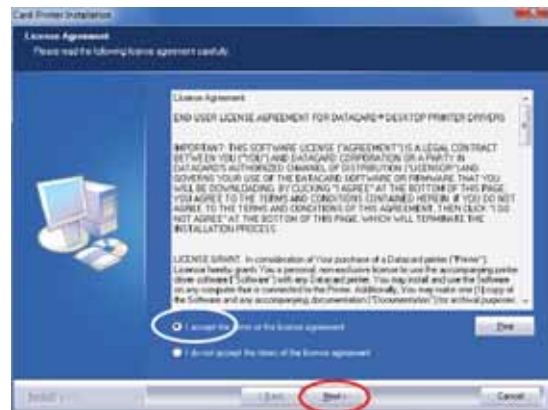
- If you are installing from the CD, insert the CD in the PC's drive.

If the Autoplay dialog box displays, click **Run CdBrowser.exe**.

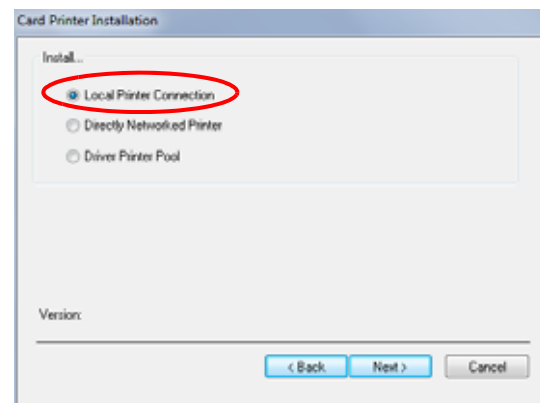
When the driver installation window opens, click "Install the Printer."



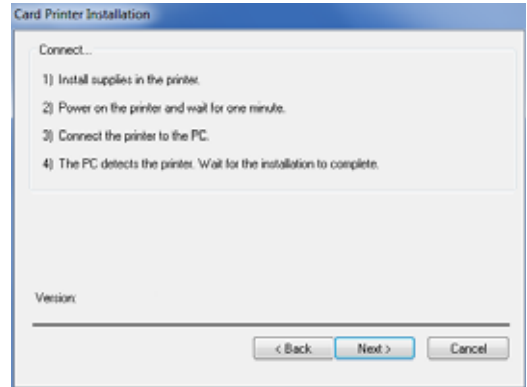
- 4 Click "Yes" on the User Account Control dialog box if it displays.
- 5 Accept the license agreement and then click "Next."



- 6 Select "Local Printer Connection" and click "Next."

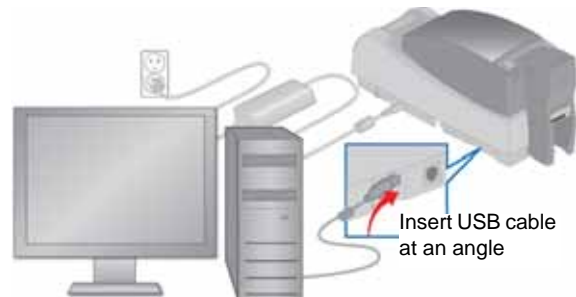


- 7 Verify that you have prepared the printer as instructed on the Connect dialog box.

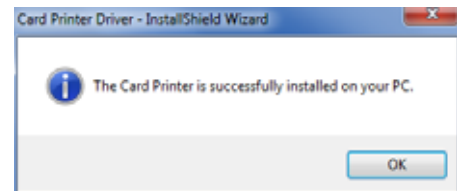


- 8 Connect the USB cable to the printer. Position the USB cable at an angle to properly insert it into the printer.

The PC detects the printer and completes the installation.



- 9 When the completion message displays, click **OK**.



- 10 The installation program places an icon for the printer on the Windows toolbar. Double-click the icon to open the Printer Toolbox. (Or, click Start > All Programs > Datacard Card Printers > Printer Name.)

- 11 Click "Print Sample Card" to print a sample card from the driver.



Installation is complete when the sample card prints successfully.



Installing the Driver Using a Network Connection



- 1 Prepare the printer for installation. See ["Preparing the Printer"](#) for the steps to follow.
- 2 Obtain the IP address of the printer. See ["Network Address Settings"](#) for details.
- 3 Log on to the PC as a user with Administrator access.
- 4 Do one of the following:
 - If you are installing from a downloaded file, locate the file on the PC. Double-click the downloaded file to start the card printer installation.

OR

- If you are installing from the CD, insert the CD in the PC's drive.

If the Autoplay dialog box displays, click **Run CdBrowser.exe**.

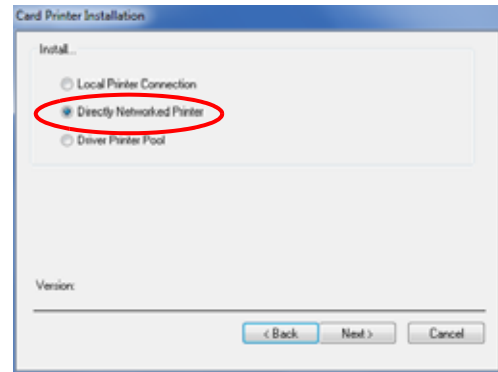
When the driver installation window opens, click "Install the Printer."



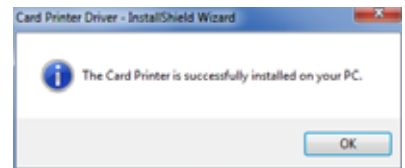
- 5 Click "Yes" on the User Account Control dialog box if it displays.
- 6 Accept the license agreement and then click "Next."



- 7 Select “Directly Networked Printer” and click “Next.”



- 8 When the completion message displays, click **OK**.



- 9 The Printer Properties dialog box opens.

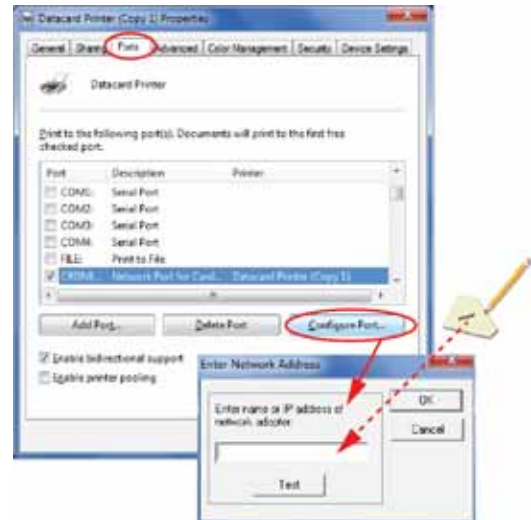
- 10 Select the Ports tab.

- 11 Select the printer and then click “Configure Port.”

- 12 Enter the printer IP address in the Enter Network Address dialog box.

If you are installing using a print server, enter the IP address of the print server.

- 13 Click “Test.”



- 14 Wait for the “Successfully communicated” message and click **OK**.

If the “Unable to communicate” message displays, troubleshoot a communication problem. See ["Installation Troubleshooting"](#).

- 15 Close the Enter Network Address and Printer Properties dialog boxes. A message displays that the printer has been identified.

- 16 Print a sample card.

- a Open the Printer Toolbox
(click Start > All Programs > Datacard Card Printers > Printer Name).
- b Click “Print Sample Card.”

Installation is complete when the sample card prints successfully.

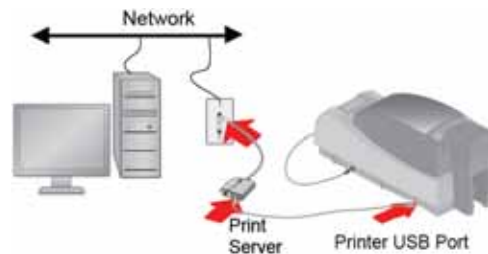


Network Installation Using a Print Server



Printers that do not have an Ethernet port can be used over a network by connecting the printer to a print server that is connected to the network. Use the following instructions to set up your print server and then complete the installation as described in ["Installing the Driver Using a Network Connection"](#).

- 1 Load supplies and then power on the printer. See ["Preparing the Printer"](#).
- 2 Connect the printer to the print server using a USB cable. (Position the USB cable at an angle to properly insert it into the printer.)
- 3 Connect the print server to the network using an Ethernet cable.
- 4 Set up the print server on the network. Refer to your print server documentation for setup information.
- 5 Obtain the print server IP address (or network name) and record it.



Continue with step 3 in ["Installing the Driver Using a Network Connection"](#) to complete the installation.

Installing More than One Printer on a PC



There are several options for connecting more than one printer to a PC, or for connecting more than one PC to a printer.

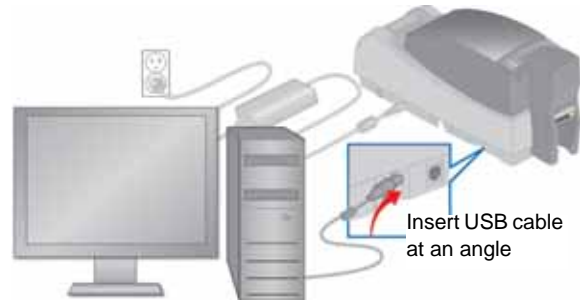
- Install two or more printers on one PC using USB ports. See ["Installing more than one printer using a USB connection"](#) for details.
- Install more than one networked printer on a PC using the built-in Ethernet port on the printer. Each installation follows the same procedure. See ["Installing the Driver Using a Network Connection"](#).
- Install more than one networked printer on a PC using a print server. Each installation follows the same procedure. See ["Network Installation Using a Print Server"](#).
- Install multiple printers on a PC using a combination of connection methods. For example, connect one or more printers to the PC using a USB connection, and connect others through a network (using direct networking or Windows printer sharing).
- Use more than one printer installed to a PC as a printer pool. The PC must be running a Windows operating system. The operating system sends each print job to the next available printer. See ["Printer Pooling"](#) for details.
- Install a printer on a client PC when the printer is connected to a host PC and both PCs are connected to a network (using Windows printer sharing). See ["Shared Printers"](#) for more information.

Installing more than one printer using a USB connection

Tips for success

- Connect and install one printer at a time. The PC cannot run two or more installation programs at the same time.
Install the first printer following the steps in ["Installing the Driver Using a USB Connection"](#). Then, install any additional USB-connected printers as described below.
 - The USB protocol allows devices to be connected to the PC through another USB device (daisy-chained). USB also uses hubs to which multiple USB devices (including other hubs) can be connected (cascaded).
 - Up to five powered hubs can be used between the printer and the PC. Card printers do not have ports to support daisy chaining. If you need to connect two card printers to a PC with one USB port, obtain a powered USB hub to which both printers can be connected.
 - Every other hub in a daisy chain must be powered.
 - The printer must be powered on for the PC to detect it. It must remain powered on during installation.
- 1 Load supplies and then power on the printer. See ["Preparing the Printer"](#) for the steps to follow.
 - 2 Log on to the PC as a user with Administrator access.

- 3 Connect the USB cable to the USB port on the PC and the printer. Position the USB cable at an angle to properly insert it into the printer.



- 4 The operating system detects the new device and begins installation. Depending on your system's current setup, what you see during the installation process varies.

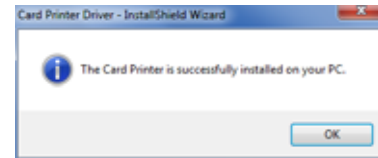
— A pop-up window may display during installation.

If the operating system does not display a pop-up window within a few minutes, check all cables and connections to the printer. Then look at the Printers window to see if the icon for the new printer displays. The software sometimes installs without displaying the pop-up window. If the icon is not present, see ["Installation Troubleshooting"](#) for more information.



— The operating system usually uses the existing driver files to install the driver for this printer. Insert the driver installation CD only if you are prompted for it.

- 5 A message displays when the printer has been installed successfully.



Using more than one printer on a PC



When you have more than one printer on a PC, keep the following in mind:

- Select the printer to use in your ID software or other application. Card jobs are sent to the printer you select, even if more than one card printer is attached to the PC.
- When messages display, the title bar of the message box displays the name of the printer causing the message. Keep track of which printer has which name.
- Each printer has its own icon in the Printers window, and each printer has separate Printer Properties and Printer Preferences dialog boxes. Settings are not shared among printers.
- The PC has a Printer Toolbox for each installed printer. Open each Printer Toolbox by selecting Start > All Programs > Datacard Card Printers > Printer Name. When the Printer Toolbox is open, the printer name displays in the title bar.

Wireless Network Connection



To install the printer using a wireless network connection, you must have the following:

- Equipment, including cables, for the wireless connection method you have chosen.
- Knowledge of wireless communication.

For wireless printing, the card printer is connected to a bidirectional wireless print server using a USB cable. The wireless print server receives data from another wireless device. The sending device can be one of the following:

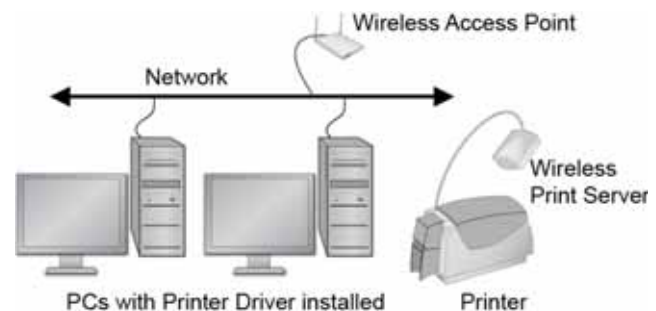
- Part of a existing network. See ["Wireless Network Connection with an Existing Network"](#)
- Attached to a PC (peer-to-peer). See ["Wireless Network Connection with a Peer \(Ad Hoc\) Network"](#)

Wireless Network Connection with an Existing Network

A networked connection includes the typical components of an organization's existing network, including servers, cables, routers, and PCs. The network must be enabled for wireless communication through one or more access points.

PCs on the network must install the driver for the card printer to send cards to the printer. PCs send data over the network, which transmits the data through an access point to the wireless print server and printer. The printer returns status information to the PC using the same path.

The printer location is limited by the range and availability of access points. This method also is called infrastructure mode.



Using an existing wireless network:

- Make sure you have the following:
 - A bidirectional wireless print server with cables and documentation.
 - A wireless network with one or more access points available to the printer.
 - A PC with a wireless adapter that uses the same wireless protocol (such as 802.11g) as the print server.
 - For a wired or wireless infrastructure (existing network) connection, the PC must be connected to, and working on, an Ethernet network.

Note: A wireless network connection was tested using the HP Jetdirect 380x, revision A, bidirectional wireless print server. The print server was connected to the printer using a USB cable.

- Your network support personnel can tell you whether the network uses DHCP or static IP addressing.
 - If it uses static IP addressing, obtain the IP address, subnet mask, and gateway address from the network support personnel. You then assign these values to the print server.
 - If the network uses DHCP, you obtain these values from the print server configuration utility and use them when setting up the PCs that send jobs to the printer.
- Most networks use encryption to protect data transmitted using the access points. Your network support personnel can provide the information you need to set up encryption on the wireless print server.

To continue, see ["Install and Set Up the Wireless Print Server"](#).

Wireless Network Connection with a Peer (Ad Hoc) Network

A peer-to-peer network is made up of PCs equipped with wireless adapters and the printer with a wireless print server. The PCs have the driver for the card printer installed, and transmit print data from the PC's wireless adapter to the wireless print server. The printer returns status information to the PC using the same path.



A peer-to-peer network also is called a local network or an ad hoc network.

Using a peer-to-peer wireless network

- Make sure you have the following:
 - A bidirectional wireless print server with cables and documentation.
 - For each PC that will send jobs to the printer, a wireless adapter that uses the same wireless protocol (such as 802.11g) as the print server.
- Note:** A wireless network connection was tested using the HP Jetdirect 380x, revision A, bidirectional wireless print server. The print server was connected to the printer by a USB cable.
- Obtain information about setting up encryption if the peer-to-peer network will use it.

To continue, see ["Install and Set Up the Wireless Print Server"](#).

Install and Set Up the Wireless Print Server

- 1 Log on to the PC as a user with Administrator permissions.
- 2 Prepare the printer for installation. See ["Preparing the Printer"](#) for the steps to follow.
- 3 Install the wireless network adapter, including the adapter's driver files, on a nearby PC. Follow the instructions provided with the adapter to install it.

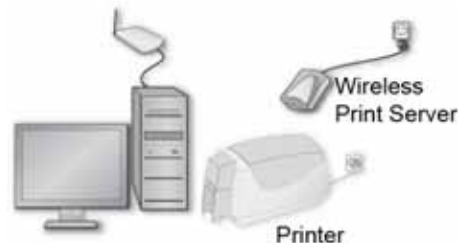


- 4 Change settings in the utility for the wireless network adapter (if needed) to match the default settings for the wireless print server. Refer to the print server documentation for the settings to use.



- 5 Power on the wireless print server.

For best results, try to set up the print server without connecting it to the printer. (This sequence might be different from the one the print server recommends). If the wireless network adapter utility does not find the print server, you might need to connect the print server to the printer.



- 6 Insert the wireless print server CD in the PC with the wireless network adapter. Follow the instructions provided with the print server to set it up.

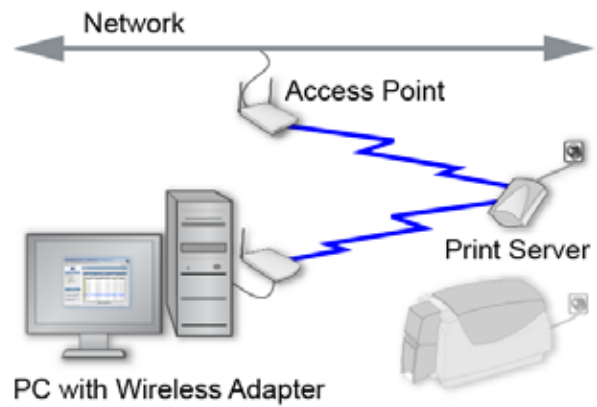
Record the values you use so you can repeat the setup for other devices or PCs.



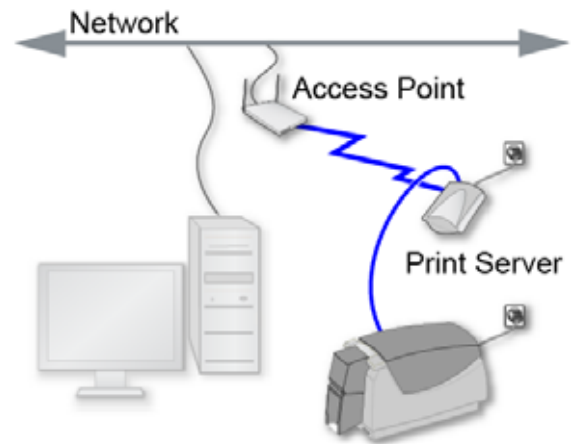
7 Do one of the following:

Existing Network:

- Set up the print server so that it communicates with the network through the access point. Your network support personnel can provide the network settings to use.



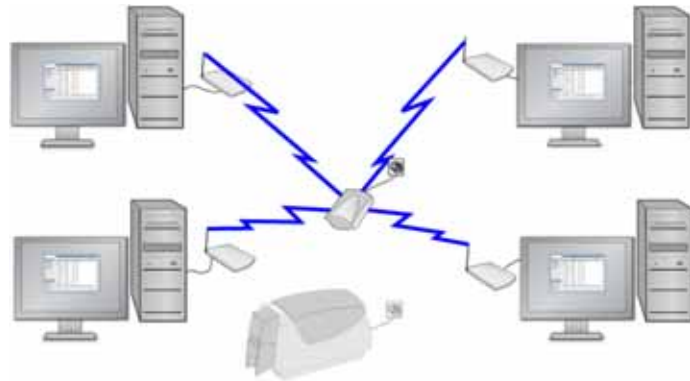
- Connect the print server and printer using a USB data cable (if it is not already connected). You can remove the wireless adapter from the PC. Future communication occurs over the network.



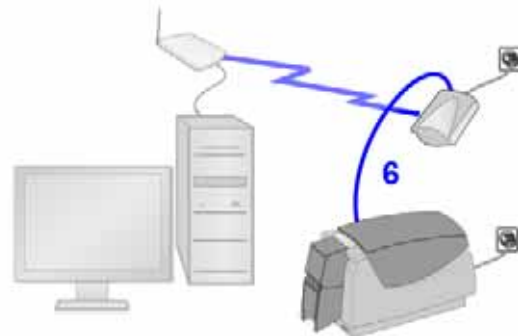
OR

Peer-to-Peer Network:

- On each PC that will print, set the wireless adapter to communicate with the print server.

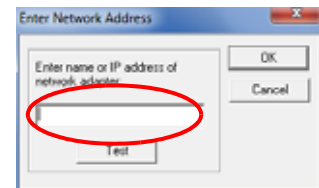


- Connect the print server and printer using a USB cable.

**Install and Set Up the Driver**

Install the driver for the card printer on each PC that will send jobs to the printer. Follow the steps in ["Installing the Driver Using a Network Connection"](#) with the following changes:

- Make sure that each printer has a unique name (such as Card Printer 1 or Card Printer 2) on the PC.
- Make sure that you are logged in as the Administrator. (Users without Administrator permission cannot complete this task successfully.)
- In step 12, enter the print server name or the IP address of the print server. If your network uses DHCP, use the print server name and not the IP address, which the network can change.
- The Print Sample Card button in the Printer Toolbox is enabled when the printer and driver are communicating. If the Print Sample Card button is not available, check for the following:
 - The printer is suspended. Click Resume.
 - The printer is busy processing a print job sent by another user on the network.
 - The printer is paused. Check that the Status Light on the front of the printer is steady green.



See ["Printing Cards Using Bidirectional Communication"](#) to print cards.

Printing Cards Using Bidirectional Communication



In the Windows environment, the typical printer installation uses bidirectional communication. See ["Installation on Windows"](#) for details about installing the printer. When bidirectional communication between the printer and driver are active, the following occurs:

- The driver “reads” the type of printer connected and its options (such as duplex or magnetic stripe), and then enables the settings (in the Printer Toolbox and Printing Preferences) for the features available.
- The driver “reads” the type of ribbon in the printer (or, for manual-feed printers, whether it is set for rewritable cards) and enables settings that correspond to the capabilities of the print media.
- The driver monitors the printer, and reads any errors the printer issues. The driver displays a message when it reads an error. You must correct the problem with the printer to continue.
- When you select some settings, such as edge-to-edge printing, the driver sends the settings to the printer.
- When you click some buttons, such as “Clean Printer,” the driver sends a command to the printer and the printer implements the process.
- When you send a card to print, the following occurs:

The driver:

- Renders the data so that it can be used by the printer
- Polls the printer to determine whether it is busy or ready to print
- Sends the card data to the printer
- Reacts to information returned by the printer (such as error messages)

The printer:

- Receives the card data and prints the card
 - Issues status and other information
- When the driver communicates with a network printer, it waits until the printer is “available” before sending card data. The time between sending a card and the start of printing is not predictable when you are printing over a network.

The Printer Toolbox and the Printing Preferences dialog box provide information about the printer features and status. See *InfoCentral > Features > Printer Toolbox* to learn about the Printer Toolbox. See *InfoCentral > Advanced > Printing Preferences* to learn about using Printing Preferences. See *InfoCentral > Features* to learn about printer features and how to specify settings for the features.

Unidirectional Printing



"Unidirectional" means that the driver sends data to the printer, but does not receive any data back from the printer—the communication is in one direction only. A unidirectional driver can be installed on PCs running a Windows operating system. A unidirectional driver is included on the driver CD or in the driver download files.

You must install the unidirectional driver to use the printer with Windows Terminal Services, and in environments that require Terminal Services, such as Citrix Presentation Server.

Many features of the driver depend on bidirectional communication, including when to send data to the printer. See ["Printing Cards in the Windows Terminal Services Environment"](#) for information about how to operate the printer in a unidirectional environment. Consider sharing this information with operators.

Your success might depend on the amount of data per card and number of cards sent. For best results, use simple card layouts and send individual cards, or send batches with a small number of cards to print at one time.

Installing the Unidirectional Driver

This section includes:

- ["Before You Install"](#)
- ["Unidirectional Driver Installation for Windows XP and Windows Server 2003"](#)
 - ["Network Unidirectional Installation"](#)
 - ["USB Unidirectional Installation"](#)
- ["Unidirectional Driver Installation for Windows 7, Windows 8.1, Windows Server 2008, and Windows Server 2012"](#)
 - ["Network Unidirectional Installation"](#)
 - ["USB Unidirectional Installation"](#)

Before You Install

Do not rename the unidirectional printer

The printer name, (*brand*) UniDir, must be used for the unidirectional driver. Do not change this part of the printer name. If you have more than one unidirectional driver installed, you can change the (copy *n*) at the end of the printer name if needed. For example, one PC could have two printers, with names Datacard UniDir and Datacard UniDir Net, that use the unidirectional driver. The brand of your printer might be different.

Remove any existing drivers for the card printer

Before you install the unidirectional driver with Terminal Services, remove existing drivers for the card printer. See ["Removing a Printer from a Windows PC"](#) to remove any currently installed card printer drivers.

You can install a printer for unidirectional operation after the existing drivers are removed.

Unidirectional Driver Installation for Windows XP and Windows Server 2003



These instructions apply only to PCs running Windows XP or Windows Server 2003.

(Note: The following procedure might differ slightly depending on the version of Windows installed on your system.)

Network Unidirectional Installation

Windows XP and Windows Server 2003:

- Use the files on the driver CD. The driver CD contains files to install the Network Ports, which are required to install the unidirectional driver on a network.
 - Obtain the following information from your network support personnel.
 - You need:
 - ◁ Address Mode—either DHCP or Static IP
 - ◁ IP address for Static IP address mode
 - ◁ Network name if using a print server
 - You also might need:
 - ◁ Gateway address
 - ◁ Subnet mask
 - Your network personnel might ask you for the network name (if you are using a print server), the printer's current IP address if using DHCP, or the MAC Address of the device.
- 1 Load supplies and then power on the printer. See ["Preparing the Printer"](#) for the steps to follow.
 - 2 Power on the print server, if used. Record the default print server name, usually provided on the device label, or set the print server to use the IP address provided by your network support personnel. See the print server documentation for instructions.
 - 3 Obtain or set the IP address of the printer if you are not using a print server. See ["Network Address Settings"](#) for details.
 - 4 Log on to the PC as a user with Administrator permissions.
 - 5 Insert the driver CD in the PC. When the Card Printer Installation window opens, click "Exit" to close the window.



- 6 Browse the driver CD to locate the Support\Net Port Mon Install folder.

Make sure that you locate the correct file for your operating system (32-bit).

- 7 Double-click the setup.exe file in the folder to start the installation of a series of ports named CRDNET x (where x is a number).



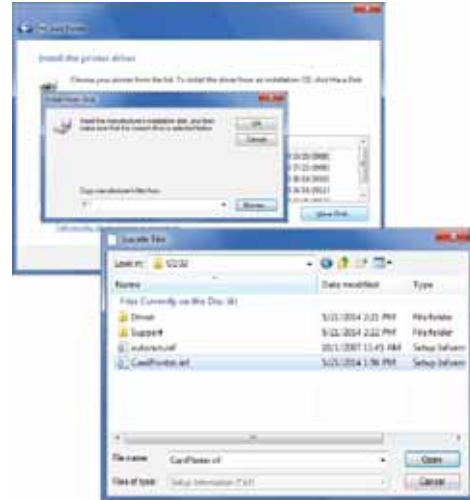
- 8 Follow the prompts to complete port installation.



- 9 Open the Printers window.
- 10 Double-click "Add Printer" to start the installation and click Next.
- 11 Select "Local Printer." Make sure that the option to automatically detect and install the printer is NOT checked. Click "Next."
- 12 In the Use the Following Port list, select "CRDNET x " (where x is a number) and then click "Next."

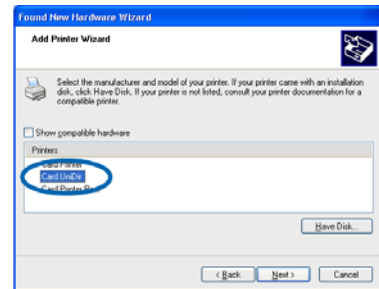


- 13** In the manufacturers and printers list page, click "Have Disk" and browse to the location of the driver files (such as the driver CD).



- 14** Select the CardPrinter.inf file and follow the prompts to continue.

- 15** Select the unidirectional driver from the Printers list. The name includes UniDir (or a similar word). Click "Next."



- 16** Click "Finish" to complete the driver installation.

- 17** Power the printer off and then back on.

- 18** Restart Windows.

- 19** Open the Printers window.

- 20** Open the Printing Preferences dialog box.

- 21** Open the Advanced page.

- 22** Change the Printer Type setting to match the model shown on the front of the printer. Click OK on the Advanced page to save your changes. Close the Printing Preferences window.



- 23** Open the Advanced page of Printing Preferences again. (Changing the Printer Type setting might change the available options.)

- 24** The default Print Ribbon Type is YMCKT. If a different type of ribbon is installed in the printer, change the Ribbon Type.

- 25** Change other settings, such as Duplex Method or Mag Stripe Encoding Format, as needed to match the printer. Close the Printing Preferences dialog box.

- 26** Open the Printer Properties dialog box.

- 27** Select the Ports tab.

28 Select the port for the printer, and then click "Configure Port."

29 Enter the name or IP address of the printer or print server in the Enter Network Address dialog box.

For best results if you are using a print server and DHCP, use the print server name (not the IP address, which the network can change).

30 Click the Test button. If the "Successfully communicate" message does not display, see ["Installation Troubleshooting"](#).

31 Close the Enter Network Address dialog box.

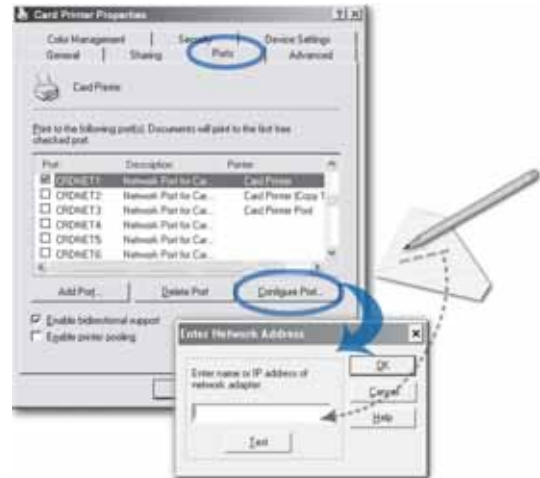
32 On the General tab of the Printer Properties dialog box, click "Print Test Page" to print the Windows test page.

33 Verify that the Windows test page prints. The image on the card will be cropped.

34 Click OK when the card prints, and then close the Printer Properties page.

If you have not restarted the PC and the printer, the Windows test page might not print or might cause an error at the printer. Restart the printer: Do not follow Windows troubleshooting.

To continue, see ["Set Up the Unidirectional Printer"](#).



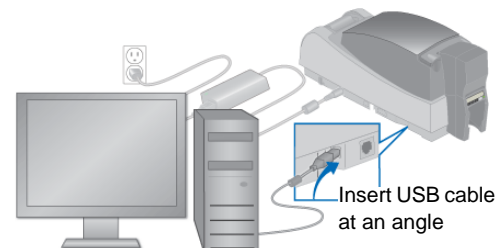
USB Unidirectional Installation

Windows XP and Windows Server 2003:

- 1 Load supplies and then power on the printer. See ["Preparing the Printer"](#) for the steps to follow.
- 2 Insert the driver CD in the PC's drive. When the Card Printer Installation window opens, click "Exit" to close the window.



- 3 Connect the printer to the PC using the USB data cable. Position the USB cable at an angle to properly insert it into the printer.



- 4 The Found New Hardware wizard opens. Click "No, not this time" and then click "Next."

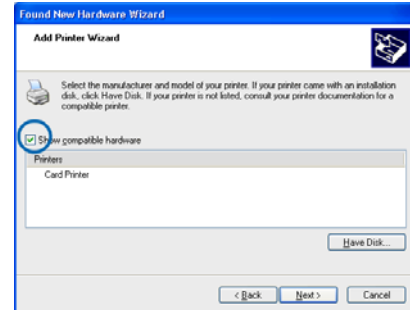


- 5 Select to install the driver from a list or from a specific location and then click "Next."
- 6 Select "Do not search" and then click "Next."
- 7 On the Hardware Type window, select "Printers" and then click "Next."
- 8 On the Add Printer Wizard window, click "Have Disk." Browse to the driver CD and select the CardPrinter.inf file.

Make sure that you browse to the correct location for your operating system (CD32).

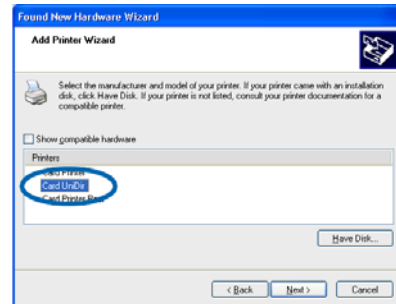


- 9 Follow the prompts to continue. If needed, remove the check mark next to "Show compatible hardware" to display more entries in the Printers list.



- 10 Select the unidirectional driver from the list of available drivers. The name includes Unidirectional, UniDir, or a similar word.

- 11 Click "Next."



- 12 Click "Finish" to complete the driver installation.

- 13 Power the printer off and then back on.

- 14 Restart Windows.

- 15 Open the Printers window:



- 16 Click the icon for the installed unidirectional printer and select Printing Preferences. Specify the following:

- The orientation for the card.
- Whether to print on both sides (a duplex module is required).

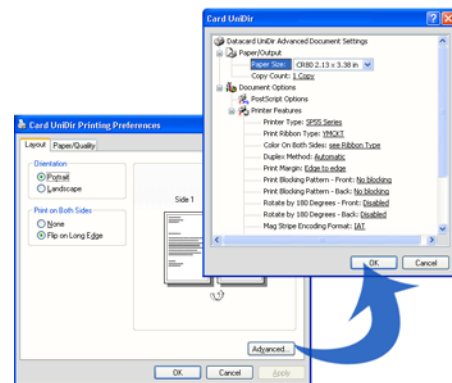
- 17 Click "Advanced" to open the Advanced page.

- 18 Change the Printer Type setting to match the printer installed.

- 19 Click OK on the Advanced page and the Printing Preferences page to close them.

- 20 Open the Advanced page of Printing Preferences again. (Changing the Printer Type setting might change the options available.)

- 21 The default Print Ribbon Type is YMCKT. If a different type of ribbon is installed in the printer, change the Ribbon Type.



- 22** Change other settings, such as Duplex Method or the Mag Stripe Encoding Format, as needed to match the printer. Close the Printing Preferences window.
- 23** Open the Printer Properties window.
- 24** On the General tab of the Printer Properties window, click Print Test Page to print the Windows test page.
- 25** Verify that the Windows test page prints. The image on the card will be cropped.
- 26** Close the Printer Properties window.

If you have not restarted the PC and the printer, the Windows test page might not print or might cause an error at the printer. Restart the printer: Do not follow Windows troubleshooting.

To continue, see ["Set Up the Unidirectional Printer"](#).



Unidirectional Driver Installation for Windows 7, Windows 8.1, Windows Server 2008, and Windows Server 2012



These instructions apply only to PCs running Windows 7, Windows 8.1, Windows Server 2008, or Windows Server 2012. (**Note:** The following procedure might differ slightly depending on the version of Windows installed on your system.)

Network Unidirectional Installation

Windows 7, Windows 8.1, Windows Server 2008, or Windows Server 2012:

- Obtain the following information from your network support personnel.
 - You need:
 - ◁ Address Mode—either DHCP or Static IP
 - ◁ IP address for Static IP address mode
 - ◁ Network name if using a print server
 - You also might need:
 - ◁ Gateway address
 - ◁ Subnet mask
 - Your network personnel might ask you for the network name (if you are using a print server), the printer current IP address if using DHCP, or the MAC Address of the device.
- 1 Load supplies and then power on the printer. See ["Preparing the Printer"](#) for the steps to follow.
 - 2 Power on the print server, if used. Record the default print server name, usually provided on the device label, or set the print server to use the IP address from network support personnel. See your print server documentation for instructions.
 - 3 Obtain or set the IP address of the printer if you are not using a print server. See ["Network Address Settings"](#) for details.



- 4 Log on to the PC as a user with Administrator privileges.
- 5 Insert the driver CD in the PC's drive.

If the Autoplay dialog box displays, click **Run CdBrowser.exe**.

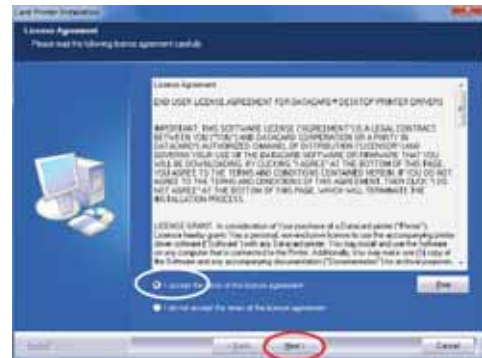
When the Card Printer Installation window opens, click "Install the Printer."



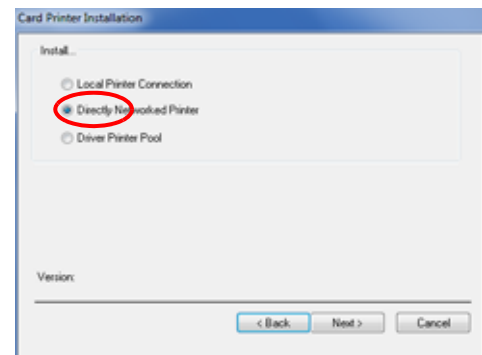
- 6 Click "Yes" on the User Account Control dialog box if it displays.

- 7 Accept the license agreement and then click "Next."

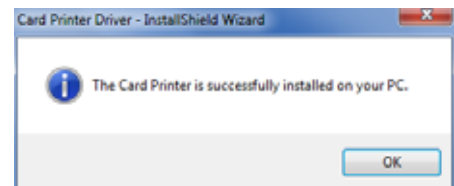
Installation does not continue unless you accept the license agreement.



- 8 On the Install page of the Card Printer Installation, select "Directly Networked Printer" and then click "Next."



- 9 When the completion message displays, click **OK**.



- 10 Close the Printer Properties window for the printer when it displays.

11 Open the Printer Properties window and select the Advanced tab.

12 Add the printer driver.

Windows 7 and Windows 8.1: Select “New Driver” to open the Add Printer Driver Wizard.

Windows Server 2008 and Windows Server 2012: The New Driver button is unavailable from the Printer Properties Advanced window. To install a unidirectional driver on the server, do the following (see the Windows help for your operating system for complete information):

- Make sure that the Print and Document Services server role is installed on the server.
- Start Server Manager.
- Select Tools > Print Management > All Printers.
- Right-click the card printer and select Properties.
- Select the Advanced tab. The New Driver button is enabled.
- Select “New Driver” to open the Add Printer Driver Wizard.

Follow the Wizard prompts to add the unidirectional driver.

13 In the Manufacturer list, scroll to the brand of your card printer and select it.

14 In the Printers list, select (*brand*) UniDir and then click “Next.” Click Finish when the installation completes.

The new driver name displays in the Driver box of the Printer Properties Advanced page.



15 Click OK to close the Printer Properties window.

16 Restart Windows.

17 Power the printer off and then back on.

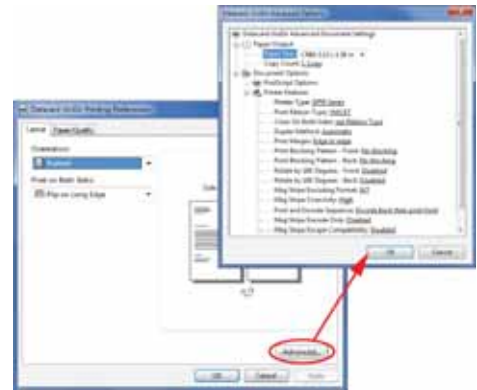
18 Open the Devices and Printers window.

- 19 Right-click the printer and select Printer Properties."
- 20 Select the Ports tab.
- 21 Select the port for the printer, and then click "Configure Port. Enter the name of the network adapter (if used) or the IP address of the printer in the Enter Network Address box.
- 22 Click the Test button. Click OK when the "Successfully communicated" message displays.

If the "Successfully communicated" message does not display, see ["Installation Troubleshooting"](#).



- 23 Close the Enter Network Address dialog box and then close the Printer Properties window.
- 24 Right-click the printer and select Printing Preferences. Specify the following:
 - The orientation for the card.
 - Whether to print on both sides (a duplex module is required).
- 25 Click "Advanced" to open the Advanced page.
- 26 Change the Printer Type setting to match the printer installed.
- 27 Click OK on the Advanced page and the Printing Preferences page to close them.



- 28 Open the Advanced page of Printing Preferences again. (Changing the Printer Type setting might change the available options.)
- 29 The default Print Ribbon Type is YMCKT. If a different type of ribbon is installed in the printer, change the Ribbon Type.
- 30 Change other settings, such as Duplex Method or Mag Stripe Encoding Format, as needed to match the printer. Close the Printing Preferences window.
- 31 Verify that you can print a card to the printer. **Note:** Do not print the Test Page from the Printer Properties window to verify the installation. The test page is not supported by these operating systems.

To continue, see ["Set Up the Unidirectional Printer"](#).

USB Unidirectional Installation

Windows 7, Windows 8.1, Windows Server 2008, or Windows Server 2012:

- 1 Load supplies and then power on the printer. See ["Preparing the Printer"](#) for the steps to follow.
- 2 Log on to the PC as a user with Administrator access.
- 3 Insert the driver CD in the PC's drive.

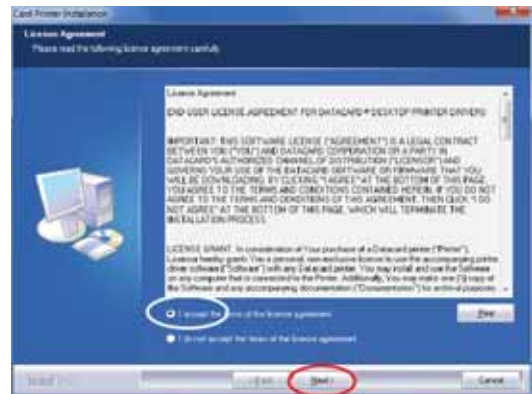
If the Autoplay dialog box displays, click **Run CdBrowser.exe**.

The driver installation window opens.

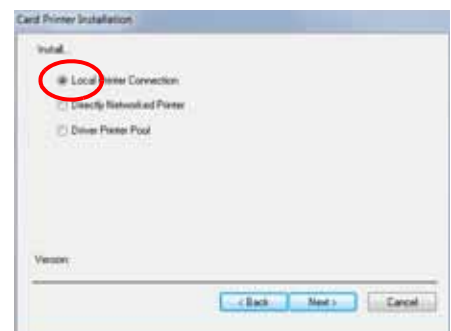
- 4 Click "Install the Printer."
- 5 Click "Yes" on the User Account Control dialog box if it displays.



- 6 Accept the license agreement and then click "Next".



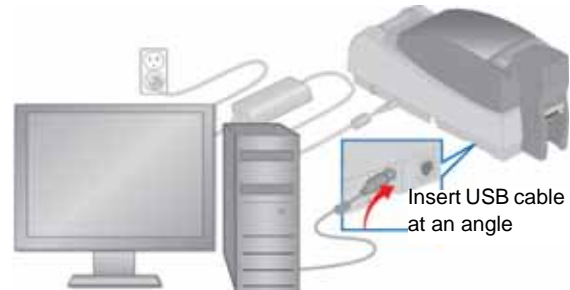
- 7 On the Install page of Card Printer Installation, select "Local Printer Connection" and then click "Next."



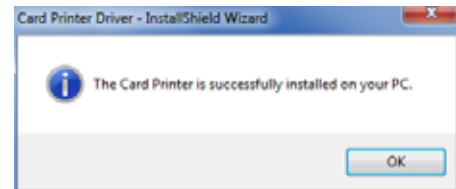
- 8 Verify that you have prepared the printer as instructed on the Connect dialog box.



- 9 Connect the USB cable to the PC and the printer. Position the USB cable at an angle to properly insert it into the printer.



- 10 When the completion message displays, click OK.



- 11 Open the Printer Properties window and select the Advanced tab.
12 Add the printer driver.

Windows 7 and Windows 8.1: Click “New Driver” to open the Add Printer Driver Wizard.

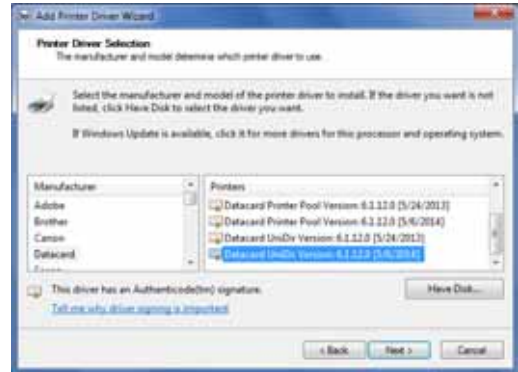
Windows Server 2008 and Windows Server 2012: The New Driver button is unavailable from the Printer Properties Advanced window. To install a unidirectional driver on the server, do the following (see the Windows help for your operating system for complete information):

- Make sure that the Print and Document Services server role is installed on the server.
- Start Server Manager.
- Select Tools > Print Management > All Printers.
- Right-click the card printer and select Properties.
- Select the Advanced tab. The New Driver button is enabled.
- Select “New Driver” to open the Add Printer Driver Wizard.

Follow the Wizard prompts to add the unidirectional driver.

- 13 In the Manufacturer list, scroll to the brand of your card printer and select it.

- 14 In the Printers list, select UniDir and then click "Next."



- 15 Click Finish. The new driver name displays in the Driver field of the Advanced page.

- 16 Click OK to close the Printer Properties window.

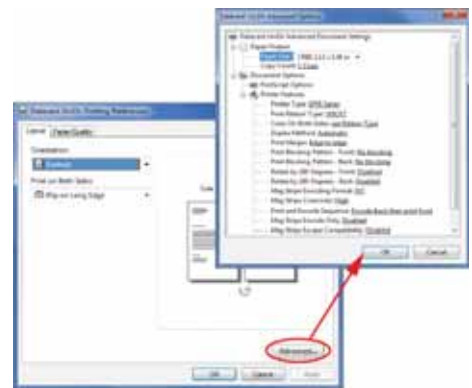
- 17 Restart Windows.

- 18 Power the printer off and then back on.

- 19 Open the Devices and Printers window.

- 20 Right-click the printer icon and select Printing Preferences. Specify the following:

- The orientation for the card.
- Whether to print on both sides (a duplex module is required).



- 21 Click "Advanced" to open the Advanced page.

- 22 Change the Printer Type setting to match the printer installed.

- 23 Click OK on the Advanced page and the Printing Preferences page to close them.

- 24 Open the Advanced page of Printing Preferences again. (Changing the Printer Type setting might change the available options.)

- 25 The default Print Ribbon Type is YMCKT. If a different type of ribbon is installed in the printer, change the Ribbon Type.

- 26 Change other settings, such as Duplex Method or Mag Stripe Encoding Format, as needed to match the printer.

- 27 Click OK to save your changes. Close the Printing Preferences window.

- 28 Verify that you can print a card to the printer. **Note:** Do not print the Test Page from the Printer Properties window to verify the installation. The test page is not supported by these operating systems.

To continue, see ["Set Up the Unidirectional Printer"](#).

Set Up the Unidirectional Printer



Before using the printer, verify (or change) the following printer settings at the server PC. See *InfoCentral* for information about settings. The settings you specify affect all clients that send print jobs to the printer:

- 1 Set the Printer Type to match the name on the printer. Make sure to close the Properties window to update the available options.
- 2 Set the Ribbon Type to match the ribbon installed in the printer.
- 3 Specify the Print on Both Sides setting, which controls whether the printer prints one side or two sides of the card. Also set the Duplex method, which controls how two-sided printing occurs. (Manual duplex is not supported.)
- 4 For printing two-sided (duplex) cards and some ribbon types, set whether to print color on both sides.
- 5 Specify print and topcoat blocking, if needed. For manual-feed printers, set rewrite blocking if needed.
- 6 If the printer includes a magnetic stripe option and you plan to print magnetic stripe cards, set the Mag Stripe Encoding Format.
- 7 Specify whether to apply laminator material to one or both sides of the card (available only on laminating printers).
- 8 Set card design features, such as portrait or landscape orientation.

The following are not available when using a unidirectional driver:

- Features provided by the Printer Toolbox, including color settings, supplies information, edge-to-edge settings, and printhead power.
- Diagnostics for Card Printers.
- The Firmware Update program. See "[Firmware Updates](#)" for information about updating firmware.

See "[Printing Cards in the Windows Terminal Services Environment](#)".

Printing Cards in the Windows Terminal Services Environment



In controlled network environments, Windows Terminal Services makes resources on the server available to client PCs on the network. These resources can include applications, data, and printers. The unidirectional driver can be installed in the Windows Terminal Services environment, as described in ["Installing the Unidirectional Driver"](#).

Features

Many driver features are not available when using the unidirectional driver. If you need one or more of these features on a regular basis, and the printer does not have an LCD panel, consider whether to install the bidirectional driver on another PC, and change the printer connection from the server to the PC for short periods of time. You cannot have a unidirectional driver and a bidirectional driver installed on the same PC.

The following features are not available using the unidirectional driver, but there are alternative methods for the feature:

- The Printer Toolbox for the unidirectional driver does not open, which has the following impacts:
 - The Start > All Programs > Datacard Card Printers > Printer Name entry has no effect when it is selected.
 - Messages do not display on the PC when the printer has an error. If the printer has an LCD panel, messages display on the panel and can be cleared using the keys on the LCD panel.

If the printer does not have an LCD panel, you cannot receive information about the cause of the error. Start by investigating the most likely causes, for example, the printer is out of cards or ribbon, or has a card jam.
 - The Retry button and the message box do not display. You must send the card job to the printer again from the PC.
 - Card counts are not available. If the printer has an LCD panel, view card counts on the LCD panel. If the printer does not have an LCD panel, you can connect the printer to another PC using bidirectional communication. The driver obtains the values when you open the Printing Preferences dialog box or the Printer Toolbox.
 - The Sample Card and Magnetic Stripe Sample Card functions are not available. Connect the printer to another PC using bidirectional communication to use these functions.
 - The Clean Printer and Clean Laminator functions are not available. If the printer has an LCD panel, use it to run the cleaning cards. If needed, connect the printer to another PC using bidirectional communication to use these functions.
 - Edge-to-edge settings are not available. Usually, you need to change this setting only when installing a new printhead cartridge. Connect the printer to another PC using bidirectional communication to change the edge-to-edge settings, which are saved in the printer.

- The PC cannot automatically detect the type of printer or printer features, such as a duplex module. Open Printing Preferences and set the printer type to match the printer. Close Printing Preferences and open it again to make any other changes based on the printer type.
- The PC cannot automatically detect the type of print ribbon. Open Printing Preferences and set the ribbon type to match the ribbon installed in the printer.
- You cannot select the unidirectional printer in Diagnostics for Card Printers. Connect the printer to another PC using bidirectional communication to use Diagnostics.
- The Firmware Update Program is not supported. Connect the printer to another PC using bidirectional communication to use the Firmware Update Program.

The following features are not available with a unidirectional driver and an alternative is not available:

- The Color Settings tab on the Printer Toolbox cannot be used and there is no method for changing color settings in the driver.
- Manual duplex (for simplex printers) is not available.
- Printing multiple copies of the same card design, using the "Copies" setting in Printing Preferences, is not supported.
- Security features are not available.
- Interactive mode, including processing smart cards and reading magnetic stripe data, is not available.

Installation Troubleshooting

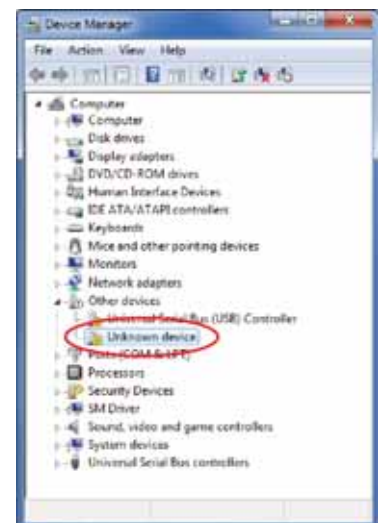
The card printer does not install when the USB cable is connected



If the printer is not recognized correctly by the PC, or if the installation was interrupted, you might need to remove a printer entry in the Device Manager before the printer can be installed.

- 1 Disconnect the printer from the PC.
- 2 If the printer was installed, make sure it is deleted. See ["Removing a Printer from a Windows PC"](#).
- 3 Open the Device Manager window. Make sure "View devices by type" is selected in the View menu.
- 4 Locate the device to delete. The device might be called "Unknown device" or it might be located under the Printers folder. The device might be marked with a yellow question mark or exclamation mark.
- 5 Right-click the device name and select Remove.
- 6 Confirm removal of the device.
- 7 Close Device Manager. Close any other windows.
- 8 Try installing the printer again.

See *InfoCentral > Troubleshooting > Installation* for more information.



A message displays when installing a second or subsequent printer on one PC



If the Printer Toolbox for an installed printer is active when an additional printer is installed, the additional printer does not install correctly. Do the following:

- 1 Follow the steps in ["The card printer does not install when the USB cable is connected"](#) to remove the additional printer from the PC.
- 2 Exit the Printer Toolbox for all installed printers.
- 3 Start the installation for the additional printer again.

Cards sent by a user do not print



The PC can appear to have problems when the user does not have the necessary permissions to use the printer. To set permissions, see *InfoCentral > Advanced > Printer Permissions*.

The Printer Toolbox does not open after renaming a printer



You must restart the PC after renaming a printer. If you rename multiple printers, you must restart the PC after *each* rename operation. If the Printer Toolbox is running when you rename the printer, you are prompted to restart the PC. If the Printer Toolbox is not running when the printer is renamed, no prompt displays. Failing to restart the PC after each rename causes unpredictable results to occur.

The Card Printer does not install on a client PC



A PC can have a locally connected (USB) card printer attached, a directly networked card printer attached, and be connected to a shared printer as a client PC.

If you use more than one connection method on a PC, install the locally and/or directly networked printer(s) first, and then install the shared printer last. The shared printer must have a different name from the other printers. Shared printer names must meet the following requirements:

- Use a name with eight or fewer characters. The printer name, including the server name can be no longer than 30 characters.
- The printer name cannot contain spaces or special characters. Follow Windows guidelines for allowed characters and naming restrictions.

The Print Sample Card button is not available

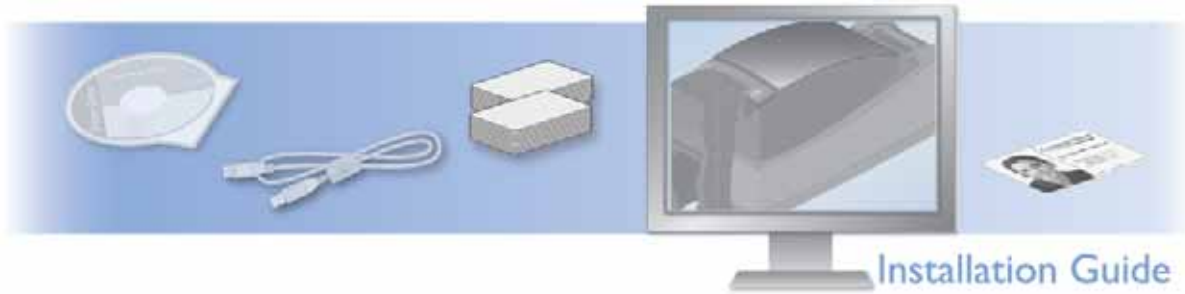


The Print Sample Card button in the Printer Toolbox is enabled when the printer and driver communicate normally. If the Print Sample Card button is not available, check for the following:

- The printer is suspended. Click Resume.
- The printer is busy processing a print job sent by another user on the network.
- The printer is paused. Check that the Status Light on the front of the printer is steady green.

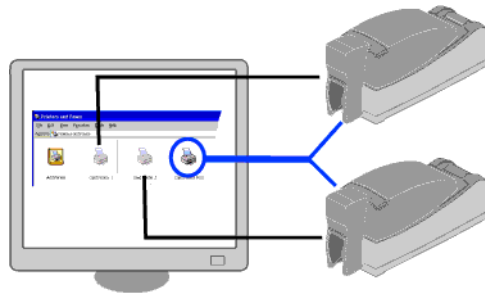
For additional troubleshooting, see *InfoCentral > Troubleshooting > Communication*.





Printer Pooling

Printer pooling is a Windows feature that treats a group of printers as one printer and distributes print jobs among the available printers.



Requirements for a Printer Pool



To create a printer pool for card printers:

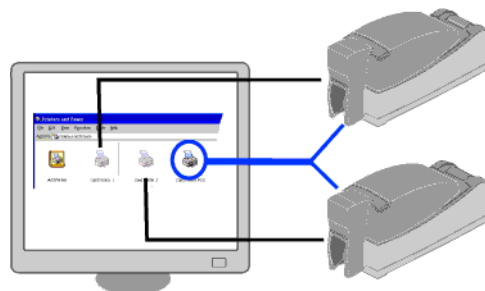
- Install the printers to the same PC. You can use one or more of the following methods to install the printers:
 - Install the printer locally using a USB port
 - Install the printer using a direct network connection
- Use a supported Windows operating system on the PC.
- All printers must be the same brand and have the same features to be part of the pool. For best results, use printers with the same brand, model, and configuration. Printers can be installed before or after the printer pool is set up and will be included in the pool. By default, all directly connected card printers are included in the pool, so all printers must support and use the same card features. If you need to exclude an installed card printer from the pool, see the *Solutions Guide* or your service provider.
- Use the method described in this section to set up printer pooling. Do not use the Enable Printer Pooling check box on the Printer Properties dialog box for the printer. Although Windows permits checking this box, it does not display a message if the printer does not support it.
- Printer pooling does not support interactive print processing. Do not use special features that require interactive mode, such as reading a magnetic stripe or programming a smart card. (During interactive processing, the PC must communicate directly with the printer about a specific job. This information is not available to the PC when using a printer pool.)
- At least one actual printer must be installed before a printer pool can be installed.
- Do not use shared printers, which cannot be part of a printer pool.

Set up Printer Pooling



Setting up a printer pool has two components:

- "Install Each Printer"
- "Install the Printer Pool Driver"



Install Each Printer

To install each printer:

- 1 Install the same type of supplies in each printer. See ["Installing Supplies and Powering On the Printer"](#) for the steps to follow.
You must install the same ribbon type in each printer for the card data to be processed (rendered) correctly by the driver and for each printer to accept any card sent.
- 2 Install each printer and its driver on the PC. See ["Installation on Windows"](#) for the steps to install a local (USB) or network printer.
- 3 Define up each printer with the same settings, especially print on both sides preferences, magnetic stripe settings, and laminate "apply material."
The print ribbon type is set based on the print ribbon actually installed in the printer and cannot be changed.
- 4 Verify the operation of each printer individually. Do not print the Test Page from the Printer Properties window to verify the installation. The test page is not supported by printer pooling.

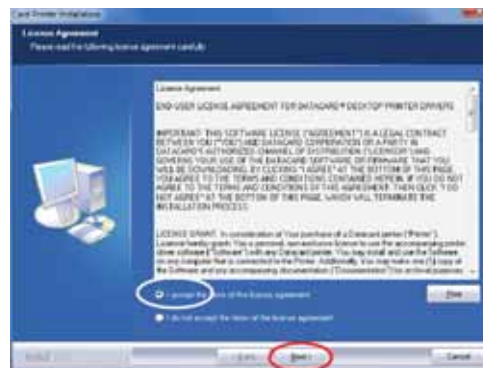
Install the Printer Pool Driver

After each printer is installed and communicating correctly, install the printer pool driver. This is a "logical" printer to which the application sends jobs.

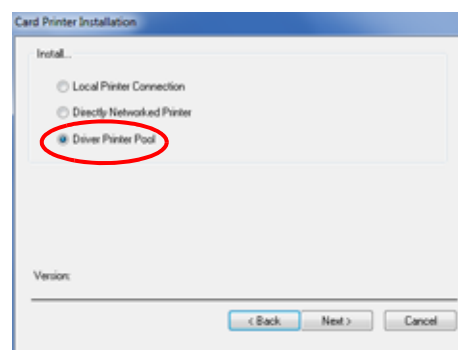
- 1 Install the printer pool driver. Start the driver installation program by doing one of the following:
 - Use the driver installation CD.
 - ◀ Insert the driver CD in the PC's drive.
 - ◀ Click "Install the Printer" on the Card Printer Installation window.
 - Use the installation file downloaded from the website. Double-click the file to start the installation program.
- 2 Click "Yes" on the User Account Control dialog box if it displays.



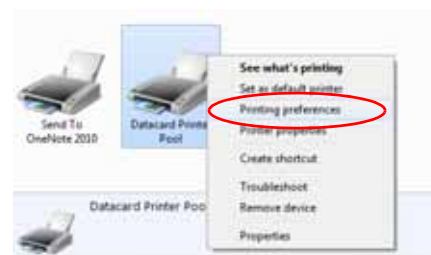
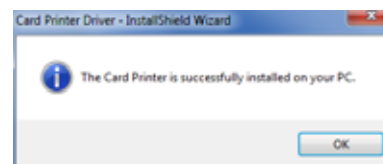
- 3 Accept the license agreement" and then click "Next."



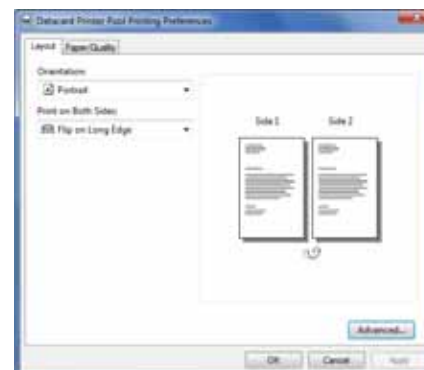
- 4 Select "Driver Printer Pool" and click "Next."



- 5 When the completion message displays, click OK.
- 6 Restart Windows when prompted.
- 7 Open the Printers window.
- 8 Right-click the printer icon for the pool and select Printing Preferences.



- 9 Set "Print on both Sides" to "None" for cards printed on one side, or "Flip on Long Edge" for two-sided cards.
Set the orientation for cards.
- 10 Click Advanced to open the Advanced Options window.



11 Set the Printer Type to the same type as the printers in the pool.

12 Click OK on the Advanced Options window and the Printing Preferences window to close them.

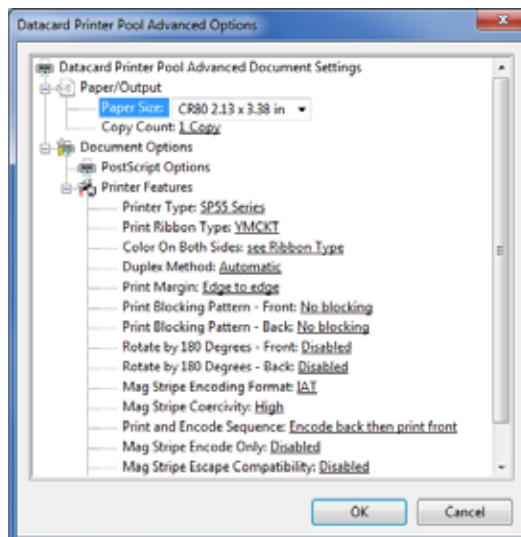
13 Open the Advanced Options window of Printing Preferences again. (Changing the Printer Type setting might change the options available.)

14 In the Advanced Options window, specify or verify the following:

- Set Print Ribbon Type to the type of ribbon installed in all printers.
- Set Duplex Method to None for cards printed on one side, or Automatic for two-sided cards. (Manual is not supported.)
- Specify other settings to use the same values as each printer uses.

15 Click OK to close the Advanced Options and Printing Preferences windows.

16 Select the printer pool as the printer in your card design application.



To remove a printer from the pool, see the *Solutions Guide* or ask your service provider.

See ["Printing Cards Using a Printer Pool"](#) for information about printing to a printer pool.

Printing Cards Using a Printer Pool



A printer pool treats a group of printers as one printer and distributes print jobs among the available printers.

Tips for Success

- To use the printer pool effectively, each card must be sent from the application as a separate job. Some applications, such as ID software, send each card in a batch as a separate job, while others send the batch as one job. Test the application you use to determine the best way to send multiple cards to the printer pool.
- The printer pool determines whether printers are available:
 - If you do not want one or more printers to print cards as part of the pool, suspend the printer in Print Manager. Check this each time you power on the PC.
 - ◀ In the Printers window, right-click the printer and select "See what's printing."
 - ◀ On the Print Manager window, select Printer > Pause Printing
 - The printer pool identifies a USB-connected printer as "available" if the printer is powered on, even when the printer status is Suspended or Not Responding. Power off a USB-connected printer to remove it from the pool, or suspend printing using Print Manager.
 - A network printer is not identified as "not responding" until one card is sent and not accepted by the printer. Suspend the printer in Print Manager.

- If the Printer Toolbox for a printer is in Advanced Setup, the printer is not available.
- If you need to use a printer separately from the printer pool, install it on another PC or contact your service provider for assistance in removing it from the pool.
- Some applications track card completion status, and this data is available for cards sent to the printer pool. The application can query the printer pool and obtain status for all cards processed through the pool. Card completion status does not indicate which printer actually printed the job.
- Make sure that the Printing Preferences are the same for all printers in the pool, as described in ["Install the Printer Pool Driver"](#).
- For magnetic stripe encoding, use the same coercivity and magnetic stripe format values for all printers and the printer pool. (If you select "Use printer settings," make sure that the settings in the printers are the same; use Diagnostics for Card Printers to view magnetic stripe values if needed.)

Using a Printer Pool

To use a printer pool:

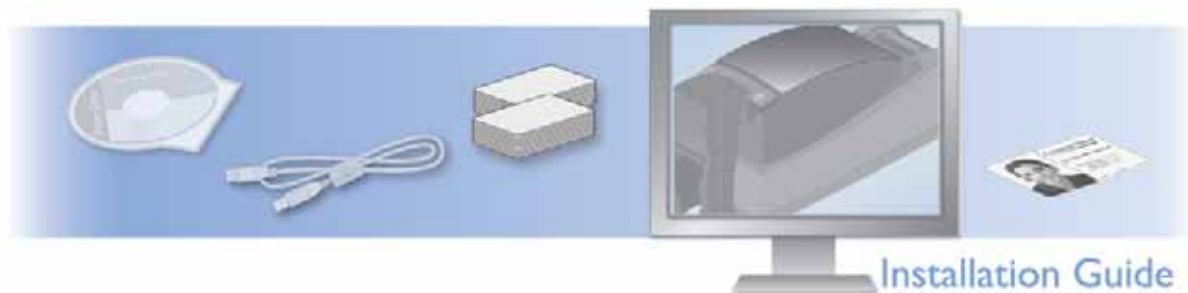
- 1 Make sure that the printers in the pool are powered on and ready.
- 2 In the application used to print cards, select the name assigned to the printer pool when it was installed, such as Card Printer Pool.
- 3 Select Print in the application. The application sends the cards to the printer pool, which randomly distributes the card jobs among the available card printers. When all printers are busy, the printer pool keeps the card jobs in a queue until the next printer is available. It sends the next card job as soon as any printer in the pool becomes available.

A printer is available if:

- The number of jobs active in the printer is less than the number of jobs supported for that printer type.
 - No jobs are pending in the Windows spooler for that printer.
 - The printer is not paused in Windows Print Manager.
 - The printer is not set to work offline in Windows Print Manager
 - The printer status displayed in Windows Print Manager is not "User Intervention Required."
 - The Printer Toolbox is not in Advanced Setup mode.
- 4 After a card is sent by the printer pool to a specific printer, it cannot be removed from that printer and assigned to another printer.

When a printer issues a message, the message displays on the PC with the name of the printer in the title bar of the message box. The printer is unavailable to print cards until the situation that caused the message is corrected. Other printers in the pool continue to receive card jobs and print cards.





Shared Printers

This section provides information about printing over a network using Microsoft File and Printer Sharing. A printer is connected to a PC (host) that has the printer driver installed. After you share the printer, users at other PCs (clients) on the network can print to it. Up to 10 client PCs can share the printer at one time. Users at client PCs do not have the same level of access to the printer driver as a user at the host PC.

The following operating system configurations are supported. Both the host PC and the client PCs must have the same type of processor (either 32- or 64-bit) installed.

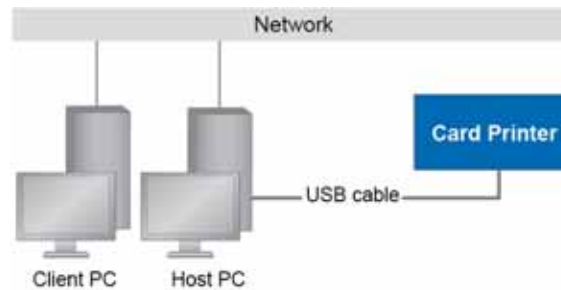
Host	Client	Refer to:
64-bit: Windows 7 or Windows 8.1	64-bit: Windows 7 or Windows 8.1	"Printer Sharing for Windows 7, Windows 8.1, Windows Server 2008, or Windows Server 2012"
64-bit: Windows Server 2008 or Windows Server 2012 R2	64-bit: Windows 7 or Windows 8.1	
32-bit: Windows XP	32-bit: Windows XP	"Printer Sharing for Windows XP or Windows Server 2003"
32-bit: Windows Server 2003 R2	32-bit: Windows XP or Windows 7 or Windows 8.1	

See ["Print Cards Using a Shared Printer"](#) to use and manage the printer.

See ["Updating the Driver When Sharing Printers"](#) if you need to update the driver when sharing printers.

Components

The following are the components you need to use the card printer with printer sharing.



Network: A TCP/IP-compatible network must be set up and working before you begin.

Host PC: The PC with the printer attached is called the Host PC. The host PC must be connected to the network, and have permissions for users set.

Port connection: The printer can be connected to the host PC through a USB port or a direct network connection.

Client PC: The client PC is connected to the host PC over the network.

Setting up Printer Sharing

Requirements for Printer Sharing



A shared printer attached to a host PC over the network must meet the following requirements:

- Each PC that uses the printer must have a working network connection. Verify that the network connection is working properly.
- Each PC that uses the printer must have a supported Windows operating system installed and have service packs required by the host PC operating system. See ["Shared Printers"](#) for a list of the supported host/client operating system configurations.
- The printer at the host PC must be enabled for sharing. See the Windows help for your operating system for complete information about enabling printer sharing.
- The PC with the printer attached (host PC) must remain on at all times, with the Windows operating system running. A user with Print, Manage Printers, and Manage Documents permissions to the printer must be logged on at the host PC so that other users can print, and so the printer can be installed on the client PC.
- If more than one printer is connected to a PC (including a shared printer), the printers must have different names.
- Set separate access permissions for users at the host PC and for users at the client PC. See *InfoCentral > Advanced > Printer Permissions* for the steps to follow.
- If a client PC will have more than one shared printer installed, install one printer on the host PC, and then install the printer on the client PC. Complete the installation of the printer on both host and client PCs, then install the additional printers on the host and client PCs.

Printer Sharing for Windows XP or Windows Server 2003

The driver supports printer sharing for the 32-bit host/client configurations listed in ["Shared Printers"](#).

Set Up the Host PC for Windows XP or Windows Server 2003



To set up the host PC for printer sharing, do the following:

- 1 Install the printer driver on the host PC. See ["Installing the Driver with Bidirectional Communication"](#) for more information.
- 2 With the printer power on, change settings to reflect your card design, including printer features such as ribbon type and magnetic stripe settings. Record the settings so you can make the same changes on each client PC.
- 3 Change the printer name to meet the following requirements:
 - The name of a shared printer is the name you assign plus the server name (which is added by Windows). The server name is the network name of the host PC.
 - For best results, use a name with eight or fewer characters. The printer name, including the server name, can be no longer than 30 characters.
 - The printer name cannot contain spaces or special characters. Follow Windows guidelines for allowed characters and naming restrictions.
- 4 Restart Windows on the host PC.
- 5 Enable the printer for sharing:
 - a Open the Printers window.
 - b Right-click the printer icon and select Printer properties. Select the Sharing tab on the Printer Properties window.
 - c Select the "Share this printer" check box. The first eight characters of the printer name, assigned by the operating system, display in the Share name field. Leave the name as it displays.
 - d Clear the "Render print jobs on client computer" check box.
 - e Click Apply to save your changes, and then click OK to close the Printer Properties window. The icon for the shared printer now displays a shared symbol.
- 6 Set up an account for each user at the host PC.
Set up accounts for users who log onto the host PC and for users who log onto the client PC(s).
- 7 Grant users permission to the printer from the host PC, including:
 - Client PC users who have Print permission to the printer.
 - Host PC users who also have Print, Manage Printers, and Manage Documents permissions to the printer.
 - Host PC users (if any) who are denied permission to the printer.

See *InfoCentral > Advanced > Permissions* for more information.
- 8 Make sure that client PC users can access the host PC from the network.

Set up the Client PC



- 1 Set up an account for each user of the client PC.
At least one user must have administrator access to both the client and host PCs to install the driver.
- 2 Make sure that client PC users can access the host PC from the network.

Install the Printer Driver on the Client PC



A client PC may use any of the supported Windows operating systems. Refer to ["Shared Printers"](#) for a list of supported host/client operating system configurations. Except as noted, the following steps apply to all client Windows systems. The window names may vary slightly based on the operating system of the client PC.

Use the following process at the client PC to install the printer. If more than one client PC will share the printer, repeat the procedure at each client PC. Restart Windows before printing from the client PC.

- 1 Make sure that the printer and driver on the host PC are working properly before beginning.
- 2 Log on to the client PC as an Administrator, and log onto the network.
- 3 Locate the host PC on the network and log into it using the user name and password defined on the host PC. Keep the window open during printer driver installation.
- 4 On the client PC, do the following:
 - Windows XP: Click Start > Settings > Printers and Faxes to open the Printers and Faxes window.
 - Windows 7 or Windows 8.1: Click Start > Devices and Printers to open the Devices and Printers window.
- 5 Select Add Printer to start the Add Printer wizard.
- 6 In the Add Printer window, do the following:
 - Windows XP: Select "A network printer, or a printer attached to another computer."
 - Windows 7 or 8.1: Select "Add a network, wireless, or Bluetooth printer."
- 7 Follow the prompts in the Add Printer wizard to select the printer.
 - Select to browse for the printer. An expandable list of network servers, PCs, and/or printers appears. If needed, double-click a server or PC name to see the names of attached printers.
 - Select the printer to which the user will print. The printer name displays in the Printer box.
 - The printer name includes the name of the host PC. Make sure the name of this printer is different from the names of any other printers attached to this PC.
 - Click No if you are prompted to print a test page. You must set values in the client PC Printing Preferences window before printing.
 - Do not restart the computer if prompted.

Click Finish to close the wizard when it completes. The shared card printer icon displays in the Printers and Faxes window of the client PC.
- 8 Right-click the printer icon and select Printing Preferences.

- 9 Change the printing preferences settings on the client PC to match those on the host PC and your card design. Some settings are set from the host PC and cannot be changed at the client.
 - The client PC obtains the Printer Type and Ribbon Type from the host PC. If it cannot obtain the values from the host PC, the client PC uses the default values or the last set of values obtained from the host PC.
 - Change settings that apply to the printer, such as magnetic stripe settings, so they are the same as those on host PC.
 - Change settings to reflect your card design, such as portrait or landscape orientation. These settings can be different from the settings on the host PC.
- 10 Close the Printing Preferences window.
- 11 Open the Printer Properties window and click "Print Test Page" on the General tab.
- 12 Verify that the Windows test page prints and close the Printer Properties window.
- 13 Restart the client PC.
- 14 Assign Print permission to the printer for each client PC user who uses the printer.

See ["Print Cards Using a Shared Printer"](#) to use and manage the printer.



Tips for Success

- A PC can have a locally connected (USB) card printer attached, a directly networked card printer attached, and be connected to a shared printer as a client PC.
If you use more than one connection method on a PC, install the locally and/or directly networked printer(s) first, and then follow the steps in this section to install the shared printer last. The shared printer must have a different name from the other printers.
- See Windows help for information about printer naming, including shared printers.
- If you update the printer driver on the host PC, the driver on the client PC may update automatically or may require a manual update. See ["Updating the Driver When Sharing Printers"](#).
- If you need to remove the driver from the client PC, see ["Removing a Printer from a Windows PC"](#) for more information.

Printer Sharing for Windows 7, Windows 8.1, Windows Server 2008, or Windows Server 2012

The driver supports printer sharing for the 64-bit host/client configurations listed in "[Shared Printers](#)".

Set Up the Host PC for Printer Sharing



- 1 Install the printer on the host PC.
- 2 With the printer power on, change settings to reflect your card design, including printer features such as ribbon type and magnetic stripe settings. Record the settings so you can make the same changes on the client PC.
- 3 Change the printer name to meet the following requirements:
 - The name of a shared printer is the name you assign plus the server name (which is added by Windows). The server name is the network name of the host PC.
 - For best results, use a name with eight or fewer characters. The printer name, including the server name, can be no longer than 30 characters.
 - The printer name cannot contain spaces or special characters. Follow Windows guidelines for allowed characters and naming restrictions.
- 4 Restart the host PC.
- 5 Open the Devices and Printers window.
- 6 Right-click the printer icon and select Printer properties. Click the Sharing tab.
- 7 Select the "Share this printer" check box. The first eight characters of the printer name, assigned by the operating system, display in the Share name box. Leave the name as it displays.
- 8 Clear the "Render print jobs on client computer" check box.
- 9 Click Apply to save your changes, and then click OK to close the Printer Properties window. The icon for the shared printer now displays a shared symbol.
- 10 Set up an account for each user of the host PC.
Set up accounts for users who log onto the host PC and for users who log onto the client PC(s).
- 11 Grant users' permission to the printer from the host PC.
See *InfoCentral > Advanced > Permissions* for more information.
- 12 Continue with "[Install the Driver on the Client PC](#)".

Install the Driver on the Client PC



A client PC may use any of the supported Windows operating systems. Refer to "[Shared Printers](#)" for a list of supported host/client operating system configurations. The window names may vary slightly based on the operating system of the client PC.

Use the following process at the client PC to install the printer. If more than one client PC will share the printer, repeat the procedure at each client PC.

- 1 Log on to the client PC as an administrator, and log on to the network.
- 2 Locate the host PC on the network and log into it using a user name and password defined on the host PC. Keep the window open during printer driver installation.
- 3 On the client system, open the Devices and Printers window.

- 4 Select Add a Printer to start the Add Printer wizard.
- 5 In the Add Printer window, select "Add a network, wireless, or Bluetooth printer."
- 6 Follow the prompts in the Add Printer wizard to select the printer.
 - Select to browse for the printer. An expandable list of network servers, PCs, and/or printers appears. If needed, double-click a server or PC name to see the names of attached printers.
 - Select the printer to which the user will print. The printer name displays in the Printer box.
 - The printer name includes the name of the host PC. Make sure the name of this printer is different from the names of any other printers attached to this PC.
 - Click No if you are prompted to print a test page. You must set values in the client PC Printing Preferences window before printing.
 - Do not restart the computer if prompted.

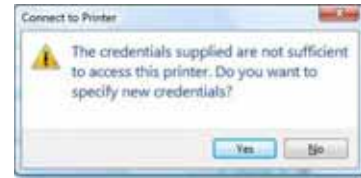
Click Finish to close the wizard when it completes. The shared card printer icon displays in the Devices and Printers window of the client PC.
- 7 Right-click the icon for the shared printer and select Printing Preferences.
- 8 Change the printing preferences settings to match the settings of the host PC. Some settings are set at the host PC and cannot be changed from the client PC.
 - The client PC obtains the Printer Type and Ribbon Type from the host PC. If it cannot obtain the values from the host PC, the client PC uses the default values or the last set of values obtained from the host PC.
 - Change settings that apply to the printer, such as magnetic stripe, so they are the same as those on the host PC.
 - Change settings to reflect your card design, such as portrait or landscape orientation. These settings can be different from the settings on the host PC.
- 9 Close the Printing Preferences window.
- 10 Open the Printer Properties window and click the Print Test Page button on the General tab.
- 11 Verify that the test page prints and close the Printer Properties window.
- 12 Restart the client PC.
- 13 Assign Print permission to the printer for each client PC user who uses the printer. See *InfoCentral > Advanced > Printer Permissions* for more information.

Tips for Success

- To install the printer for additional clients, repeat the procedure. A user with Print permission to the printer can install the driver after it has been installed by an Administrator.
- A PC can have a locally connected (USB) card printer attached, a directly networked card printer attached, and be connected to a shared printer as a client PC.

If you use more than one connection method on a PC, install the locally and/or directly-networked printer(s) first, and then follow the steps in this section to install the shared printer last. The shared printer must have a different name from the other printers.

- If an error message displays when connecting to the printer, similar to the one shown, restart Windows and repeat the procedure.

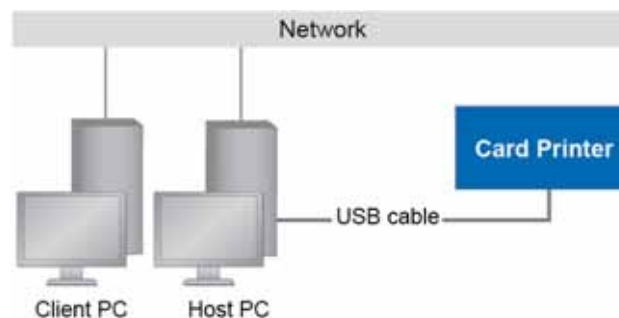


- The Start menu at the client PC contains entries for the printer. The user who installed the printer can use them to open the Printer Toolbox and InfoCentral.

Print Cards Using a Shared Printer



Microsoft File and Printer Sharing enables a user at one PC to print to a printer attached to another PC.



A printer is connected to a PC (host) and has the printer driver installed. After you share the printer, users at other PCs (clients) on the network can print to it. Up to 10 client PCs can share the printer at one time. The driver is installed on the host PC and then on each client PC.

Use the Printer from the Client PC

Users at the client PC can perform several actions, including:

- **Print a card.** To send cards to print from an application on the client PC, select the printer in the application and then select Print.
- **Print a card using an application and magnetic stripe fonts.** When printing from an application such as Microsoft Word, use the magnetic stripe fonts provided by the printer driver to format text for magnetic stripe encoding. See *InfoCentral > Advanced > Magnetic Stripe > Fonts* for more information.
- **Change some card design settings.** You can change the card orientation (landscape or portrait) from the client PC. Many settings are read from the host PC and cannot be changed at the client PC. Those settings are disabled at the client PC.
- **View the status of the client PC.** The Printer Toolbox is available on the client PC. It displays the client status and a reminder that messages and additional status information is available on the host PC.
- **Use the Color Settings tab of the Printer Toolbox.** The color settings can be used to fine-tune the appearance of cards sent from a client PC running a 32-bit Windows operating system. See *InfoCentral > Printer Features > Printer Toolbox > Color Settings Tab*.

- **Pause or delete print jobs from Print Manager.** A paused card job remains in the print queue until it is sent to the printer (or deleted). See Windows help for information on using Print Manager.
- **View Print Manager.** Expand the Status column in Print Manager to see messages from the host PC.

Management Tasks at the Host PC

The user at the host PC has more control over the printer and can see more information about the printer. You can perform the following additional tasks at the host PC.

- **Print a card.** To send cards to print from an application on the host PC, select the printer in the application and then select Print.
- **Manage all jobs in the print queue.** Use Print Manager to view all jobs in the print queue and to pause or delete any jobs in the queue, no matter who submitted the job. A paused job remains in the print queue until it has been sent to the printer (or deleted). See Windows help for information on using Print Manager.
- **See and respond to messages.** If the printer is not able to process and print a card, the driver displays a message on the host PC. The message does not display on the client PC. The host PC can see the message and view help, which provides information to resolve the situation. The title bar of the message contains the printer name. Printing for all users is suspended until the situation is resolved.
- **Set values in Printing Preferences.** Values set at the host PC apply to all users (unless changed at the client PC). Some values can be changed at client PCs, but those values apply only to the print jobs sent from the client PC.
- **View printer status.** The host PC runs the Printer Toolbox and all status functions. The Printer Toolbox is closed by default. To open the Printer Toolbox, select the printer from the Windows Start menu.
- **Use all features of the Printer Toolbox.** The Printer Toolbox on the host PC provides access to all printer settings, including edge-to-edge settings and color controls.

Updating the Driver When Sharing Printers



When you use printer sharing, the host PC and all client PCs must be at the same version of the driver to work properly. Depending on the operating system installed on the host and client PCs, one of the following can occur:

- The driver on the client PC is updated automatically after you update the host system and restart it. See ["Driver Updates"](#) for information about updating the driver.
- The driver on the client PC must be updated manually. If the driver on the client PC requires a manual update, the text "Needs new driver" displays when you select the printer on the Devices and Printers window on the client PC. (*Windows XP users: Open Windows Print Manager and look at the Status column to see messages.*)

Update a Client PC Manually

To update the driver on a client PC that requires a manual update, do the following:

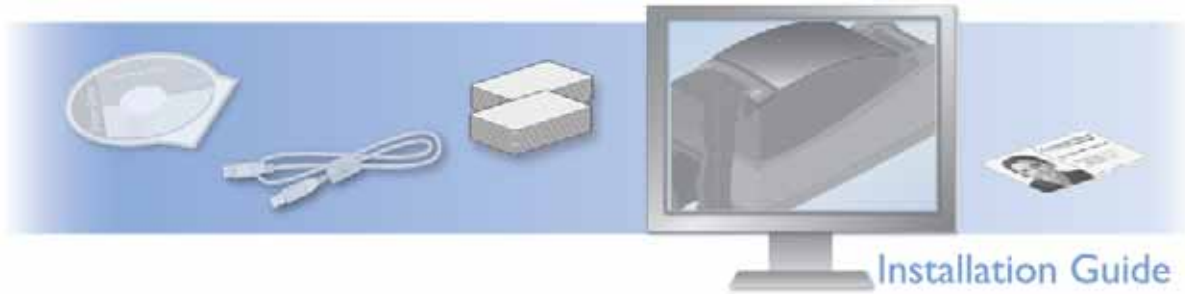
- 1 Record settings at the host PC and at the client PC in case you need to enter them following the update.
- 2 Open the Printers window on the client PC.
- 3 Select the printer. The text "Needs new driver" displays next to the printer name and Update Driver displays on the menu bar.
- 4 Select Update Driver.
- 5 On the Do you trust this printer dialog box, click "Install Driver." The updated driver is installed on the client PC from the host PC.
- 6 Press F5 to refresh the Printers window to clear the "Needs new driver" message.

Verify the Client Update

After the client PC has been updated with the new driver version, verify that the update completed properly and that your settings and preferences were not changed.

- 1 Open the Printer Toolbox on the client PC.
- 2 View the version of the driver.
- 3 Review your printer properties settings and printing preferences and verify that they are correct. Update them, if necessary.
- 4 Print sample cards to confirm that cards print successfully.





Installation on Non-Windows Platforms

This section provides information about installing the printer on an OpenCard-enabled system.

OpenCard Installation



The OpenCard option is available for 32-bit operating systems only. Printers with the Built-in Ethernet and OpenCard option include an LCD panel, which provides access to status information and configuration settings. Printers with the OpenCard option can print cards using the OpenCard data format (when the data format is set to OpenCard). The option includes a CD that contains utilities, samples, and the *Data Formatting Guide* (in PDF format).

Plan for the following installation and setup steps:

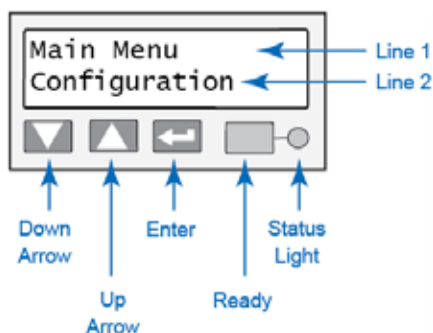
- 1 Define the requirements for the card to guide you in the installation and setup. See the *Data Formatting Guide* for details about supported card features.
- 2 If you need to change settings, such as K power, install the printer and driver on a Windows PC. You also might want to install Diagnostics for Card Printers if you need to set up a custom magnetic stripe format. The data format must be "Printer Driver" to use the driver and Diagnostics for setup. See ["Installation on Windows"](#) for the steps to install the Card Printer Driver for Windows.
- 3 Use Telnet to connect the printer to a PC to define card layouts in the printer. See *Data Formatting Guide* > Getting Started > Connecting the Printer. The data format must be "OpenCard" to use the Telnet menus in the printer. Print sample cards to verify that cards meet your requirements.
- 4 Connect the printer to the production system and configure the system to communicate with the printer. The data format must be "OpenCard" to receive data from the host and use it to print cards.

Set the Data Format



Before you send any data to the printer, set the data format so the printer can receive the data you send.

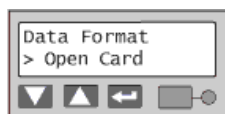
- 1 Press the Enter key to enter the menu system.
- 2 Press the Up or Down Arrow key to scroll to “Configuration” and press the Enter key.



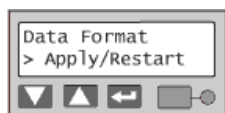
- 3 Press the Up or Down Arrow key to scroll to “Data Format” and press the Enter key.



- 4 Press the Up or Down Arrow key to display the data format you want to use on the second line of the display. Press the Enter key.

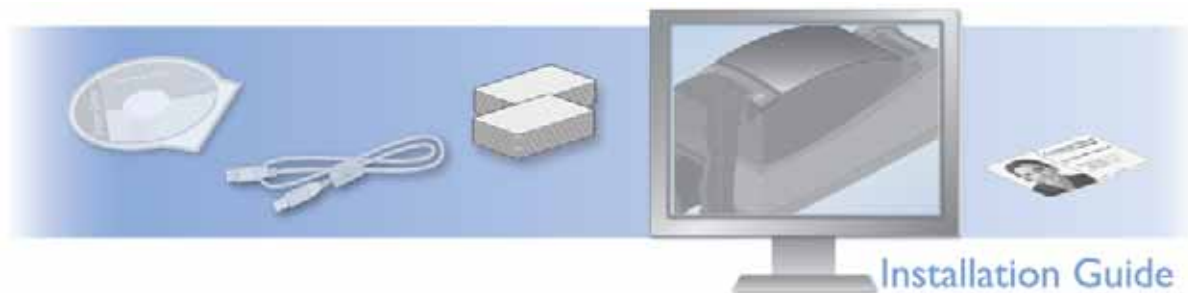


- 5 The “Apply/Restart” prompt appears on the second line of the display. Press the Enter key to confirm the data format selection and restart the printer.



After restarting, the printer is ready to accept data in the format you have selected.





Updates, Upgrades, and More

This section describes:

- ["Updates"](#)
- ["Upgrades"](#)
- ["Deviations"](#)
- ["Removing a Printer from a Windows PC"](#)

Updates

An update replaces part of the product you have—usually software—with a newer release. Driver updates and firmware updates are the most common types of updates.

Driver Updates



Driver updates are available from the website or from your service provider. See *InfoCentral > Contact Us* for contact information.

Read the information about supported printers and operating systems before installing a driver update to make sure that your printer and operating system are supported by the new driver. See ["PC Requirements"](#) for a list of operating systems supported by the driver.

You usually can update to the latest driver version without having to remove all installed printers and reinstall the new driver. The updated driver retains your printing preferences and selections from the previous version.

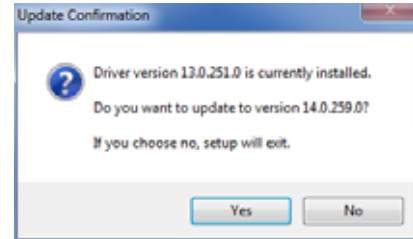
If your current driver cannot be updated, remove the printer and driver from your system and install the new driver.

If you currently have an installed printer and you want to install a new printer that uses a newer version of the driver, you must update the installed driver before you can install the new printer.

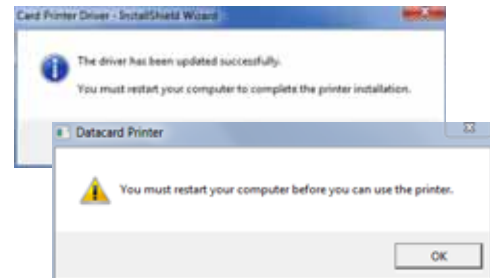
You can update the driver using a new driver CD or using files downloaded from the website.

Updating the Driver Using Downloaded Files

- 1 Prepare the printer for installation. See ["Preparing the Printer"](#) for the steps to follow.
- 2 Log on to the PC as an Administrator.
- 3 Locate the downloaded file. See ["Obtaining the Downloaded File"](#) if you need to download the driver.
- 4 Double-click the downloaded file on the PC.
- 5 Click "Continue" on the User Account Control dialog box if it displays.
- 6 The License Agreement window displays. Accept the license agreement and then click "Next."
- 7 When the Update Confirmation dialog box displays, click "Yes" to continue.



- 8 When the update completes, one or two "Update successful" dialog boxes display. Click "OK."
- 9 Restart the PC to complete the update.



Updating the Driver Using the Driver CD

- 1 Log on to the PC as an Administrator.
- 2 Insert the driver CD in the PC's drive. The Card Printer Driver Installation window opens.
- 3 Click "Install the Printer."
- 4 Click "Continue" on the User Account Control dialog box if it displays.
- 5 The License Agreement window displays. Accept the license agreement and then click "Next."
- 6 When the Update Confirmation dialog box displays, click "Yes" to continue.



- 7 When the update completes, the “Update successful” dialog boxes display. Click “OK” to finish.
- 8 Remove the CD from the PC.
- 9 Restart the PC to complete the update.



Firmware Updates



Firmware updates sometimes are available from the website. Firmware usually is updated using a program and a separate firmware update file. The program guides you through the update process. In most cases, you should update firmware when your service provider recommends it.

Make sure that you select the firmware update file that exactly matches your printer type.

Upgrades



An upgrade adds functionality to your printer. Upgrades typically are physical changes to the printer, performed by your service provider. Depending on the printer, the following types of upgrades might be available:

- Magnetic stripe module
- Smart card module
- High-capacity input hopper
- High-capacity output hopper

Field upgrades come with installation instructions designed for trained service providers. Instructions for using the new functionality are included in *InfoCentral > Features*.

Deviations



Deviations are specially adapted products, created as a special-order. Most often, the driver or the firmware is deviated; sometimes the hardware (printer) also is changed. If you have a deviated driver, firmware, or printer, be very careful about updating the driver or firmware. A deviated driver or firmware has a version number with “d” near the end, similar to the following:

Firmware Version: 12.11.d1

Driver Version: 13.0.123-d2

Always check with your service provider to determine whether to install the update. Do not update until you are sure that the update supports the special features of your product.

Deviations might be called by a different name in your organization. Other names might include RPQ, custom, or special. RPQ stands for Request for Price Quotation, which is one of the first steps in developing an agreement to create the deviated product.

Removing a Printer from a Windows PC



To remove the printer and all driver files from the PC, do the following. **(Note:** The following screens might differ slightly depending on the version of Windows installed on your system.)

1 Log on to the PC as a user with Administrator privileges.

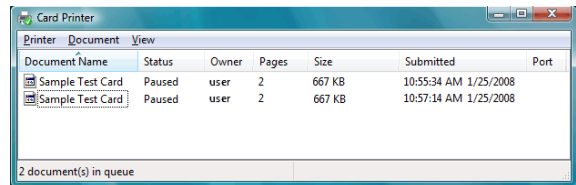
2 Open the Printers window.

3 Select the printer and open the Print Manager window to check for any print jobs in the queue. Allow jobs to finish printing or cancel any jobs that you want to delete.

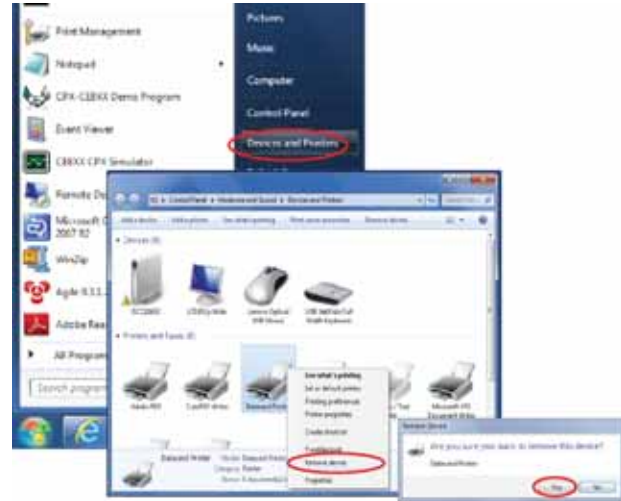
Make sure that there are no print jobs in the print queue. You cannot delete a printer that has jobs in the print queue.

4 Power off the printer.

5 Disconnect the USB or network data cable from the printer.



- 6 Open the Printers window. Right-click the printer icon and select "Remove Device."
- 7 Click "Yes" to confirm that you want to remove the printer.
- 8 Repeat steps 2 through 7 for each card printer you want to remove.



- 9 From the Start menu, select All Programs > Datacard Card Printers > Uninstall Driver Software.

Windows 8.1, Windows Server 2008, and Windows Server 2012 Users: From the Windows Start screen, display the Apps screen and select Datacard Card Printers > Uninstall Driver Software.

- 10 Click "Yes" when asked if you want to delete all driver files.

A message displays when the driver files are deleted.

- 11 Close all applications and then click "OK" to restart the computer and complete the removal.

