Datacard® SD/CD™ Series Card Printer
User's Guide

June 2012

Part No. 527248-001, Rev A

Notice

Please do not attempt to operate or repair this equipment without adequate training. Any use, operation, or repair you perform that is not in accordance with the information contained in this documentation is at your own risk.

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Revision Log

Datacard® SD/CD™ Series Card Printer User's Guide

Revision	Date	Description of Changes
A	June, 2012	First release of this document.

Contents

Chapter 1: Introduction

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About this Manual

This manual provides user information for the SD and CD Series Card Printers. The manual includes:

- An overview of printer components and options, and a description of the system label.

- How to use the printer, including how to power the printer on and off, how to use the front panel and LCD menus, card processing basics, how to print a test card, and how to load and replace supplies.

- How to perform routine maintenance and troubleshooting tasks.

An additional *SD/CD Installation and Administrator's Guide* is available for use by administrators or other professionals responsible for printing cards. Refer to the SD and CD Series Card Printers Owner's Library CD.

Intended Audience

The manual is intended for the printer operator responsible for printing cards, loading and replacing supplies, printer maintenance, and troubleshooting.

Technical Support

Contact Datacard Technical Phone Support at 1-800-328-3996.

Chapter 2: About the Printer

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About the SD and CD Series Card Printers

The card printer applies images, text, and encoded data to plastic cards. It can print full-color and monochrome images, depending on the type of print ribbon installed.

A busy issuance site might issue up to 10,000 cards a month. During these busy times, the site might use more than one printer to keep up with demand. The printer issues cards either one at a time or in batches — up to 100 cards at a time. An optional 200-card input hopper is available for some printers.

Options available for the card printer include magnetic stripe, smart card, automatic duplex, and reject hopper. The configuration label on the printer shows the options installed. Refer to "System Label" on page 7 for more information about recognizing the factory-installed options on your card printer.

Refer to the following to view the printer components and the different options:

- Printer Components on page 4

- Printer With Input Hopper on page 5

- Printer With Duplex Option on page 6

Printer Components

Printhead: Transfers images to cards using the print ribbon.

Printer information label: Shows location, date of manufacture, and options installed.

Manual advance knob: Use the knob to move a card in the track.

Security lock: Insert the security plate before attaching the lock.

Printer connections:

- Power receptacle

- USB connection

- Network connection

Printer ribbon cartridge: Holds ribbon for printing.

Print ribbon: Roll of material to apply images to cards.

Replaceable cleaning sleeve: Removes dust and other particles from cards to maintain print quality.

Printer information label

Printhead

Manual advance

Security lock

Printer connections

Print ribbon cartridge

Print ribbon

Replaceable cleaning sleeve

Printer With Input Hopper

Cover: Open the cover to load print ribbon.

Latch: Push to release the cover and open the printer.

Ribbon cartridge handle: Holds the print ribbon and replaceable cleaning roller.

Card input hopper: Load cards to print. Holds up to 100 cards.

Front panel: Includes the Ready button, status lights, the power button, and LCD panel with keys.

Output hopper: Remove completed cards. Holds up to 25 cards.

Printer With Duplex Option

Cover: Open the cover to load print ribbon.

Latch: Push down and release latch to open the printer cover.

Ribbon cartridge handle: Holds the print ribbon and replaceable cleaning roller.

Card input hopper: Load cards to print. Holds up to 100 cards (0.030-in or 0.762mm thickness)

Front panel: Includes the User button, status lights, the power button, and the LCD panel with navigation keys.

Security lock receptacle

Manual advance knob

Power connection

USB connection

Network connection

Output hopper: Remove completed cards.

Inside a Printer With a Duplex Option

Configuration label: Shows printer model and options installed.

Printhead: Transfers images to cards using the print ribbon.

Duplex module: Automatically turns card for two-sided printing.

Print ribbon cartridge: Holds print ribbon and replaceable cleaning sleeve.

Reject card tray Optional reject card location.
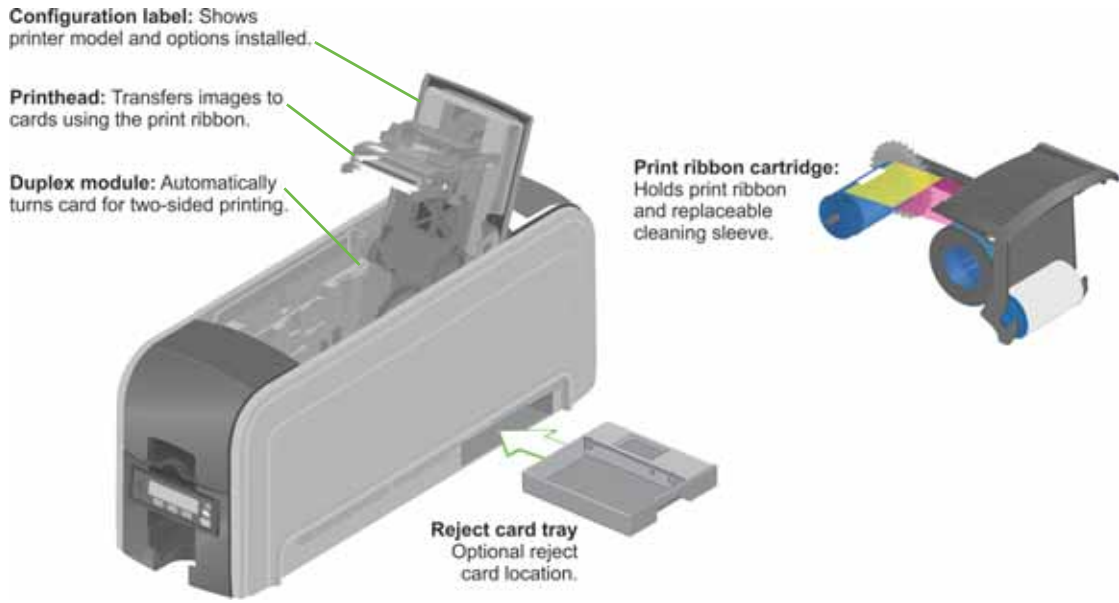
System Label

The printer configuration label on the side of the cover arm shows the components installed. It provides information that is useful when requesting service.
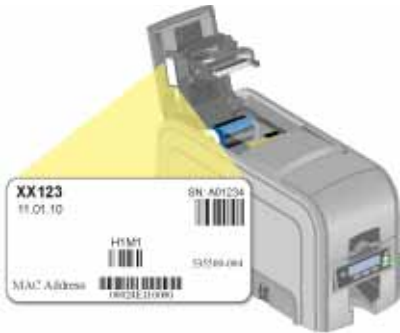
The label shows:

- Printer name, which also appears on the model label.

- Configuration, which includes options in the printer.

- Date and country of assembly.

- The MAC address to use when the printer is connected via an Ethernet network.

Some components might be installed by the dealer or sales group. The information for those items is hand-written on the label.

Chapter 3: Using the System

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This section provides information on how a card travels through the printer, the printer as part of a card production system, printer controls, printing a test card, loading and replacing supplies, and cleaning the printer.

How the Card Travels

The card is verified and sent to print from the PC. The hopper pick mechanism picks a card and moves the card into the printer component for processing.

Optionally, the card moves to the magnetic stripe encode area or to the smart card park station, depending on the type of card selected. The encrypted data is decrypted and written to the card. The finished card exits the printer through the card output hopper.

Card Printer System Overview

The card printer is used with other equipment and software to create a card production system. The system produces cards for a specific purpose and the cards must meet requirements.

The system can include:

1. A PC, with software to support the printer, such as:

   - The Datacard XPS Card Printer Driver for Windows.

   - ID software designed specifically to capture, format, and save the data for cards.

   - A retail application such as Microsoft® Word or Adobe® Photoshop®.
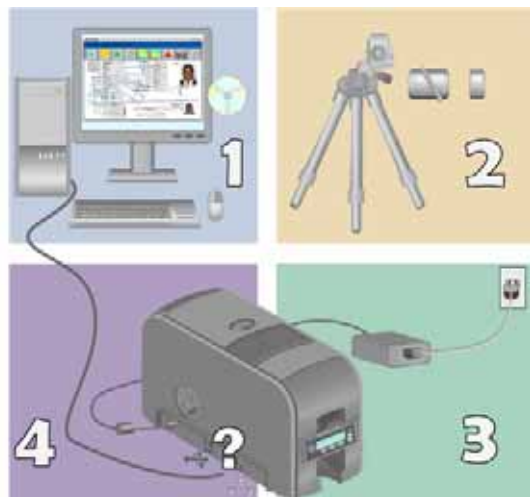
2. Capture devices, such as:

    - A digital camera connected to the PC to take photos for ID badges and other cards.

    - A signature capture pad or fingerprint reader.

3. The printer with supplies and a facility power source.

4. A data connection between the printer and PC, which can be a USB connection or a network connection. (Do not use both with one printer.)

Tasks and Users

Typical roles in a card production system include:

- The **operator** makes cards, loads supplies, and handles minor problems such as card jams.

- The **system administrator** sets up the card printer and other hardware, sets up card designs, configures card production software, and identifies the best use of the card printer in the organization.

Printer Controls

The front panel of the printer provides the controls for operating the printer. It includes the following:

Power Button

Use this button to power off and power on the printer. All lights show steady amber while the printer powers on.

To power off the printer, press the switch for 1 to 2 seconds until the printer powers off.

If the printer is processing cards, press the button for 2 or more seconds to power off the printer immediately. Card jobs in the printer are not completed.
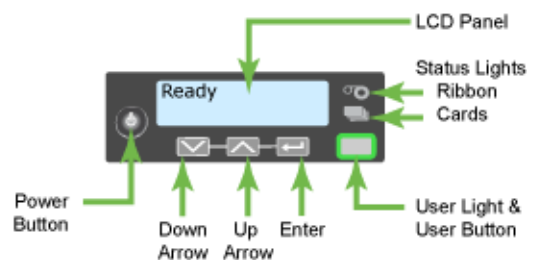
LCD Panel

The LCD panel shows the printer's menus and displays printer messages or conditions. Refer to "Respond to Messages" on page 32 for more information.

Menus

The menu system has three major branches:

- Use the **Maintenance** menu to run a cleaning card or a test card.

- Use the **Status** menu to see settings and data about the printer.

- Use the **Configuration** menu to change settings.

HINTS & TIPS

- The menu system can be accessed when **Ready** displays on Line 1 of the LCD panel.

- The printer returns to the **Ready** status after two minutes of no activity. Changes not applied are lost.

- To leave a selection without changing the value, press the ENTER key repeatedly until **Ready** displays.
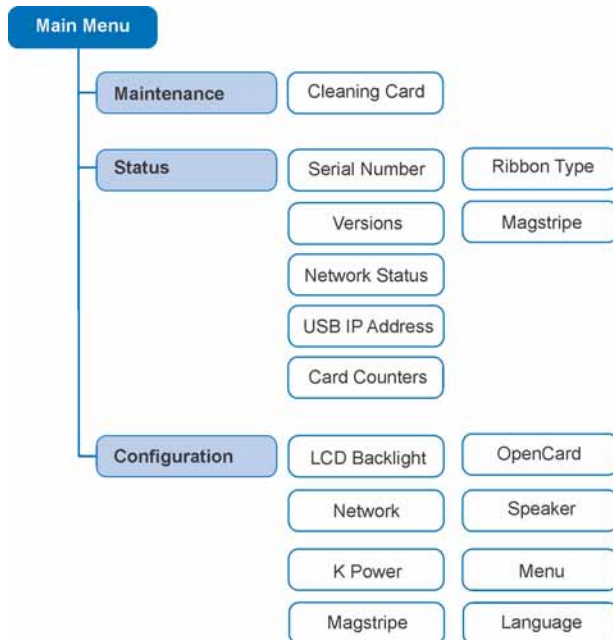
User Button and Light

The printer has a USER button with a ring of light. Its uses are:

- To suspend printer activity, press the USER button when it displays **Ready.**

- To clear a message, press the USER button once.

- To clear all messages, press the USER button for 2 seconds or more.

- To clear all cards currently printing, press and hold the USER button again for two or more seconds. (Make sure that this action is allowed in your card system.)

- To show whether the printer is ready, busy printing, or not available:

Off	Printer is off.	
Green	Printer is ready.	
Blinking green	Printer is busy.	
Amber	The printer is not ready. The POWER button was pressed to turn the printer off.	
Blinking Amber	The printer has an error.	

Down Arrow, Up Arrow, and Enter Key

Use the arrow keys to move through the printer menu system, and the ENTER key to make a selection.

Ribbon Light

The ribbon light glows green when the print ribbon is low. It glows amber when there is a problem with the ribbon.

Off	Ribbon is okay.	
Green	Ribbon is low - less than 10% remains.	
Amber	Ribbon is out or broken.	
Blinking Amber	The printer problem applies to ribbon.	

Card Light

The card light indicates the status of cards in the printer.

Off	Cards are okay.	
Green	Ribbon is low - less than 10% remains.	
Blinking Green	Insert cleaning card.	
Rapid Blinking Green	Insert card for printing.	
Blinking Amber and Green	The printer is equipped with an optional card present sensor and no card is detected.	
Blinking Amber	The printer problem applies to cards.	

Retrieve the Printer IP Address

The printer can display the network IP address it uses when connected to the network. It also displays the Subnet Mask, Gateway Address, and MAC Address.

Begin with the printer power connected, and the printer connected to the network.

1. Press the POWER button (if needed) to power on the printer.

2. Access the Network Status menu in the LCD menu:

   A. Press the USER button to suspend the printer.

   B. Press the ENTER key to enter the menu system.

   C. Press the down arrow to display **Status** on line 2.

   D. Press ENTER to enter the Status menu.

   E. Press the down arrow key to display **Network Status** on line 2.

   F. Press ENTER to display the Network Status menu.

3. Press the down arrow key to display **IP Address** on line 2.

4. Press ENTER to display the IP address. Record the IP address.

5. Press ENTER to return to the Network menu. **Subnet Mask** displays on line 2.

6. Do one of the following:

   - To exit the LCD menu system, skip to step 9.

   - To get the Gateway Address value, press the ENTER key.

     a. Press the ENTER key to return to the Network menu. **Gateway Addr** displays on line 2.

     b. Press the ENTER key to display the Gateway Address (if any).

7. Press ENTER to return to the Network menu.
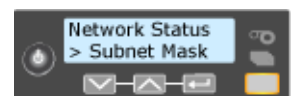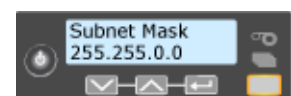
8. Press the down arrow key to scroll to Exit on line 2.

9. Press ENTER repeatedly until **Ready** displays on line one and the USER button glows green.

Print a Test Card

The printer includes a test card that runs without using a driver or other source of card data. Use it to verify that the printer is working.

1. Begin with the printer "Ready". The USER button shows steady green.

2. Press the USER button to display "Suspended" on Line 1 of the LCD panel.

3. Press the ENTER button to enter the menu system.

4. Press the ENTER button to enter the Maintenance menu.

5. Press the down arrow button to display "Test Card" on line 2.

6. With Test Card displayed on Line 2, press the ENTER button to display "Start" on Line 2.

7. After the card prints, press the USER button to return the printer to Ready.
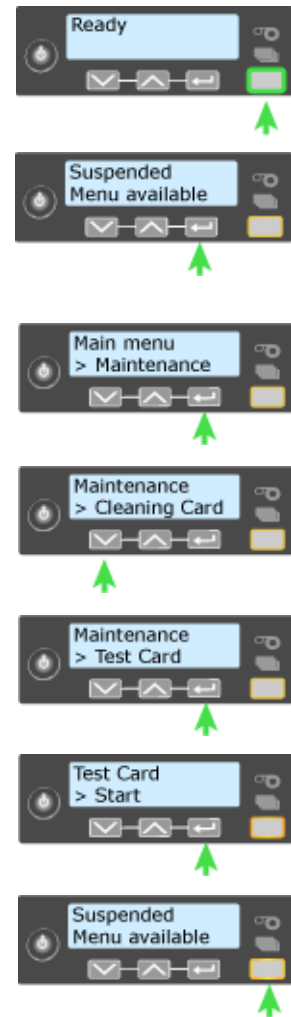
Load and Replace Supplies

To prepare the printer to print cards you load blank card stock into the input hopper (optional), and load print ribbon and a cleaning sleeve into the print cartridge.

Loading Cards

Do one of the following:

- If you are using a manual feed printer, skip this step and keep a supply of blank cards close to the printer.

- For printers with an input hopper, continue with these steps:

  1. Open the input hopper.

  2. Fan cards before placing them into the input hopper.

  3. Insert magnetic stripe cards with the stripe down and toward the right side of the input hopper.

  4. Close the input hopper.
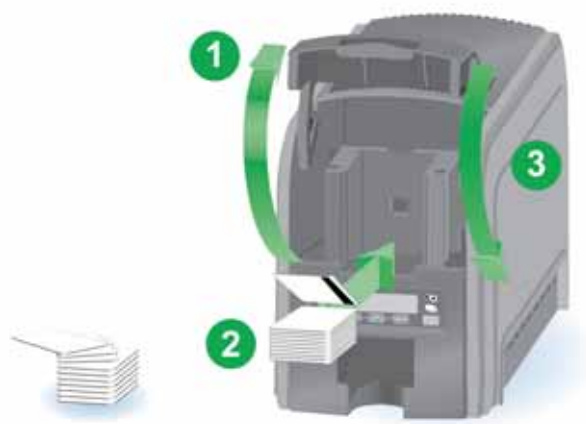
Loading the Print Ribbon

Load the print ribbon when you install the printer and when the ribbon runs out.

1. Open the printer's top cover.

2. Remove the print ribbon cartridge.

3. Load a full roll of print ribbon onto the spindle closest to the cartridge handle.

4. Place the empty spool on the spindle with the black gear.

5. Wind the empty spool counter-clockwise one full turn.

6. Close the printer's top cover.
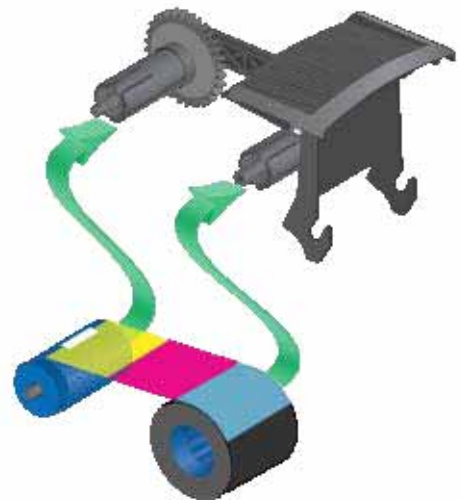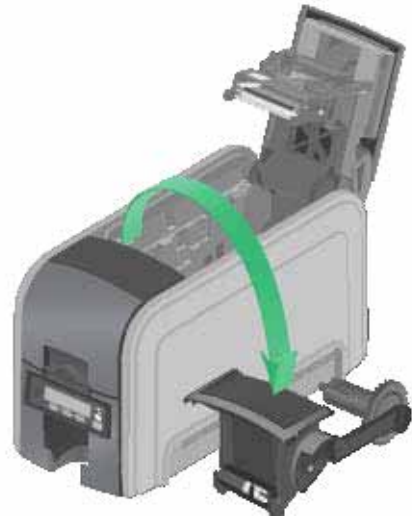
Loading the Cleaning Sleeve

Load a new cleaning sleeve with each new roll of print ribbon.

The printer ships with the cleaning roller spindle installed on the print ribbon cartridge.

1. Remove the cleaning roller spindle from the ribbon cartridge and slide the continuous cleaning sleeve onto the spindle (a).
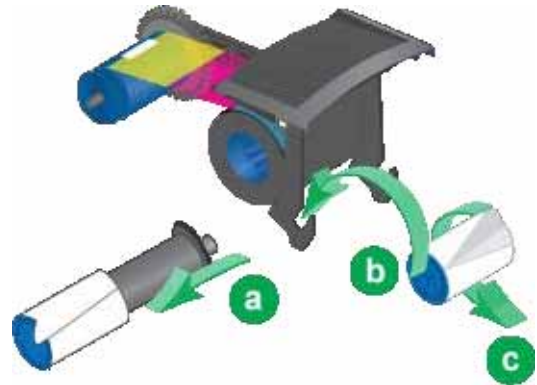
2. Snap the spindle with sleeve installed onto the ribbon cartridge (b).

3. Remove the protective wrapper from the cleaning sleeve (c).

Installing the Ribbon Cartridge

Install the assembled print ribbon cartridge into the printer.

1. Open the printer's top cover.

2. Hold the print ribbon cartridge by the handle and lower into the printer with the handle toward the front of the printer.

3. Make sure that the ribbon cartridge is correctly positioned in the guides.
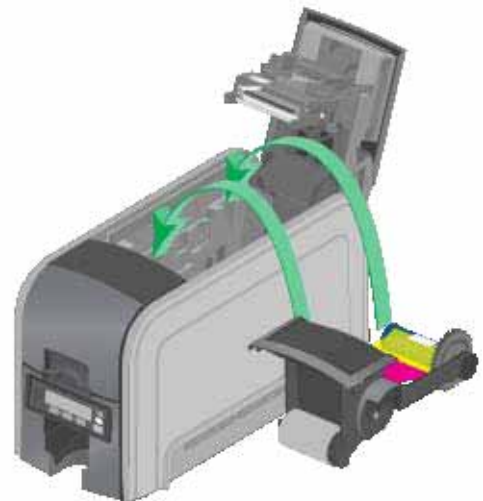
Chapter 4: System Maintenance

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Clean the Printer

The printer performs best when it is cleaned on a regular basis. Follow the cleaning guidelines for your site to keep the printer in good working condition, cleaning the printer when:

- The printer displays a message for which cleaning is a solution.

- There is debris on completed cards.

- There is a new roll of print ribbon installed.

You can perform the following cleaning tasks:

-

-

Clean the Printhead

Clean the printhead when:

- The printhead is replaced.

- There are unprinted lines on the finished card. This usually indicates dirt or contamination on the printhead.

- The printhead is accidentally touched. Oils from hands may affect print quality.

1. Power off the printer.

2. Open the printer cover and remove the print ribbon cartridge.

3. Open the cleaning pen.

4. Using gentle pressure, move the cleaning pen back and forth along the full length of the printhead edge until it is completely clean.

5. Replace the print ribbon cartridge and close the printer cover. Avoid bumping the printhead when installing the print ribbon cartridge.
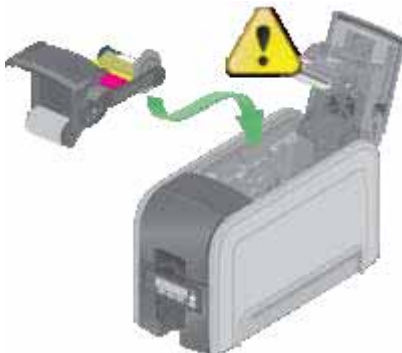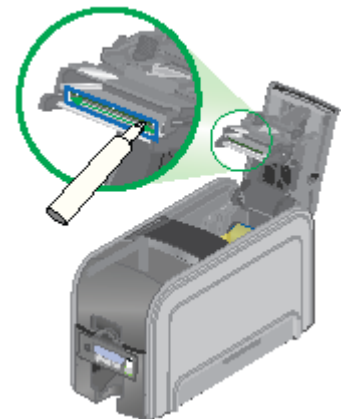
6. Power on the printer.

7. Print a sample card to verify the quality of printing. Refer to "Print a Test Card" on page 15 for more information.

HINTS & TIPS

- Avoid touching the printhead edge with your fingers.

- Avoid touching the printing edge of the printhead cartridge with any sharp objects that can permanently damage the printhead.

- Use only the cleaning pen to clean the printhead. Other materials can stick to the printhead and cause damage.

- Use the cleaning pen up to 8 times, and then replace it.

Run a Cleaning Card

Run a printer cleaning card to clean debris from the inside of the printer. The cleaning card can remove most contaminants from the printer.

1. Prepare the printer.

   A. Power on the printer.

   B. Open the printer cover and remove the print ribbon cartridge.

   C. Close the cover. The ribbon light blinks rapidly.

   D. If necessary, open the input hopper and remove unprinted cards. The card light blinks rapidly if the printer has the Card Present option.

2. Access the LCD menu.

   A. Begin when the printer displays **Ready** and the USER button shows steady green.

   B. Press the USER button to display **Suspended** on Line 1 of the LCD panel.

   C. Press the ENTER button to enter the menu system.

   D. Press the ENTER button to enter the **Maintenance** menu.

   E. Press the ENTER button to display **Cleaning Card.**
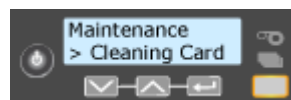
   F. When **Cleaning Card** displays on Line 2, press the ENTER key to display **Start** on Line 2.

   G. Press the ENTER key to display **Insert Cleaning Card** in the LCD panel. The USER button and the card light blink.

3. Insert the cleaning card.

   A. Open the cleaning card package and remove the cleaning card.

B. Place the cleaning card in the input hopper or in the manual feed.

C. Press the USER button to resume or click **Retry** (or **Resume the card**) in the Message box to start the cleaning cycle.

The printer moves the card through the printer several times and ejects it in the output stacker.

4. Remove the used cleaning card. Wait a few minutes for the rollers to dry.

5. Prepare the printer for use.

A. Replace the cards in the input hopper.

B. Replace the cleaning sleeve on the ribbon cartridge with a new sleeve, and remove the protective cover. Refer to "Loading the Cleaning Sleeve" on page 18 for the steps to follow.

C. Replace the ribbon cartridge and close the printer. The printer is ready to print cards again.

D. Discard the used cleaning card and cleaning sleeve.

HINTS & TIPS

• Use the cleaning card and cleaning sleeve one time only.

• Change the cleaning sleeve each time you clean the printer or change the print ribbon.

Chapter 5: Troubleshooting

5

Card Appearance

Card appearance problems can be caused by many different factors. Click the link below that best describes the card appearance issue seen on the printed card.

- Something did not print on page 25

- Printing includes unexpected data on page 26

- The printing is too light on page 27

Something did not print

Problem	Solution
Nothing is printed on the card.	The Print Ribbon is loaded incorrectly. Remove the print ribbon and install it correctly. Refer to the *SD/ CD™ Series Card Printer Installation and Administrator's Guide*.

Printing includes unexpected data

Problem	Probable Cause	Solution
Text intended for the magnetic stripe printed on the card.	The text to encode was longer than one line.	Reduce the font size to keep all text on one line. For more information, refer to the *SD/CD™ Series Card Printer Installation and Administrator's Guide*.
Several blank cards are ejected before the full card prints.	The application can use the page size in effect when a document is created, and you set the page size after creating the document and before printing.	For more information on using the page setup feature to set the page size before creating the document, refer to the *SD/CD™ Series Card Printer Installation and Administrator's Guide*. Consider using a template for cards that opens at the correct page size.

The color printing has flaws

Problem	Probable Cause	Solution
One or more unprinted lines appear on the card.	The printhead is dirty or damaged.	Clean the printhead. Refer to "Clean the Printhead" on page 20.
One color panel is not aligned correctly with other color panels.	The cards are slipping in the track.	Run a cleaning card. Refer to "Run a Cleaning Card" on page 22.
	The cards are not the correct size for the printer.	Use cards that meet the size requirement for the printer. If you must use the cards you have, ask your system administrator for help. Refer to "Cards" in the *SD/CD™ Series Card Printer Installation and Administrator's Guide*.
Printing is blurred.	The cards have a matte, not glossy, finish.	Use cards that meet the requirements for the printer. Refer to "Cards" in the *SD/CD™ Series Card Printer Installation and Administrator's Guide* for specifications.
	The rollers are dirty.	Run a cleaning card. Refer to "Run a Cleaning Card" on page 22.
	The printhead is dirty.	Clean the printhead. Refer to "Clean the Printhead" on page 20.

Problem	Probable Cause	Solution
The printed card has small unprinted areas.	Unprinted cards have scratches.	Handle cards carefully. Refer to "Card Quality Guidelines" in the *SD/CD™ Series Card Printer Installation and Administrator's Guide*.
The printed card has small unprinted areas.	Cards have embedded particles, an uneven surface, or the card edge has burrs.	Use cards that meet the requirements for the printer. Refer to "Cards" in the *SD/CD™ Series Card Printer Installation and Administrator's Guide*.
	The rollers are dirty or the card packaging contains debris.	Run a cleaning card. Refer to "Run a Cleaning Card" on page 22.
Part of the printed image is discolored.	Cards might have fingerprints or other dirt on them.	Handle cards carefully. Refer to "Card Quality Guidelines" in the *SD/CD™ Series Card Printer Installation and Administrator's Guide*.
	The rollers are dirty or the card packaging contains contamination.	Run a cleaning card. Refer to "Run a Cleaning Card" on page 22. Use cards that meet the requirements for the printer. Refer to "Cards" in the *SD/CD™ Series Card Printer Installation and Administrator's Guide*.

The printing is too light

Problem	Probable Cause	Solution
Photos look faded.	The image capture system needs adjustment.	Color settings might not be optimal. For more information on adjusting the color settings, refer to the *XPS Card Printer Driver Guide.*
The printing is very light.	The ribbon is loaded incorrectly.	Load the print ribbon correctly. Refer to "Loading the Print Ribbon" on page 17.
	The card was previously printed and has topcoat on it.	Print only new cards. Refer to "Cards" in the *SD/CD™ Series Card Printer Installation and Administrator's Guide*.
	The printhead is not installed correctly.	Contact your service provider for instructions on installing the printhead correctly.

Magnetic Stripe

To begin troubleshooting a magnetic stripe problem, first print a magnetic stripe sample card from the driver. Refer to "Printing a Driver Sample Card" in the *XPS Card Printer Driver Guide*.

The printer uses the coercivity set using the LCD panel or Printer Manager, and uses the data format set using the Printer Manager.

Problem	Solution
Cards are not loaded correctly.	Load cards with the magnetic stripe down and toward the right side of the printer. Refer to "Loading Cards" on page 16.
Cards do not have a magnetic stripe.	Load magnetic stripe cards in the card cartridge. If the cards have a magnetic stripe, check the quality of the cards. Change card stock if needed.
The card has dirt or damage on the magnetic stripe.	Encode and print the card again. If the message appears again, run a cleaning card to clean the magnetic stripe head. Refer to "Run a Cleaning Card" on page 22.

Card Jam

The card did not reach the position for the next action, such as printing or ejecting the card.

1. Open the printer and remove the ribbon cartridge.

2. Turn the knob to move the card.

3. Remove the card.

4. Replace the ribbon cartridge and close the printer.

5. Press the USER button on the printer or click **Retry** in the Message box.

HINTS & TIPS

Check the ribbon to make sure that it is not torn. Refer to "110: Print ribbon out or missing" on page 36 to fix the ribbon if needed.

Messages and Conditions

When the printer cannot process the card sent, it issues a condition. The LCD panel on the front panel shows these conditions. If your system uses the XPS Card Printer Driver, the printer driver also displays the condition as a message on the PC.

In a shared printer environment, messages may be slightly different from the messages and conditions described in this section. You view:

- Messages on the Printer LCD on page 30.

- Messages from the XPS Card Printer Driver on the PC on page 30.

- Messages From Printer Manager on page 31.

- Other Messages on page 31.

Messages on the Printer LCD

All messages are associated with a print job. The printer issues messages that focus on recovering from problems.

- The printer displays a short description and a message number for each message.

- If more than one message was issued, the next message displays after you correct the problem and press the USER button.

- If you cancel a job at the printer, the message is removed from the PC. Any additional messages for the canceled job, such as for a broken ribbon, do not display on the PC.

Messages from the XPS Card Printer Driver on the PC

- Messages the printer driver displays are similar to those on the printer LCD panel.

- Messages display on the PC sending the card.

- Messages might be in the background, behind the application sending the card. On some operating systems, the message might appear in the status bar. Click the icon in the status bar to open the message.

- If more than one message was issued, the next message displays after you close the current message.

- If there is more than one card printer installed on the PC, messages are displayed one at a time. The title bar of each message shows the printer name.

- If there is more than one card printer installed on the PC and each has issued errors, the printer driver displays the messages received even if you cleared the error at the printer.

- The driver can issue messages that are not displayed on the printer LCD panel.

Messages From Printer Manager

The Printer Manager issues messages that display in a Web browser window. Click **Continue** in Printer Manager to continue working with the printer. Refer to "Printer Manager" in the *SD/CD™ Series Card Printer Installation and Administrator's Guide*.

Other Messages

- The card production application you use may display messages.

- Other printers can cause messages if more than one model of card printer is installed.

Respond to Messages

You can respond to printer messages using the printer front panel buttons or, if your system uses the XPS Card Printer Driver, by selecting buttons in the Message box displayed in Windows.

> Names of Message box buttons on the PC are worded slightly differently depending on the installed operating system.

100: Request not supported

The print request or other action failed.

To print the card:

1. Change the data to match the system's features and settings.

2. Press the User button on the printer or click **OK** (or **Cancel the card)** in the Message box to clear the error.

3. Send the new card to print again, making sure that you choose the correct printer in the card production application. Ask your system administrator for assistance, if needed.

4. Discard any incomplete cards.

101: Job could not complete

The card took too much time.

To print the card again:

1. Make sure that data, such as a photo, is on the PC before printing. If you are connected to a database, verify the connection.

2. Press the User button on the printer or click **OK** in the Message box to clear the error.

3. Send the card to print again.

4. Discard any incomplete cards.
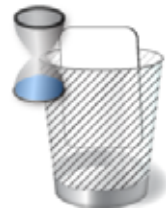
102: Card not in position

The card did not reach the position for the next action, such as printing or ejecting the card.

1. Open the printer and remove the ribbon cartridge.

    A. Check the ribbon to make sure that it is not torn. Refer to "110: Print ribbon out or missing" on page 36 to fix the ribbon if needed.

    B. Remove any debris from the print area.

2. Turn the knob to move the card.

3. Remove the card.

4. Replace the ribbon cartridge and close the printer.

5. Press the USER button on the printer or click **Retry** in the Message box.

103: Printer problem

The printer has a problem that prevents it from completing the card.

1. Press the printer POWER button to power it off.

2. Press the printer POWER button to power it on again.
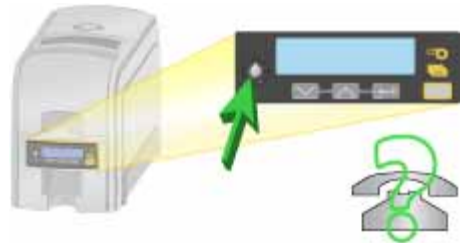
104: Critical problem

1. Press the printer POWER button or click **OK** (or **Cancel the Card**) in the Message box to power the printer off.

2. Request service. The printer needs to remain off due to an internal problem.

105: Magstripe data error

The printer encoded data on the card but could not verify all of the written data.

To print the card again:

1. Insert a magnetic stripe card that matches the printer settings, positioning the card with the magnetic stripe down and to the right side of the printer

2. Press the USER button on the printer or click **Retry** in the Message box.

HINTS & TIPS

- The card might have been turned the wrong way.

- The card might not have a magnetic stripe.

106: Magstripe data not found

The printer could not find magnetic stripe written data on the card.

To print the card again:

1. Insert a magnetic stripe card with data, positioning the card with the magnetic stripe down and to the right side of the printer

2. Press the USER button on the printer or click **Retry** in the Message box.

HINTS & TIPS

- The card might not match printer settings or the data sent.

- Ask the system administrator to verify that the card, the data, and the printer settings match.

107: Magstripe read data error

The printer could not read the magnetic stripe data on the card.

To read the card successfully:

1. Press the USER button on the printer or click **OK** in the Message box to clear the error.

2. Insert a magnetic stripe card with data, positioning the card with the magnetic stripe down and to the right side of the printer.

3. Send the new card to the printer.

HINTS & TIPS

- The data might use a different format than the current printer setting.

- Ask the system administrator to verify that the card, data, and printer settings match.

108: Magstripe read no data

The printer did not find any magnetic stripe data on the card.

To read the card:

1. Press the USER button on the printer or click **OK** (or **Cancel the card)** in the Message box to clear the error.

2. Insert a magnetic stripe card with data, positioning the card with the magnetic stripe down and to the right side of the printer.

3. Send the new card to the printer.

HINTS & TIPS

- The card might have been turned the wrong way.

- The card might not have a magnetic stripe.

109: Print ribbon problem

The print ribbon is not moving properly.

To fix the ribbon:

1. Open the printer and remove the ribbon cartridge.

2. Cut and tape the damaged ribbon to the take-up spindle, and move the repaired area one full turn.

3. Remove any debris from the print area.

4. If the card is in the printer, turn the knob to move the card so the printer can eject it.

5. Replace the ribbon cartridge and close the printer.

6. Press the USER button on the printer or click **Retry** in the Message box.
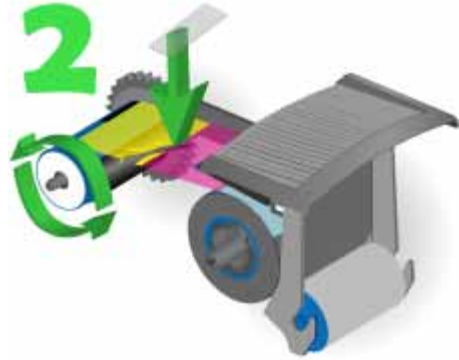
110: Print ribbon out or missing

The printer does not have usable ribbon.

To load new print ribbon:

1. Open the printer and remove the ribbon cartridge.

2. Remove the existing ribbon and cleaning roller, if present.

3. Install the ribbon. Replace the cleaning roller.

4. Replace the ribbon cartridge and close the printer.

5. Press the USER button on the printer or click **Retry (**or **Resume the card)** in the Message box.
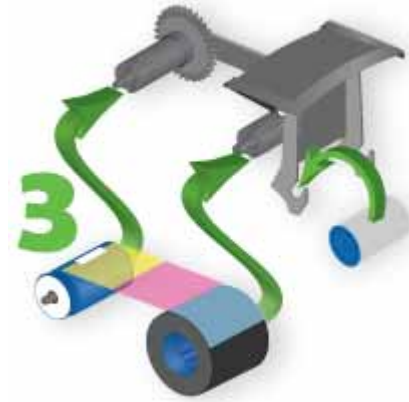
HINTS & TIPS

Used ribbon has negative images of printed data. To keep the data confidential, follow your company policy to discard used ribbon.

111: Card not picked

The printer did not pick a card.

To load cards in printers with an input hopper:

1. Open the input hopper.

2. Insert cards in the input hopper. To prevent cards
   from sticking together, slide or fan cards to separate the edges before loading
   the input hopper. Refer to "Card Handling" in the *SD/CD™ Series Card Printer
   Installation and Administrator's Guide*.

   - Orient all cards the same way.

   - Do not touch the card surface to be printed.

   - Handle cards by their edges.

   - Wear gloves.

3. Close the input hopper

4. Press the USER button on the printer or click **Retry (**or **Resume the card)** in the
   Message box to resume printing.

To load cards in printers with a single-card feed:

1. Insert a card into the single-card feed. Refer to "Card Handling" in the *SD/CD™
   Series Card Printer Installation and Administrator's Guide*.

   - Orient all cards the same way.

   - Do not touch the card surface to be printed.

   - Handle cards by their edges.

   - Wear gloves.

2. Push the card in until the printer moves it.

3. Press the USER button on the printer or click **Retry (**or **Resume the card)** in the
   Message box.

112: Card hopper empty

The printer does not detect cards in the input hopper.

1. Open the input hopper.

2. Insert cards in the input hopper. To prevent cards
    from sticking together, slide or fan cards to separate
    the edges before loading the input hopper. Refer to
    "Card Handling" in the *SD/CD™ Series Card Printer Installation and
    Administrator's Guide*.

    - Orient all cards in the same direction.

    - Do not touch the card surface to be printed.

    - Handle cards by their edges.

    - Wear gloves.

3. Close the input hopper.

4. Press the USER button on the printer or click **Retry (**or **Resume the card)** in the
    Message box to resume printing.

113: Close cover to continue

The printer cover must be closed to print.

1. Close the cover.

2. Push down on the cover to latch it.

3. Press the USER button on the printer or click **Retry
    (**or **Resume the card)** in the Message box.

HINTS & TIPS

Make sure that the ribbon cartridge is installed with the cartridge handle even
with the edges of the printer.

114: Cover opened during job

The printer cover must be closed to print.

1. Close the cover.

2. Push down on the corners of the cover to latch it.

3. Press the USER button on the printer or click **Retry** in the Message box.

4. Discard any incomplete cards.

HINTS & TIPS

Make sure that the ribbon cartridge is installed with the handle even with the edges of the printer.

115: Wait for print temperature

The printer is not at the correct temperature to print the card.

1. Printing the card may resume on its own
   OR
   Press the USER button on the printer or click **Retry (**or
   Resume the card) in the Message box.

2. Discard any incomplete cards.

HINTS & TIPS

Make sure that you have chosen the correct printer in the application. Ask the system administrator for assistance if needed.

116: Magstripe not available

Open the printer cover and look at the **config** area of the label inside.
Does the label show **M** or **J**?

- If yes, the printer has a magnetic stripe option that is not working.

   A. Press the USER button on the printer or click **OK (**or **Cancel the card)** in the Message box.

B. Request service.

- If no, the printer does not have a magnetic stripe option.

  To print the card without magnetic stripe encoding:

  A. Press the USER button on the printer or click **OK (**or **Cancel the card)** in the Message box.

  B. Remove magnetic stripe data from the card.

  C. Send the card again.

HINTS & TIPS

To remove magnetic stripe data, you or your system administrator may need to:

- Clear a checkbox in the card production application.

- Change the font from Mag Track X XPS Card Printer to a printable font such as Arial, Verdana, or Calibri. Refer to "Magstripe Formats" in the *SD/CD™ Series Card Printer Installation and Administrator's Guide*.

117: Reader not available

The printer does not have a magnetic stripe reader option.

To print the card without using a reader option:

1. Press the USER button on the printer or click **OK (**or **Cancel the card)** in the Message box.

2. Remove the reader request from the card.

3. Send the card again.

HINTS & TIPS

To remove the reader request, you or your system administrator may need to clear a checkbox in the card production application.

118: Print ribbon type problem

The printer cannot use the ribbon installed.

Press the USER button on the printer or click **OK (**or **Cancel the card)** in the Message box.

When the printer recognizes that a supported ribbon is installed, all enhanced product features are enabled and successful card printing can begin.

HINTS & TIPS

- Use ribbon designed for this printer brand and model.

- Check the website for newer firmware that supports new ribbon types.

119: Print ribbon not supported

The printer cannot use the ribbon installed.

Press the USER button on the printer or click **OK (**or **Cancel the card)** in the Message box.

When the printer recognizes that a supported ribbon is installed, all enhanced product features are enabled and successful card printing can begin.

HINTS & TIPS

- Purchase ribbon from your dealer or authorized reseller.

- Use ribbon designed for this printer brand and model.

120: User paused the printer

The user pressed the USER button on the printer when a card was in process.

Press the USER button to resume or click **Retry** (or **Resume**) in the Message box.
The card continues processing without damage.

HINTS & TIPS

- If the user pressed the button for several seconds, the card has been canceled.
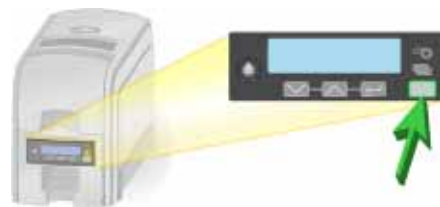
- If this message occurs often, ask your system administrator to set the button sensitivity to a lower value.

121: Print ribbon not identified

The ribbon data is damaged.

1. If needed, install a supported ribbon.

2. Press the USER button on the printer or click **Retry** in the Message box.

   When the printer recognizes that a supported ribbon is installed, all enhanced product features are enabled and successful card printing can begin.

HINTS & TIPS

- Ask your dealer or authorized reseller for a replacement.

- Use ribbon designed for this printer brand and model.

122: Magstripe format problem

The magnetic stripe data sent does not match the format set in the printer.

To solve the magnetic stripe format problem:

1. Press the USER button on the printer or click **OK** (or **Cancel the card)** in the Message box to clear the error.

2. Ask the system administrator to verify that the card, the data, and the printer settings are compatible. Make sure that all data for the card is available.

3. Send the card to print again.

123: Insert new card side 1 up

The card requires you to insert a new card into the printer with the front of the card (side 1) facing up.

To insert a new card with side 1 up:

1. Insert the card with side 1 up in the manual feed slot of the printer. Make sure to use the correct type of new card for this job. Refer to "Card Handling" in the *SD/CD™ Series Card Printer Installation and Administrator's Guide*.

- Do not touch the card surface to be printed.

- Handle cards by their edges.

- Wear gloves.

2. Press the USER button to resume or click **Retry** (or **Resume the card**) in the Message box.

124: Insert same card side 2 up

The card must be re-inserted with the back of the card (side 2) facing up.

To insert the same card with side 2 up:

1. Turn the card over, end to end. Make sure to turn over the card to the back side (side 2) for this job. Refer to "Card Handling" in the *SD/CD™ Series Card Printer Installation and Administrator's Guide*.

- Do not touch the card surface to be printed.

- Handle cards by their edges.

- Wear gloves.

2. Insert the card with the back side up in the manual feed slot of the printer.

3. Press the USER button to resume or click **Retry** (or **Resume the card**) in the Message box.

149: Option not installed

Data for hardware that is not included in the system was sent.

1. Press the USER button or click **OK** (or **Cancel the card**) in the Message box to cancel the error.

2. Remove the data from the card design.

3. Resend the card.

HINTS & TIPS

Don't include references in the card format to hardware that cannot be accessed by the system. For more information, refer to your ID software documentation or your system administrator.

152: Insert new card side 2 up

The new card must be inserted with the back of the card (side 2) facing up.

To insert a new card with side 2 up:

1. Insert the card with side 2 up in the manual feed slot of the printer. Make sure to turn over the card to the back side (side 2) for this job. Refer to "Card Handling" in the *SD/CD™ Series Card Printer Installation and Administrator's Guide*.

    - Do not touch the card surface to be printed.

    - Handle cards by their edges.

    - Wear gloves.

2. Press the USER button to resume or click **Retry** (or **Resume the card**) in the Message box.

153: Insert same card side 2 up

The same card must be re-inserted with the back of the card (side 2) facing up.

To re-insert the same card with side 2 up:

- Turn the card over, end to end.

- Do not touch the card surface to be printed.

- Handle cards by their edges.

- Wear gloves.

1. Insert the card with the back side up in the manual feed slot of the printer. Make sure to turn over the card to the back side (side 2) for this job. Refer to "Card Handling" in the *SD/CD™ Series Card Printer Installation and Administrator's Guide*.

2. Press the USER button to resume or click **Retry** (or **Resume the card**) in the Message box.

170: Insert new card side 1 up

The card requires you to insert a new card into the printer with the front of the card (side 1) facing up.

To insert a new card with side 1 up:

1. Insert the card with side 1 up in the manual feed slot of the printer. Make sure to use the correct type of new card for this job. Refer to "Card Handling" in the *SD/CD™ Series Card Printer Installation and Administrator's Guide*.

    - Do not touch the card surface to be printed.

    - Handle cards by their edges.

    - Wear gloves.

2. Press the USER button to resume or click **Retry** (or **Resume the card**) in the Message box.

171: Insert same card side 1 up

The card must be re-inserted with the front of the card (side 1) facing up.

To insert the same card with side 1 up:

- Turn the card over, end to end.

- Do not touch the card surface to be printed.

- Handle cards by their edges.

- Wear gloves.

1. Insert the card with the front side up in the manual feed slot of the printer. Make sure to turn over the card to the front side (side 1) for this job. Refer to "Card Handling" in the *SD/CD™ Series Card Printer Installation and Administrator's Guide*.

2. Press the USER button to resume or click **Retry** (or **Resume the card**) in the Message box.

172: Insert cleaning card

This message displays when you run a cleaning card. For details, refer to "Run a Cleaning Card" on page 22.

To insert the cleaning card:

1. Prepare the printer.

2. Insert a cleaning card in the manual feed slot of the printer.

3. Press the USER button to resume or click **Retry** (or **Resume the card**) in the Message box.

4. Continue running the cleaning card.

5. Dispose of the cleaning card after use. It is made for a single use only.

173: Improper shutdown

An improper shutdown was detected.

To resolve the shutdown error, press the USER button or click **OK** in the Message box to clear the message at the printer before printing.
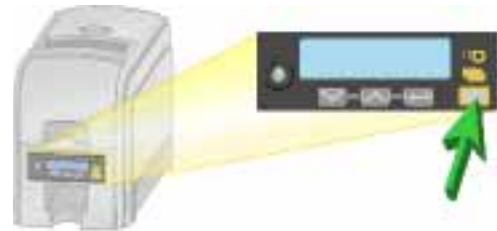
HINTS & TIPS

To avoid improper shutdowns, always use the power button to power off the printer.

Chapter 6: Supplies and Parts

6

This section includes card specifications and information on card handling and storage, and describes the supplies and replacement parts used with the printer.

Cards

For best results, use high-quality cards that meet the specifications and recommendations described in this section.

Card Size

Use ISO ID-1 size cards, also called CR80 cards. Such cards have the following dimensions:

- 3.37 inches long by 2.125 inches wide (85.60mm long x 53.98mm wide).

- 0.010 to 0.030 inches thick (0.254 to 0.762mm thick).

For encoding magnetic stripe, use cards:

- 3.37 inches long by 2.125 inches wide (85.60mm long x 53.98mm wide).

- 0.010 to 0.030 inches thick (0.508mm to 0.762mm thick).

Actual card thickness can vary by up to ten percent from the sizes listed. Typically, card bow must be less than the thickness of the card.

Card Material

Use cards with a glossy PVC surface, either 100% PVC cards or composite cards with a PVC surface. Cards can have a magnetic stripe on one side of the card.

Pre-Punched Cards

The cards can have a punched area within 1 inch (25mm) of the left edge, as the cards are loaded in the printer. If the card has a magnetic stripe, the card must not be punched anywhere in the stripe.

0.56-in (14.3mm) maximum

0.20-in (5.1mm) maximum
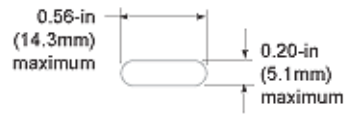
New Cards for Color Printing

The printer is designed to print on new card stock. If you print on cards twice, be careful to avoid getting dirt, fingerprints, or other contaminants on cards before the second printing. Previous printing can interfere with printing and result in cards that do not have the appearance you want. Printing on cards that have been issued might introduce substances that interfere with card printing or damage the printer. If a previously printed card has been printed with topcoat, the card cannot be printed a second time.

Adhesive-Backed Cards

Adhesive-backed cards are printed, and then adhered to proximity cards when the card surface is not flat enough to print. Use only Datacard adhesive-backed cards with the printer. Follow these guidelines:

- Store cards in a cool place (such as a refrigerator) to avoid adhesive migration.

- Clean the printer's card tracks to remove any adhesive residue. Use the printhead cleaning pen or isopropanol and a swab to remove the residue.

- Use a print margin of at least 0.05 inch when using adhesive-backed cards.

Card Quality Guidelines

Cards must meet the following card quality guidelines for the printer to print high-quality graphics successfully.

Card Surface

The card must be smooth and even, and free of irregularities such as raised burrs or particles embedded in the surface. Surface irregularities can cause printing voids, especially when printing edge to edge.

Card Handling

These guidelines apply to unprinted cards.

- Any debris or particles on an unprinted card's surface can reduce print quality and damage the printhead.

- Grease or oils, such as oils from your fingers, also reduce print quality. Keep cards completely clean. Do not touch the print surface of a card with your fingers or hands.

- Do not use a rubber band to bind blank cards together.

- If you drop a card on the floor, do not insert it into the printer.

Card Storage

These guidelines apply to both printed and unprinted cards.

- Cards must be stacked so that they do not shift and rub against each other.

- When storing cards, make sure that no two cards contain images or blocks of color that come in contact with each other.

- Make sure that the magnetic stripe on one card does not come in contact with the magnetic stripe on another card.

- Make sure that cards with magnetic stripes are stored away from magnets and other magnetic objects.

- Store cards in a cool, dry, and dark place. Excessive light can cause yellowing of cards on exposed edges.

- Keep cards in their original packaging.

- Cards should be at room temperature when they are used. If cards are stored in a cooler environment than the printer, allow them to reach room temperature before using.

Supplies

Print Ribbon

Print ribbon kits are available from your dealer. Kits include a print ribbon, a cleaning card, and a replaceable cleaning sleeve. For best results, run a cleaning card and replace the cleaning sleeve with each new print ribbon.

Color Print Ribbon

Color print ribbon is available in either full-panel or short-panel options. Both full-panel and short-panel print ribbons use the following color panels: Y (yellow), M (magenta), C (cyan/blue), K (black), and T (topcoat).

Full-Panel Color Print Ribbon

Use full-panel print ribbon when the card design calls for color printing on the entire card.

Full-panel YMCKT ribbon

Short-Panel Color Print Ribbon

Short-panel print ribbon is for use when only a portion of the card design calls for color. For example, a card design may have a color photo on the top or left of the card, and black text on the bottom of the card. The color area for short-panel ribbon is 1.57 inches (40mm). The YMC panels of short-panel ribbon are approximately half the length of a full card.

Short-panel YMCKT ribbon

For more information, refer to the *Datacard® SD/CD™ Series Card Printer Installation and Administrator's Guide*.

Color Print Ribbon Kits

For more information, refer to the *Datacard® SD/CD™ Series Card Printer Installation and Administrator's Guide*.

Monochrome Print Ribbon

For more information, refer to the *Datacard® SD/CD™ Series Card Printer Installation and Administrator's Guide*.

Monochrome Print Ribbon Kits

For more information, refer to the *Datacard® SD/CD™ Series Card Printer Installation and Administrator's Guide*.

Print Ribbon Storage Guidelines

- Store print ribbon in the original package until you load it in the printer and keep the original packaging closed.

- The print ribbon maintains its quality for about one year. For optimum card quality, purchase and store quantities that can be used within one year.

- The print ribbon and card stock might require secure storage and tracking. Follow your policy for storing and tracking the supplies used to make cards.

- Choose a location away from direct sunlight, with a temperature between 32° and 77°F (0° and 25°C). A range of 40% to 60% non-condensing humidity is recommended.

- Install supply rolls at room temperature. If supplies are stored in an environment that is cooler than the printer environment, allow supplies to reach room temperature before using.

- If the printer will not be used for an extended period, remove supplies from the printer and store them with new supplies.

Cable Lock Option

For more information, refer to the *Datacard® SD/CD™ Series Card Printer Installation and Administrator's Guide*.

Cleaning Supplies

For more information, refer to the *Datacard® SD/CD™ Series Card Printer Installation and Administrator's Guide*.

Hopper Options

200-Card Input Hopper

The 200-card input hopper kit includes the larger hopper with cover attached. The standard hopper is easily removed, and the 200-card hopper can be installed without using tools.

Large Output Hopper

The printer can use a large output hopper, which holds about 100 cards. The user can replace the small, standard hopper with the large hopper without using tools.
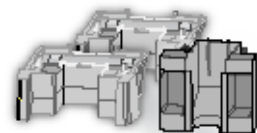
Power Supply, Cables, and Cords

Power Supply

The power supply is rated at 100-240 VAC, 50-60Hz and uses up to 3 amps. It is self-adjusting within the rated input voltage.

Data Cables and Power Cord

The printer uses a data cable and a power cord.

Data Cable

The data cable connects the printer to the network or PC sending cards. The data cable can be:

- a USB cable.

- a network cable.

Use only one data cable with a printer. If you need to connect more than one PC to a printer, use a network connection.

USB Cable

Use a 6-ft. USB data cable to connect the printer to the PC. Be sure to use a cable rated for USB 2.0 data transmission.

Network Cable

Use a standard network cable, sometimes called a Category 5 or Cat 5 cable, to connect the printer to a network port.

Smart Card Cable

Use a USB cable up to a maximum of 6 feet (2 meters) long to connect the smart card port to the PC.

Power Cord

The power cord connects to facility power and the printer power supply. Be sure to use a cord that grounds to the facility power source.

The printer can use one of the following power cords:

- USA power cord

- European power cord

- Australian power cord

- United Kingdom power cord

- Danish power cord

- Indian power cord

- Israeli power cord

- Italian power cord

- Swiss power cord

- Chinese power cord

- Japanese power cord

Replacement Parts

The following printer replacement parts are available.

Printhead Cartridge

The printer has a replaceable printhead cartridge. The printhead is subject to wear or damage and has a direct impact on print quality.

Do not touch the printing edge of the printhead in the printhead cartridge. Clean the printhead following the steps in "Clean the Printhead" on page 27.

Print Ribbon Cartridge

The ribbon cartridge holds the print ribbon and the replaceable cleaning sleeve in the printer.

Cleaning Roller Spindle

The cleaning roller spindle holds the replaceable cleaning sleeve.

Chapter 7: Legal and Compliance

7

Please note and heed the WARNING and CAUTION labels that have been placed on the equipment for your safety. Please do not attempt to operate or repair this equipment without adequate training.

Regulatory Compliance

Notice for USA (FCC notice)

This equipment has been tested and found to be within the limits for Class A computing devices, pursuant to Subpart J of Part 15 of FCC rules, designed to provide reasonable protection against radio interference in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy. If it is not installed and used in accordance with this instruction manual, it may interfere with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice for Canada

This digital apparatus does not exceed the Class A limits for radio noise for digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

The term "IC:" before the radio certification number only signifies that Industry Canada Technical specifications were met.

Notice for Europe

We hereby certify that this printer complies with EMC Directive 89/336/EEC, R&TTE Directive 1999/5/EC, and the EU RoHS Directive EU Directive 2002/95/EG.

This printer conforms to Class A of EN 55022 and to EN 301 489-5. Operation of this equipment in a residential environment may possibly cause interference. In the event of interference, the user, at their own expense, will be required to take whatever measures are necessary to correct the problem.

Notice for Taiwan

警告使用者：
這是甲類的資訊產品，在居住的
環境中使用時，可能會造成射頻
干扰，在這种情況下，使用者會
被要求采用某些适當的對策。

Notice for Japan

This equipment is in the Class A category of information technology equipment based on the rules of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). When used in a residential area, radio interference may be caused. In this case, the user may be required to take appropriate corrective actions.

この装置は，クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。　　　　VCCI - A

Notice to All Users

The printer emits radio-frequency waves and must be used as installed and recommended by the printer manufacturer. You may not modify the printer or how it is used without written permission. You may not operate the printer after modifying it or its method of operation.

Liability Statement

This product has been built to the high standards of Datacard. Please note and heed the WARNING and CAUTION labels that have been placed on the equipment for your safety. Please do not attempt to operate or repair this equipment without adequate training. Any use, operation or repair in contravention of this document is at your own risk. By acceptance of this system you hereby assume all liability consequent to your use or misuse of this equipment. Datacard assumes no liability for incidental, special, or consequential damage of any kind. Equipment specifications, applications and options are subject to change at the sole discretion of Datacard without notice.

Safety

All *Datacard* brand products are built to strict safety and reliability specifications in accordance with UL60950 and Canadian requirements, and the Low Voltage Directive 73/23/EEC. Therefore, safety issues pertaining to operation and repair of *Datacard* brand equipment are primarily environmental and human interface.

The following basic safety tips are given to ensure safe installation, operation and maintenance of *Datacard* brand equipment and are not to be considered as comprehensive on all matters of safety.

Safe environment

Connect equipment to a grounded power source. Do not defeat or bypass the ground lead.

Place the equipment on a stable surface (table) and ensure floors in the work area are dry and non-slip.

Know the location of equipment branch circuit interrupters or circuit breakers and how to turn them on and off in case of emergency.

Know the location of fire extinguishers and how to use them. ABC type extinguishers may be used on electrical fires.

Know local procedures for first aid and emergency assistance at the customer facility.

Use adequate lighting at the equipment location.

Maintain the recommended temperature and humidity range in the equipment area.

Safe human interface

Use proper lifting techniques when moving or installing the equipment.

Use standard electrostatic discharge (ESD) precautions when working on or near electrical circuits.

Do not disconnect safety interlocks on covers. Operate the printer with the cover closed.

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