



**Printer Driver for the Datacard®
150i, 2xx, and 450 Series Printers
for Windows® Platforms**

*Installation and
Technical Reference Manual*

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Revision Log

Printer Driver for the Datacard® 150i, 2xx, and 450 Series Printers for Windows Platforms Installation and Technical Reference Manual

| Revision | Date | Affected Pages | Description of Changes |
|----------|----------------|----------------|---|
| A | October 1998 | All | New Release |
| B | December 2001 | Front matter | Update for new company information and Windows 2000 |
| C | September 2006 | Many | Updated manual to incorporate Windows XP |

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Introduction

The Datacard printer drivers for Windows® NT, 2000, and XP provide users with the ability to print using the Microsoft® Windows operating systems. The drivers support the 150i, 2xx, and 450 printers. The capabilities of these printers are listed in Table 1.

Table 1. Supported Printer Capabilities

| Printer | Capabilities |
|---------|--|
| 150i | Emboss Indent Encode magnetic stripes Topping |
| 2xx | Emboss Indent Encode magnetic stripes Print graphics Topping |
| 450 | Emboss Indent Encode magnetic stripes Topping |

What's in this Manual

This manual contains the following information:

Introduction. This chapter provides information about system requirements and limitations.

Installing the Printer Driver and Utility. This chapter provides installation information and procedures for the printer driver, the character translation utility, and the printer.

Printer Fonts. This chapter includes information about fonts that are available using the printer driver for Windows NT, 2000, and XP.

Printing in a Windows Environment. This chapter tells how to change default settings, how to override default settings temporarily, and how to use the driver's online help system.

Troubleshooting. This chapter includes information and procedures for solving printing problems.

Related Documents

If you need additional information about the printer your system uses, refer to one of the documents listed below:

| Manual | Manual Part Number | CD-ROM Library Part Number |
|---|--------------------|----------------------------|
| Datacard 150i Card Personalization System CPX Protocol/Setup Manual | 526637-001 | 539170-001 |
| DataCard 150i Card Personalization System Administrator's Guide | 526638-001 | |
| 2xx Card Personalization System CRT Operator's Manual | 539017-001 | 539039-001 |
| 2xx Card Personalization System Keyboard Option Operator's Manual | 539018-001 | |
| 2xx Card Personalization System Maintenance Manual | 539019-001 | |
| Datacard CPX Communications Protocol Manual | 526473-001 | |
| Datacard 450 Operator's Guide | 526141-001 | 539299-001 |

System Requirements

The minimum system requirements for installing and using the printer driver for Windows NT or 2000 or XP are:

- Microsoft Windows NT 4.0 with Service Pack 3 (Build 1381) or Windows 2000 or XP
- A computer system that meets the minimum requirements for Windows
- One of the following:
 - 150i printer with the following firmware:
 - Main board: 556228-801 Rev. A or above
 - 2xx printer with the following firmware:
 - Main board: 596006-001 Rev. H or above
 - Graphics: 596199-001 Rev. A or above
 - 450 printer with the following firmware:
 - Main board: 590752-001 Rev. D or above

Refer to the operator's manual for procedures to determine the printer's firmware level.

Printer Driver Limitations

The printer drivers for Windows NT, 2000, and XP do *not* support the following features:

- Two-sided badge printing using the Datacard ID Works software
- Encapsulated postscript (.eps) files
- Microsoft Windows 3.1, 95, or 98 (Windows 95 and 98 have separate drivers)
- Any other version of Windows NT (3.51, 5.0 or higher, etc.)
- NTT (or J) encoding or any magnetic stripe encoding schemes other than IATA, ABA, or TTS
- Smart card personalization
- Bar code generation (your Windows application must generate the bar code and pass it to the driver for printing)
- “Indent” fonts do not display in WYSIWYG (what-you-see-is-what-you-get)
- Encryption capability as required by Visa[®]
- The 150i password for the production of major brands of financial cards (Visa, MasterCard[®], etc.)
- Rotated embossed text


Embossing Limitations

Cards pass through the embosser in landscape orientation and the embossing wheels print characters horizontally. Therefore, embossing must be limited to landscape orientation.

The 150i and 450 do not support portrait orientation.

Installing the Printer Driver and Utility

Before starting the installation procedure, verify that your PC and printer meet the applicable requirements listed in System Requirements on page 6.

-  The Printer Driver for XP can be downloaded from PartnerPage (www.partnerpage.com).

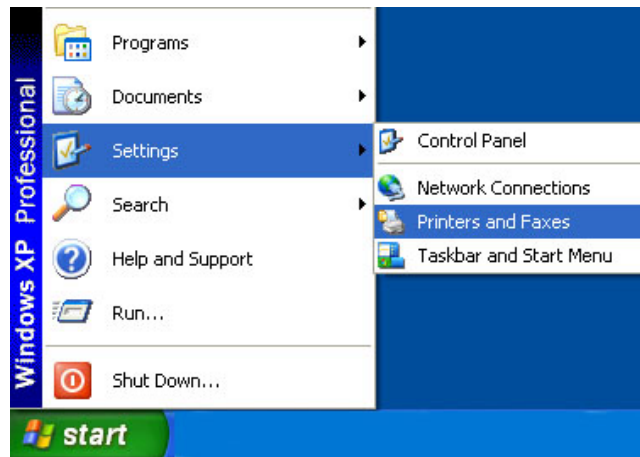
Removing the Old Driver (if present)

If the PC has a previous version of the printer driver for Windows, you will need to remove it before installing the new driver. **If you are sure there is no previous version of the printer driver for Windows NT or 2000 on this PC, go directly to Installing the Printer Driver for Windows NT, 2000 or XP on page 10.**

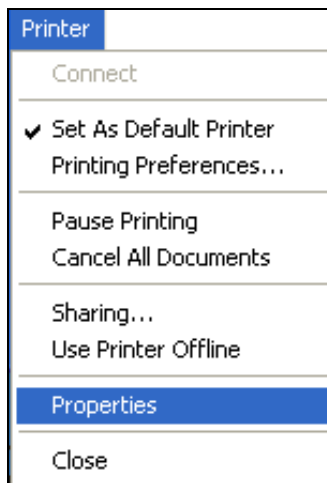
Check for the Old Driver

Follow this procedure to see if you already have a version of the driver on your PC.

1. Click the Windows **Start** button, and then select **Settings** and **Printers and Faxes** from the menu. The Printers window opens.

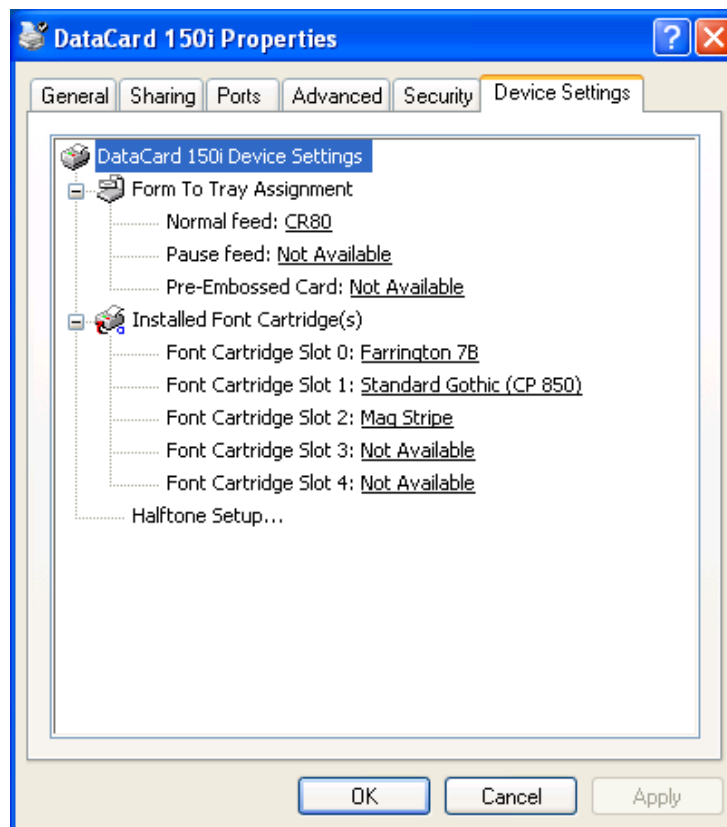


2. In the Printers window, look for a printer icon named for your Datacard printer. If there is no icon with this name, go directly to Installing the Printer Driver for Windows NT, 2000 or XP on page 10.
3. Double-click the Datacard printer icon.
4. In the resulting Datacard printer window, go to the **Printer** menu and choose **Properties**.



A Datacard printer Properties window opens.

5. Click the **Device Settings** tab to see the device parameters.



6. Leave the Printers window open and perform the procedure in Remove Old Driver Files (on the next page).



Remove Old Driver Files

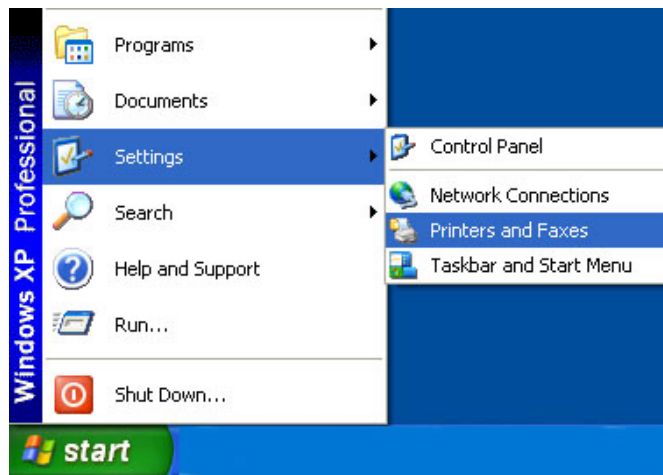
If your system has an older version of the Datacard driver (see Check for the Old Driver on the previous page), use the following procedure to remove it. If there is no previous driver, skip this procedure and continue with Installing the Printer Driver for Windows NT, 2000 or XP on page 10.

1. In the Printers window, click the Datacard printer icon. (If the Printers window is not open, see the first step of the previous procedure.)
2. Press the **Delete** key (not the Backspace key).
3. When Windows asks you if you're sure you want to delete the printer, click Yes.
4. Windows might now display a warning message saying that you have deleted the default printer. If you see this message, don't be concerned by it—you will install a new version of the driver later in this procedure.
5. Close the Printers window.
6. Shut down and restart Windows. See your Windows documentation for instructions.

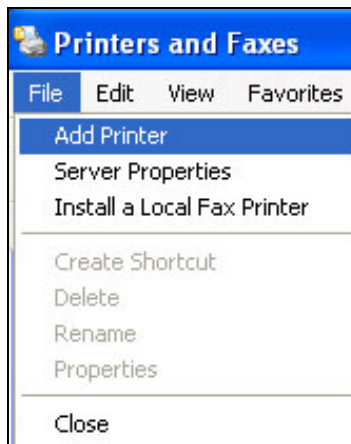
Installing the Printer Driver for Windows NT, 2000 or XP

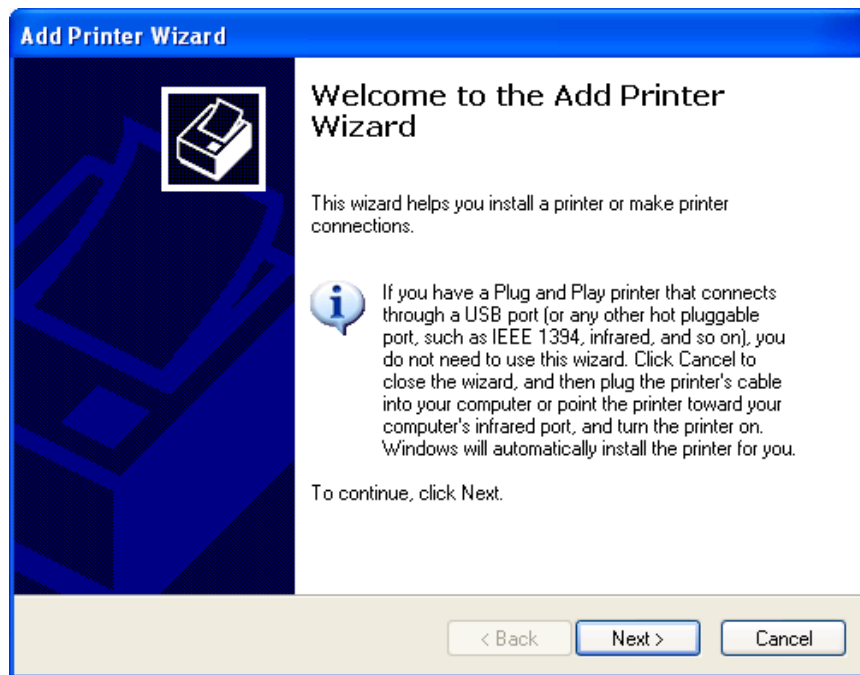
Use the following procedure to install the printer driver for Windows.

-  The following screen captures show the dialog boxes for Windows XP.
During the installation you can set the driver communications settings (baud rate, data bits, parity, etc.). These settings must match the printer. To check the printer settings now, refer to the section for your printer later in this chapter.
-  You can always come back to the driver after installation and change the communications settings via the driver printer properties.
 1. Insert the Printer Driver for Windows installation medium into the appropriate drive on the PC.
 2. Click the Windows **Start** button, and then select **Settings and Printers and Faxes** from the menu.

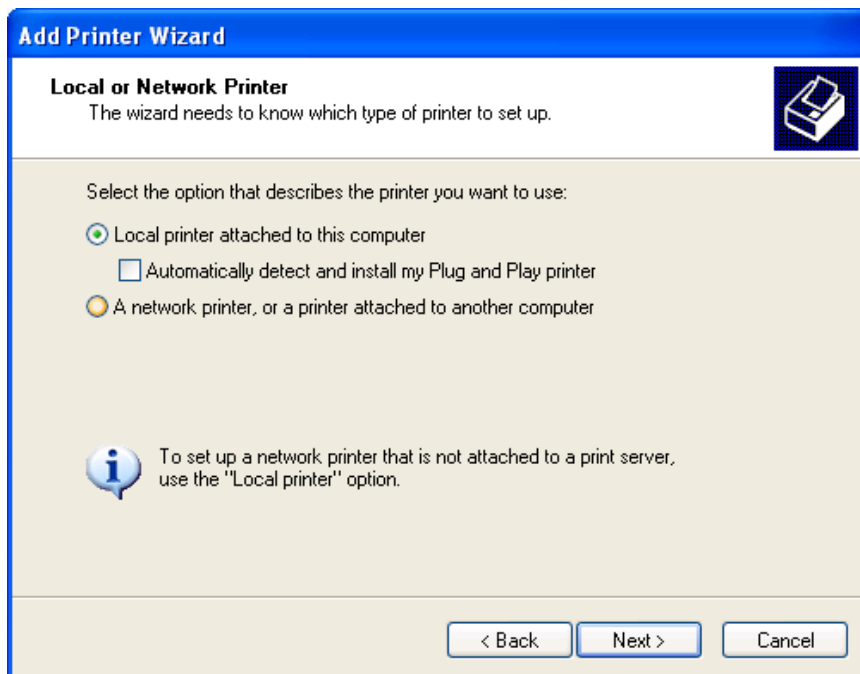


3. The Printers window opens. Click the **Add Printer** icon or click **File** and then **Add Printer**. The Add Printer Wizard dialog box appears.

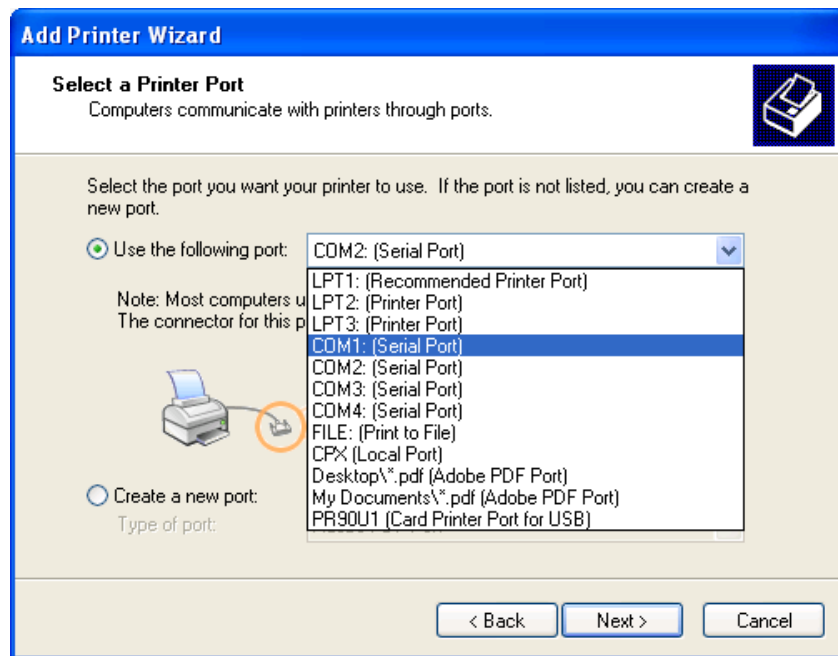




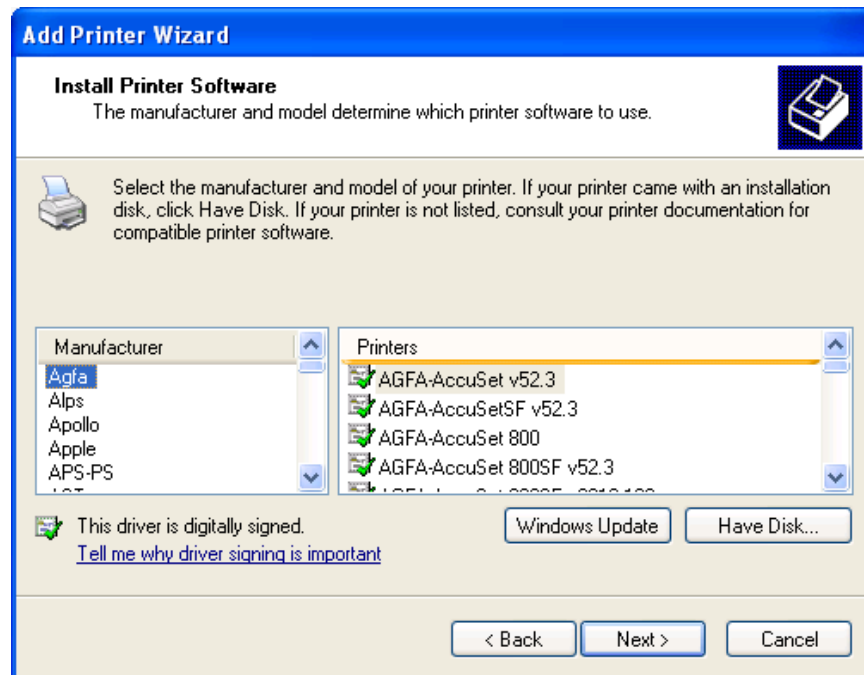
4. Click **Next** and the Local or Network Printer dialog box appears.



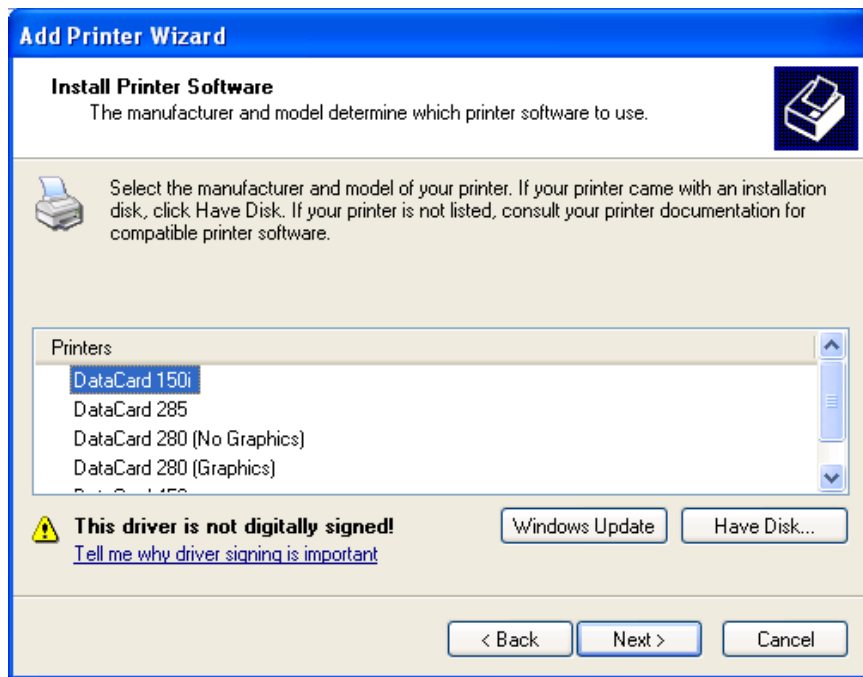
5. Click **Local printer attached to this computer**. Make sure the Automatically detect and install my Plug and Play printer is not checked and then click **Next**. The Select a Printer Port dialog box appears.



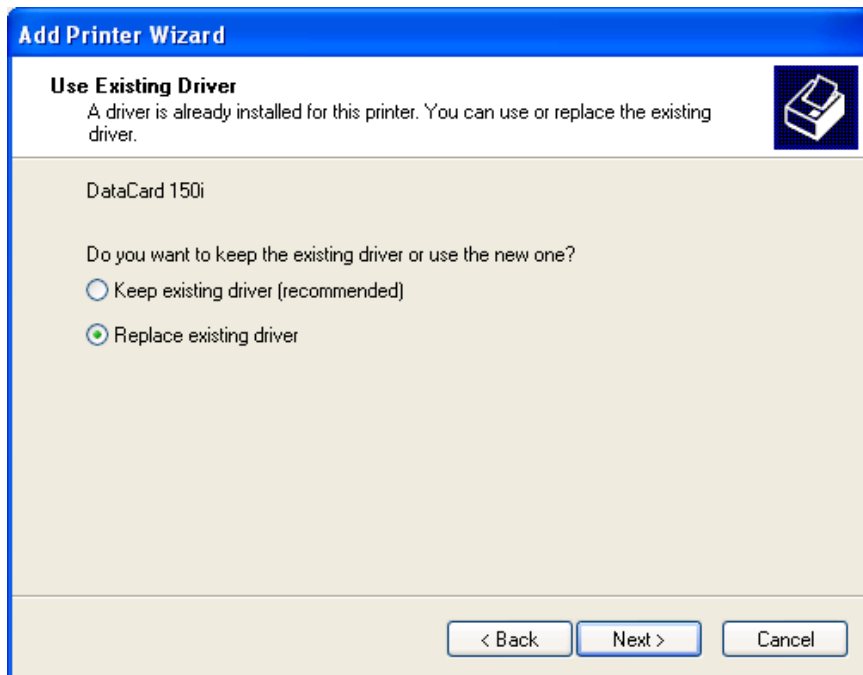
6. Select the port you'll use and then click the **Next** button. The Install Printer Software dialog box appears.



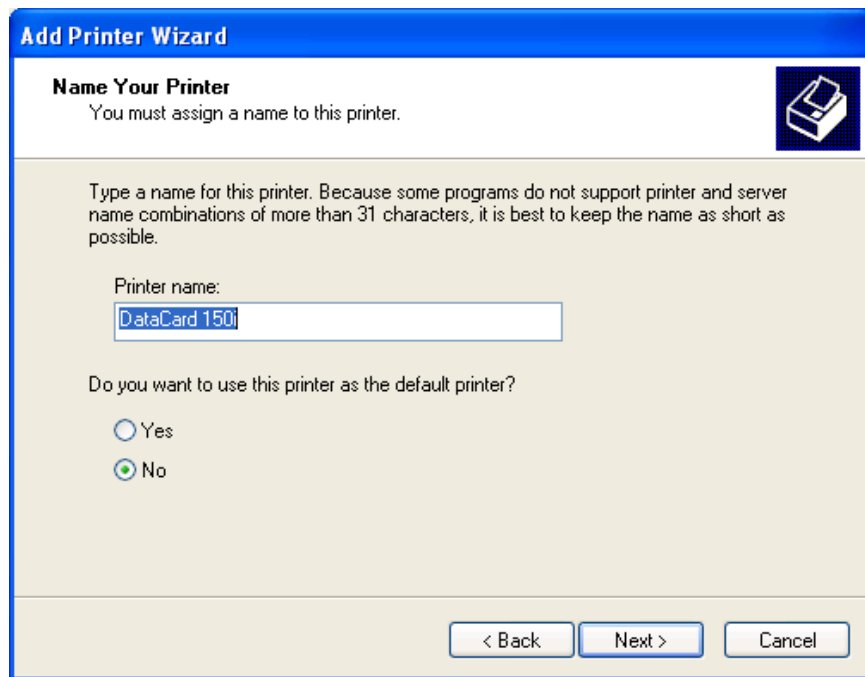
7. Click **Have Disk** and then choose the drive and the directory for installation. Make sure that "DataCard.inf" is the file selected and then click **Open**.
8. The Install Printer Software dialog box appears. Select the appropriate printer and then click **Next**.



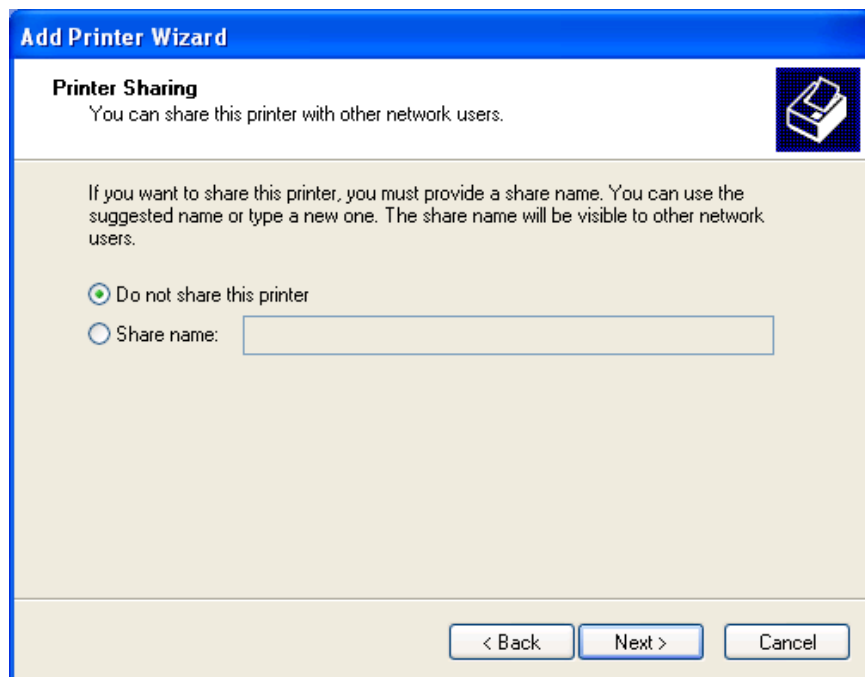
9. Click **Next** and the following Use Existing Driver dialog box appears.
10. Click **Next** and the following dialog box appears. Select **Replace existing driver** and then click **Next**.



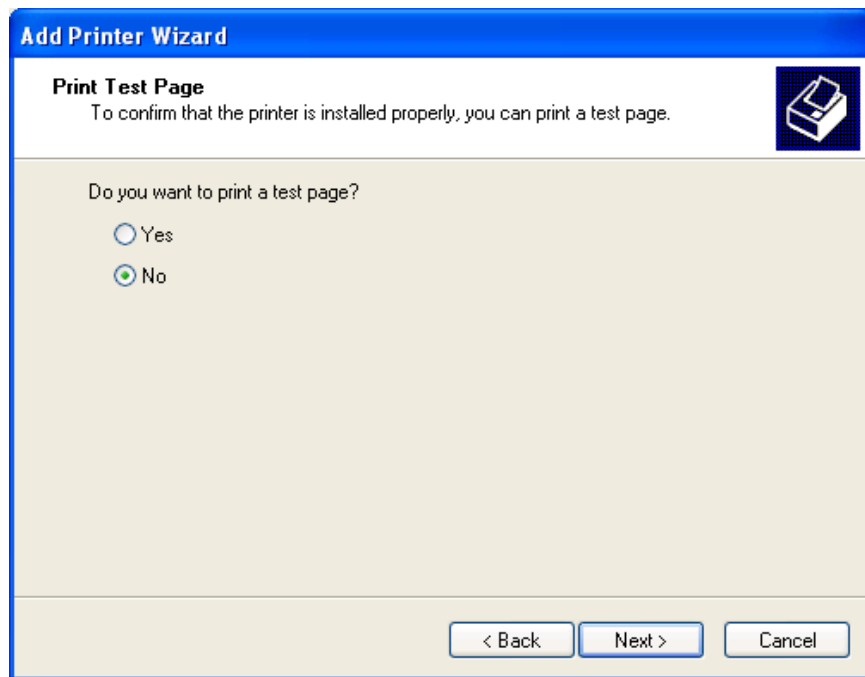
11. The following dialog box appears where you can add a name to your printer. You can leave the default name or type in another name for your printer. You can also select **Yes** or **No** to make this printer your default printer.



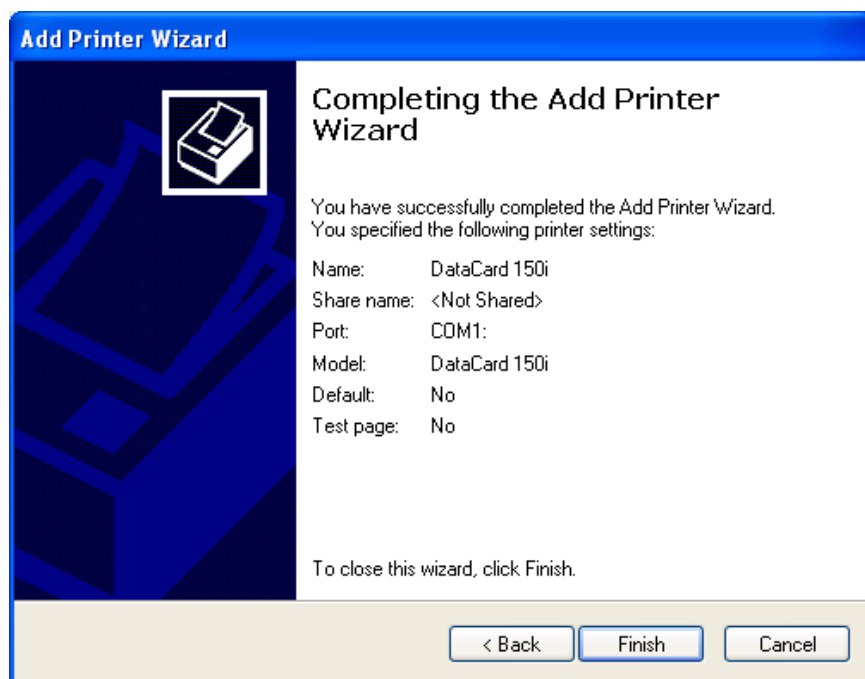
12. Click **Next** and the following dialog box appears. Select **Do not share this printer** and then select **Next**.



13. Click **Next** and the following Print Test Page dialog box appears. Select **No** and then click **Next**.



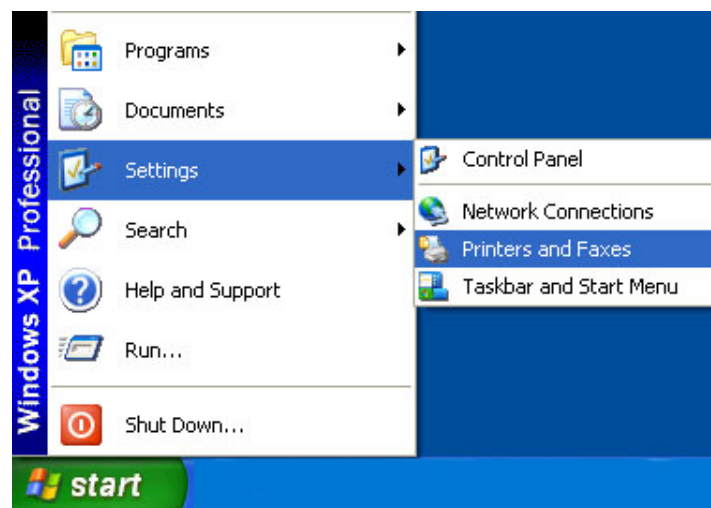
14. The following Completing the Add Printer Wizard appears stating that you have successfully added the printer.



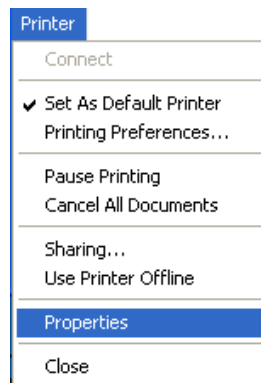
15. Click **Finish** and the following dialog box appears stating that the printer has not passed Windows Logo testing to verify its compatibility with Windows XP. Click **Continue anyway** to complete the installation.



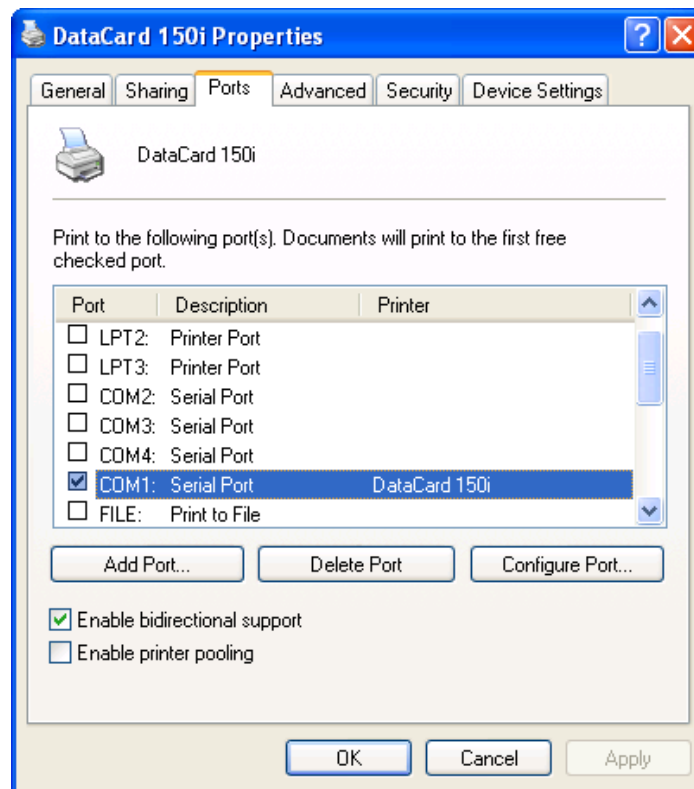
16. Click the Windows **Start** button, and then select **Settings** and **Printers and Faxes** from the menu. The Printer window opens.



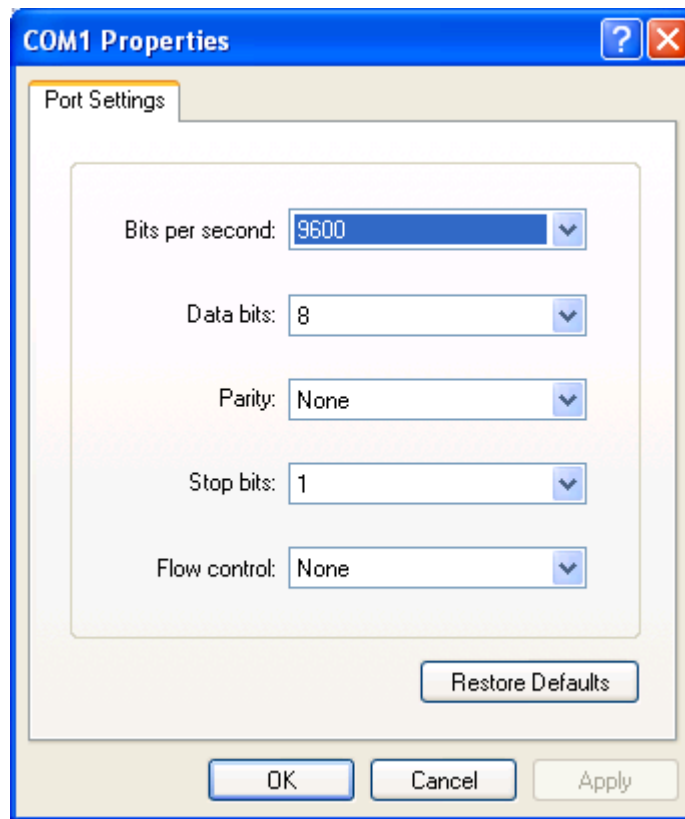
17. Click on the printer icon that was added and then right-click and select **Properties**.



18. The DataCard Properties dialog box appears for the COM port that was selected previously. Select **Configure Port** and then click **OK**.



19. In the Setting for COMx Properties, choose the settings that match the Datacard printer.



20. Click **OK**, and then click **Close**.

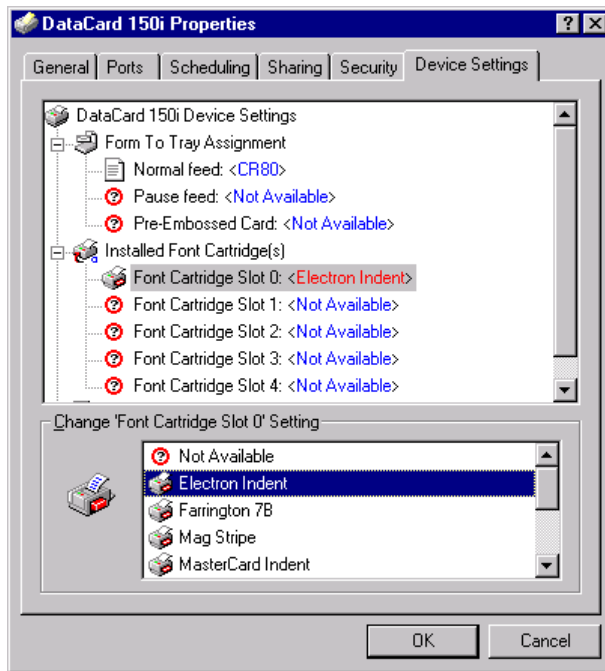
Selecting Embossing/Indent Fonts and Printer Properties

The information that follows explains how to identify to your Windows application program which fonts are resident in your Datacard printer and how to complete the software settings.

For a complete explanation of printer fonts, see *Printer Fonts* on page 30.

Use the following procedure to select the printer fonts and complete the software settings

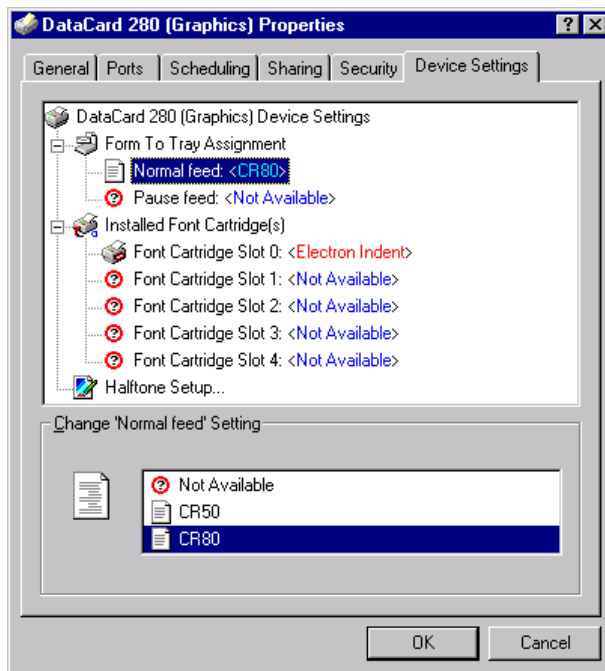
1. In the Printers window, select your Datacard printer. Then from the **File** menu, select **Properties**. The Properties dialog box for your printer appears.
2. Click the **Device Settings** tab. If necessary, click the + next to Installed Font Cartridge(s).
3. Click **Font Cartridge Slot 0**. From the list of fonts available for your printer, select the one that is actually installed in your printer.



Repeat this step as necessary for additional fonts installed in other slots.

i Up to four fonts (slots 0 through 3) are supported simultaneously.

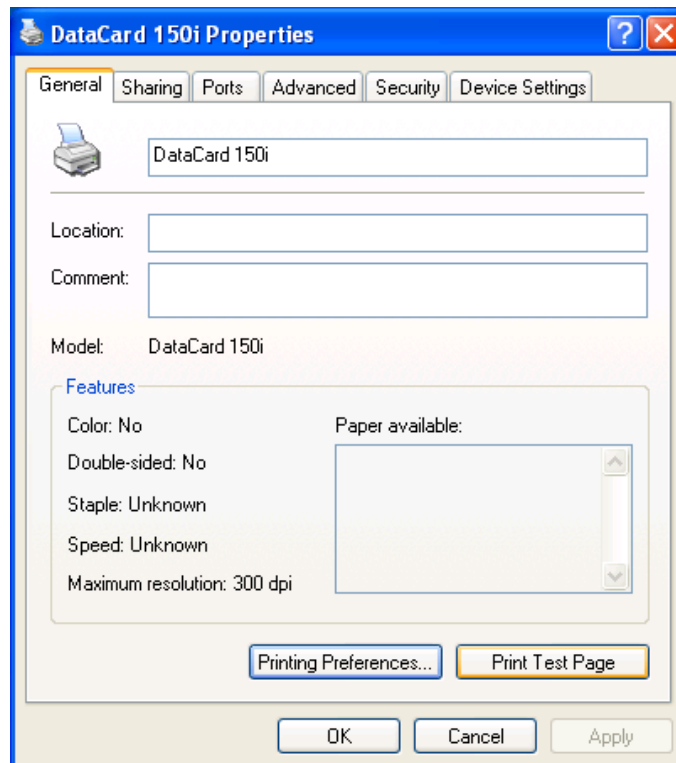
4. If necessary, click the + next to Form To Tray Assignment.



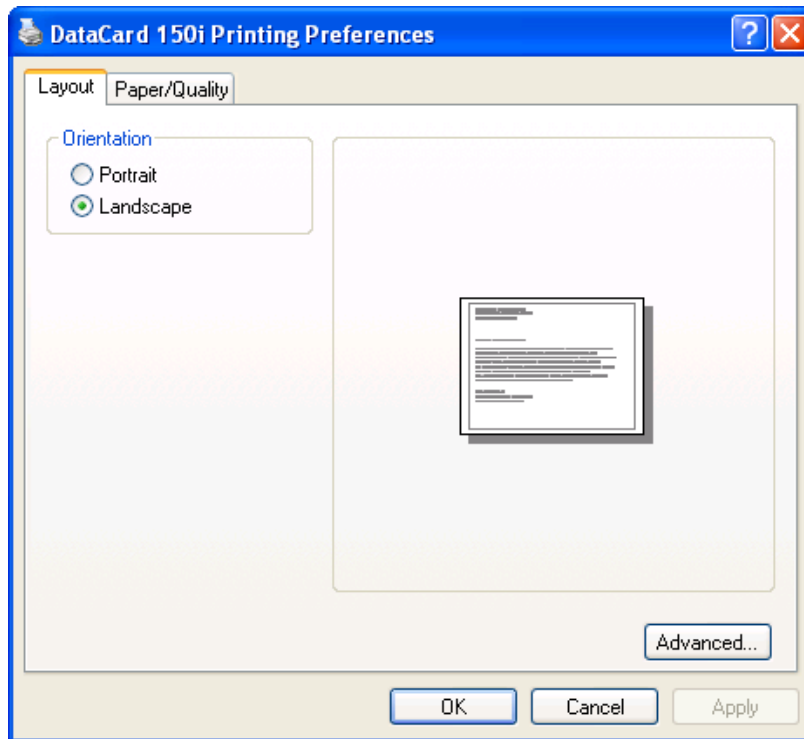
5. For the 2xx and 450 printers, click the **Normal feed** setting. In the Change Normal Feed Setting area, select the card size you are using. Select a logical page size to restrict the printing and embossing to legal areas. If your Windows application does not use page sizes, you must manually position your information in the allowable print area. Be sure to allow a margin of at

least 0.20 inch to the centerline of text for normal text, and a top margin of 0.35 inch for embossing fonts.

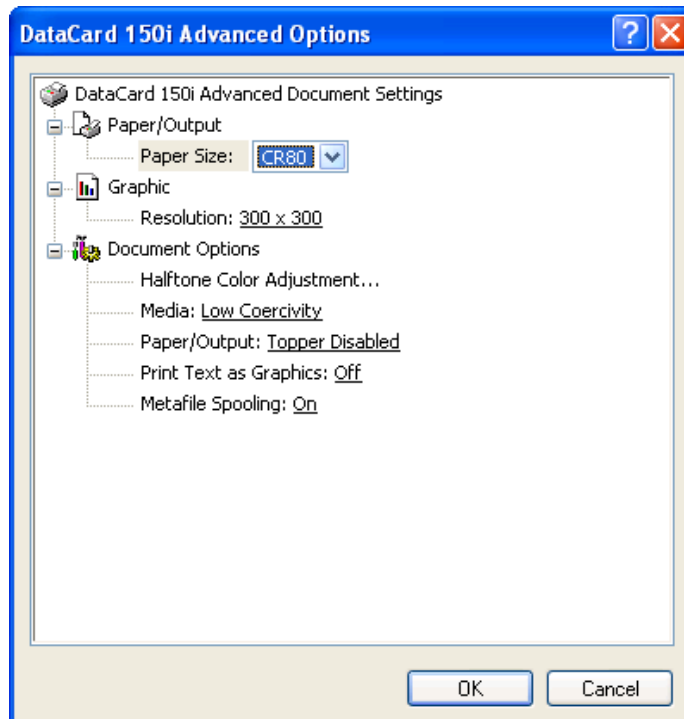
- i** The printer driver for Windows XP supports either CR50 or CR80 card sizes. Your printer was set at the factory to support one or the other. (The 150i supports only CR80. When the 150i is selected as the default printer, the default paper size will be shown as “Not Available” instead of CR80. This is not a problem; the printer will operate correctly.)
- 6. For the 150i, and 2xx printers, click the **Pause feed** setting. In the Change Pause Feed Setting area, select the card size you are using.
- 7. For the 150i printer, click the **Pre-Embossed Card** setting. In the Change Pre-Embossed Card Setting area, select the card size you are using.
- i** The “Pause feed” and “Pre-Embossed Card” options, when present, require the user to respond to a message displayed on the printer after each card is printed.
- 8. For all printers, click **OK** to save the settings and close the properties box.
- 9. With the Datacard printer still selected in the Printers window, select the File menu and then **Properties**. The Document Properties dialog box appears.



- 10. Click **Printing Preferences** and the following dialog box appears.



11. In the Orientation area, select **Landscape** and then select **Advanced**. The following dialog box will appear.

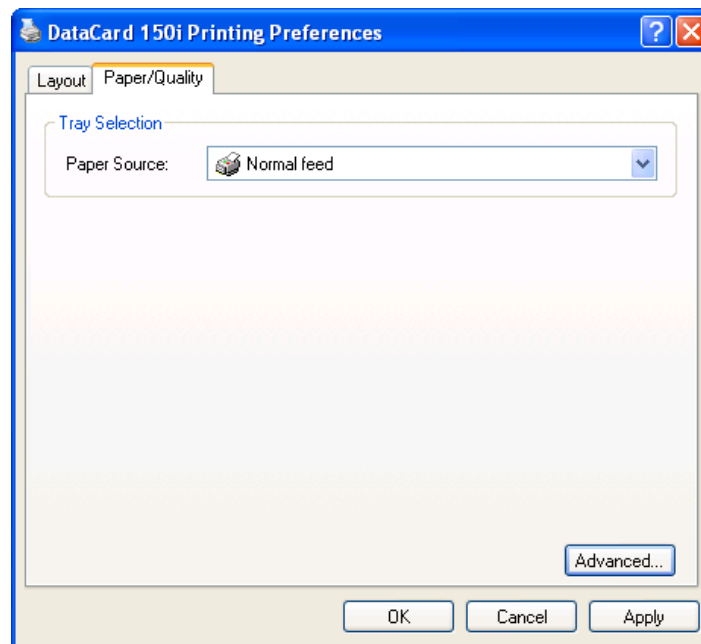


12. Under the Paper/Output/Paper Size area, select **CR80** from the pull-down list and then click **OK**. The Printing Preferences dialog box appears. Click **OK** to save the changes.

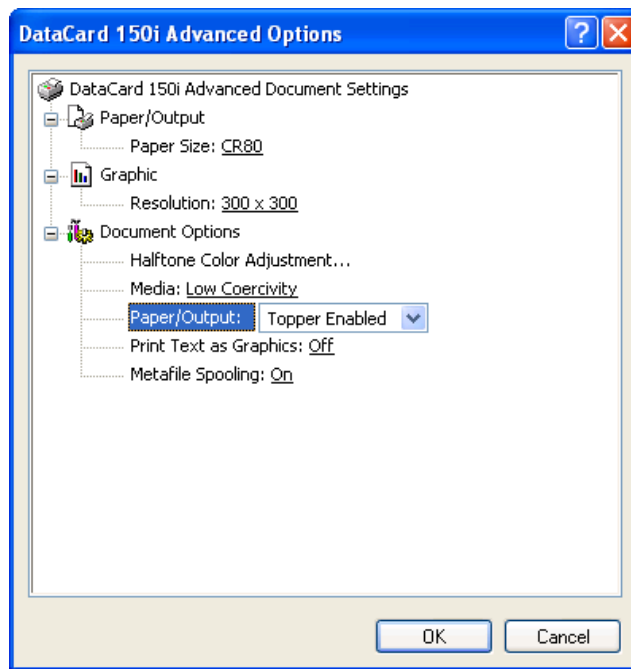
- i** Both orientations allow graphics and embossing. However, cards pass through the embosser in landscape orientation and the embossing wheels print characters horizontally. Therefore, embossing should be limited to landscape orientation.

The 150i and 450 do not support portrait orientation.

13. Click the **Paper/Quality** tab. From the pull-down list, select **Normal feed** and then click **Advanced**.



14. For the 150i printer only, under Advanced Options, click **Media** and then select the coercivity setting appropriate for your card stock.
15. For the 150i, 2xx, and 450 printers, under Advanced Options, click **Paper/Output**. In the Document Option area, select **Topper Enabled** to apply topping to embossed text.



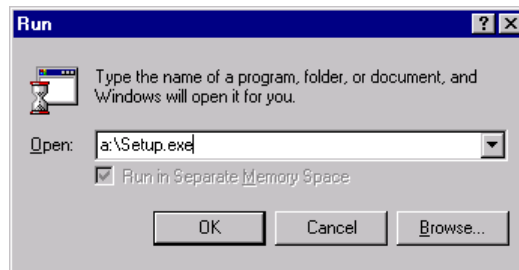
- i** The 150i is designed to apply topping to the lower half of a CR80 card only. The topper must be disabled to emboss on the upper areas of the card.

16. Click **OK** to save your settings and close the dialog box.

Installing the CPX Settings Utility

The CPX Settings Utility lets you change some additional printer settings and specify how input characters are translated to positions on the embossing wheel in the printer. Use the following procedure to install the CPX Settings Utility.

1. Insert the Setup disk or CD for Windows into the PC's disk drive.
2. Click the Windows **Start** button, and then select **Run** from the menu. The Run dialog box opens.



3. In the Open box, type **a:\Setup.exe** or **d:\Setup.exe**, depending on which drive (A or C) the installation disk or CD is in. Click **OK** to continue.
4. Follow the instructions on the screen to complete the installation.

Setting 150i Printer Configuration Options

The information that follows explains how to change the 150i printer configuration to work with the printer driver for Windows. The instructions begin with the printer powered off.

1. Power ON the 150i. When "150i/CPX" is displayed, immediately press the # key to enter Ready mode and access the Setup Menu.



The printer scrolls through the Setup Menu as you press the # key. Within an option, press 0 to scroll through the choices available. When the appropriate choice is displayed, press the # key to accept the choice and move on to the next option.

2. Make the following selections:

| |
|----------------------------------|
| Std CPX Used = Yes |
| Baud = 9600 |
| Parity = None |
| Bits = 8 |
| Monitor = No |
| TestCard = (appropriate setting) |
| Save Changes = Yes |


After Save Changes = Yes is accepted, the printer will reset. Allow it to go to Ready mode.

Setting 2xx Printer Configuration Options

The information that follows explains how to change the 2xx printer configuration to work with the printer driver for Windows. The instructions begin at the main menu of the printer's display window.

1. At the Datacard 2xx printer front panel, press **Esc** to go to the Main Menu.
2. Press **F3** to choose **Set Up**.
3. Select **F3** to choose **Customer Engineer**.
4. When prompted for an access code, press **F2** and then **F1**.
5. Press **F1** to choose the configuration menu.
6. Verify and set the configuration options identified below. Use the function keys (F1, F2, and F3) to scroll through menus, select a menu, select menu options, and save options.

| Configure Menu Option | Value to Select or Enter |
|-------------------------|---|
| System Page Select | System Page Menu Page = CPX Format Use High Baud Rate = On Baud Rate Menu Baud = 57600 NAK Busy Used = On Send Pause Status = On |
| Host Comm. | Data Bits and Parity Menu Parity = 8 bit None Ignore Transmit Error = On Use Comm. Translation Table = Off |
| Check Card Limits Error | Card Limits Error = On |

 For 486-based workstations and below, in the System Page Select menu, choose Use High Baud Rate = OFF and in the Host Comm. menu choose Baud Rate = 19200.

7. Press **Esc** twice to return to the Set Up Menu.

Use the following procedure to set the supervisor configuration options.

1. Press **F2** to choose **Supervisor**.
2. When prompted for an access code, press **F1** and **F2**.

3. Verify and set the configuration options identified below. Use the function keys (F1, F2, and F3) to scroll through menus, select a menu, select menu options, and save options.

| Setup Menu Option | Value to Select or Enter |
|-----------------------|--|
| Power Up Online | Power Up Online = On |
| Options Control Table | Option = 1 (PRT-OFF, GFX-T0) Select Match Trigger Used Match = None Magstripe Current Adjust Cur = (appropriate status) (if applicable) Magstripe Erase Rejects Rej = Std No Erase (if applicable) Set Topper = On (if applicable) Printer = Off Host = None (if applicable) Convert to Graphics Table Used = None Allow Graphics Printing = Yes Always Print Logo/Fixed Fields = No Graphics Print Ignore Embossing = No Graphics Template[0-3] = 0 Graphics Darkness Adjustments Type = Std Default |

4. Press **Esc** twice to return to Online Ready.


Setting 450 Printer Configuration Options

The information that follows explains how to change the 450-printer configuration to work with the printer driver for Windows NT.


1. Press the **READY** button. The message, *Operator Setup Press Option Key*, appears.
2. Press the **OPTION** button eight times. The current Auto Remake setting appears.
3. If necessary, press the **ENTER** button to set Auto Remake to Off.
4. Press the **READY** button.

Use the following procedure to set the communication parameters.

1. Press the **READY** button. The message, *Operator Setup Press Option Key*, appears.
2. While pressing and holding the **READY** button, press the **EXIT** button two times and the **OPTION** button two times, and then release the **READY** button. The message, *Cust. Eng. Setup Press Option Key*, appears.
3. Press the **OPTION** button two times.
4. Press the **ENTER** button. The current Baud Rate setting appears.
5. If necessary, press the **ENTER** button until 9600 is displayed.

 The printer scrolls through the Customer Engineer Setup options as you press the **OPTION** button. To back up to an earlier option, press and hold the **READY** button, and then press the **OPTION** button.

6. Press the **OPTION** button. The current Parity setting appears.
7. If necessary, press the **ENTER** button until None is displayed.
8. Press the **OPTION** button. The current Bits/Char setting appears.
9. If necessary, press the **ENTER** button until **8** is displayed.
10. Press the **OPTION** button. The current Stop Bits setting appears.
11. If necessary, press the **ENTER** button until **1** is displayed.
12. Press the **OPTION** button. The current Parity Err Actn setting appears.
13. If necessary, press the **ENTER** button until **Halt** is displayed.
14. Press the **OPTION** button. The current Input End of Line setting appears.
15. If necessary, press the **ENTER** button until **CR** is displayed.

16. Press the **OPTION** button. The current Buffered Mode setting appears.
 17. If necessary, press the **ENTER** button until **Off** is displayed.
 18. Press the **OPTION** button. The current Data Conversion setting appears.
 19. If necessary, press the **ENTER** button until **##** is displayed.
 20. Press the **OPTION** button. The current Protocol setting appears.
 21. If necessary, press the **ENTER** button until **CPX Special** is displayed.
-  If you cycle through the choices and CPX Special is not one of them, the operating system EPROM must be upgraded.
22. Press the **READY** button.
 23. Power off the printer, and then power it on.

Printer Fonts

The printer driver for Windows NT, 2000, and XP uses two types of fonts: text and pseudo. Refer to the tables on the pages that follow for specific fonts that are available.

text fonts

Text fonts are the “flat” fonts printed on a card. They are available on the Model 2xx with graphics. Text fonts come in two varieties: TrueType and Printer.

- The Windows operating system provides **TrueType** fonts, which are similar to graphics. The 2xx with graphics can use all the TrueType fonts. When you display a list of fonts in your Windows application, a **TT** icon precedes all TrueType fonts.
- The printers provide **Printer** fonts. The fonts are similar, and in some cases nearly identical, to the TrueType fonts. The purpose of providing printer-resident fonts is to improve printing speed, although systems with very fast computers may be able to print cards using TrueType fonts as fast as or faster than cards using printer fonts. When you display a list of fonts in your Windows application, a printer icon precedes all printer fonts. When using printer fonts, the screen image may not match the printed output.

pseudo fonts

Pseudo fonts enable embossing, indent, and magnetic stripe encoding capabilities. Most Windows applications do not have a built-in method for embossing or encoding; however, font selection capabilities are usually available. The printer driver for Windows NT, 2000, and XP uses font selection as a method for identifying an encoding format (track 1-IATA, track 2-ABA, track 3-TTS) or an embossing style.

-  Font selections must match the printer settings and hardware configuration.

The text fonts shown in Table 2 are available in point sizes 4, 6, 8, 10, 12, 14, 18, 24, and 36.

Table 2: Text Fonts

| Printer Font Name | Characteristics | |
|---|-----------------|--------------|
| AvantGarde-Book | San serif | proportional |
| AvantGarde-Demi | San serif | proportional |
| Bookman-Demi | Serif | proportional |
| <i>Bookman-LightItalic</i> | Serif | proportional |
| Bookman-Light | Serif | proportional |
| <i>Bookman-DemiItalic</i> | Serif | proportional |
| Courier | Serif | monospace |
| Courier-Bold | Serif | monospace |
| Helvetica | San serif | proportional |
| Helvetica-Bold | San serif | proportional |
| NewCenturySchlbk-Roman | Serif | proportional |
| NewCenturySchlbk-Bold | Serif | proportional |
| <i>NewCenturySchlbk-Italic</i> | Serif | proportional |
| <i>NewCenturySchlbk-BoldItalic</i> | Serif | proportional |
| Palatino-Roman | Serif | proportional |
| Palatino-Bold | Serif | proportional |
| <i>Palatino-Italic</i> | Serif | proportional |
| <i>Palatino-BoldItalic</i> | Serif | proportional |
| Σψμβολ (Symbol) | Decorative | proportional |
| Times Roman | Serif | proportional |
| Times-Bold | Serif | proportional |
| <i>Times-Italic</i> | Serif | proportional |
| <i>Times-BoldItalic</i> | Serif | proportional |
| <i>ZapfChancery-MediumItalic</i> | Script | proportional |
| Ⓒ Ⓓ □ × Ⓢ Ⓣ Ⓤ Ⓥ Ⓦ Ⓧ Ⓨ Ⓩ ⓐ ⓑ ⓓ ⓔ ⓕ ⓖ ⓗ ⓙ ⓛ ⓜ ⓝ ⓞ ⓟ ⓠ ⓡ ⓢ ⓣ ⓤ ⓥ ⓦ ⓧ ⓨ ⓩ ⓪ ⓫ ⓬ ⓭ ⓮ ⓯ ⓰ ⓱ ⓲ ⓳ ⓴ ⓵ ⓶ ⓷ ⓸ ⓹ ⓺ ⓻ ⓼ ⓽ ⓾ ⓿ (ZapfDingbat) | Decorative | proportional |

Embossing and Indent Type

The Datacard 150i, 2xx, and 450 printers support the embossing and indent type sets listed in Table 3.

The printer uses a border area on all sides to hold the card during embossing. If you try to place embossed text in this area, an error occurs and the embossed font will not print.

If a character isn't available in the printer/embosser, that character is ignored.

Embossed text cannot be rotated.

It is recommended that only one of these fonts be selected in any line. Selecting multiple fonts in a single line may produce unexpected results.

Table 3: Embossing and Indent Type by Printer

| Type | 150i | 2xx | 450 |
|----------------------------|------|-----|-----|
| Farrington 7B | ✓ | ✓ | ✓ |
| Standard Gothic | ✓ | ✓ | ✓ |
| Large Gothic | | ✓ | ✓ |
| Hospital Elite | | ✓ | ✓ |
| Hospital 7B | | ✓ | ✓ |
| OCRA1 Indent | | ✓ | ✓ |
| OCRB1 Indent | ✓ | ✓ | ✓ |
| OCRB4 Emboss | | ✓ | ✓ |
| OCRB4 Indent | | ✓ | ✓ |
| 6mm Gothic | | ✓ | ✓ |
| MasterCard Indent | ✓ | ✓ | ✓ |
| Electron Indent | ✓ | ✓ | ✓ |
| Standard Gothic (Cyrillic) | ✓ | ✓ | |
| Standard Gothic CP 850 | ✓ | | |
| Standard Gothic CP 852 | ✓ | | |



The most common type sets ordered are Farrington 7B and Standard Gothic.

Magnetic Stripe Encoding

Datacard printers support the Magnetic Stripe tracks listed in Table 4.

Table 4: Magnetic Stripe Tracks

| Magnetic Stripe Style | Encoding Font | Track # | Maximum Length | Character Set |
|------------------------------|-----------------------------------|----------------|-----------------------|--|
| 3 Track | IATA (210 BPI (Bits Per Inch)) | 1 | 76 | alphanumeric ISO standard characters (64 characters) |
| | ABA (75 BPI) | 2 | 37 | numeric and special characters . : ; < = > (16 characters) |
| | TTS (210 BPI) | 3 | 104 | numeric and special characters . : ; < = > (64 characters) |
| 2 Track | IATA (210 BPI) | 1 | 76 | alphanumeric ISO standard characters |
| | ABA (75 BPI) | 2 | 37 | numeric and special characters . : ; < = > |

Translating Characters

If you use special characters (for example, accent marks for some languages or the Visa V), you will need to translate the characters sent by your Windows application to the corresponding positions on the embossing wheels.

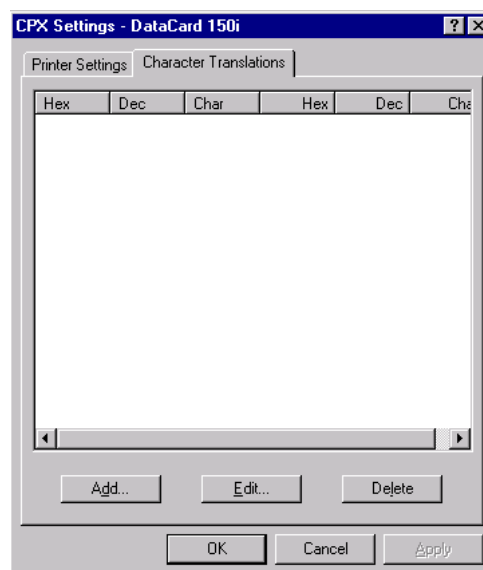
Use the following procedure to translate a character.

1. Click the **Start** button and select **Programs, Datacard, and Datacard CPX Settings**.

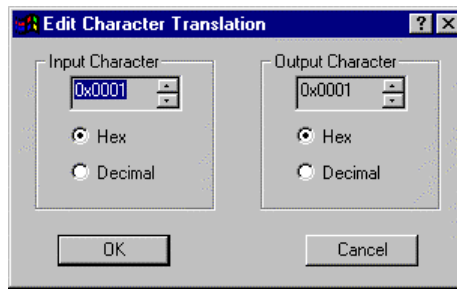


The Datacard Printers dialog box opens.

2. Select your printer from the list. The CPX Settings dialog box opens.
3. Select the **Character Translations** tab.



4. Click the **Add** button. The Edit Character Translation dialog box appears.



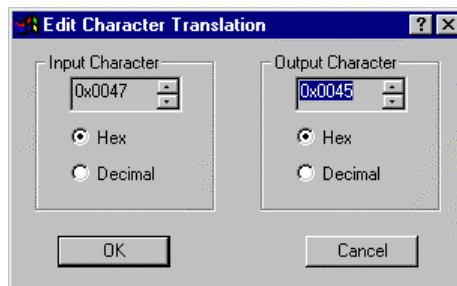
5. In the Input Character area, select **Hex** to work with hexadecimal values or **Decimal** to work with decimal values.

6. Click the arrows until the character value you want to translate appears.

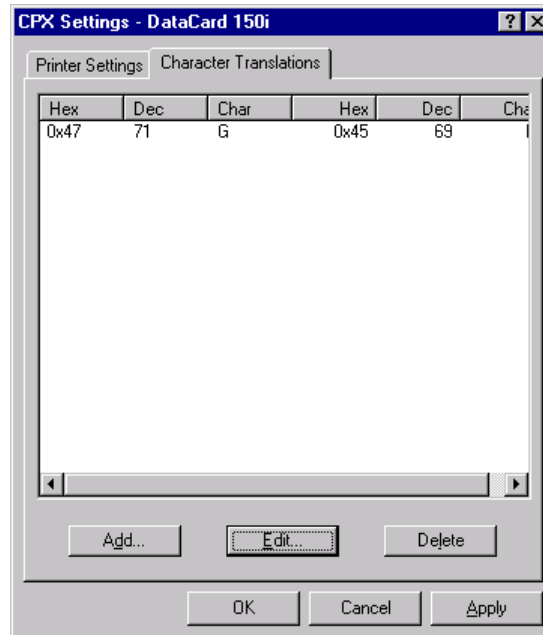
i For exact values to enter, refer to your country's code page in the Windows Resource Kit available from Microsoft Corporation. Decimal values 00 through 31 (hexadecimal values 00 through 1F) are non-printing control codes.

7. In the Output Character area, select **Hex** to work with hexadecimal values or **Decimal** to work with decimal values.

8. Click the arrows until the character value you want to translate to appears.



9. Click **OK**. The Edit Character Translation dialog box closes and the values you entered appear in the character list.



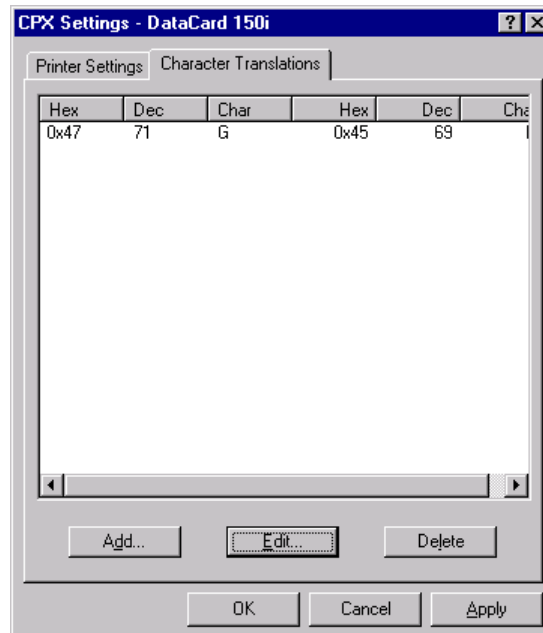
i The output character displayed will not be correct for your system because the printer driver for Windows has no way of knowing what punches and dies you've loaded in your print wheel.

10. Repeat steps 2 through 7 for additional character translations.
11. Click **OK** to save your changes and close the CPX Settings dialog box.

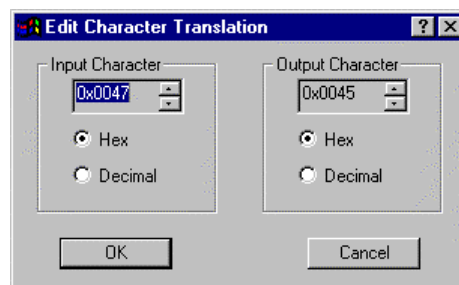
Changing Character Translations

Use the following procedure to change a character translation.

1. Select the **Character Translations** tab of the CPX Settings dialog box. (If necessary, from the Windows **Start** button, select **Programs**, **Datacard**, and then **Datacard CPX Settings**. Select your **Datacard** printer from the list of printers, and then click **OK**.)



2. In the characters list, select the row you want to change.
3. Click the **Edit** button. The Edit Character Translation dialog box appears.



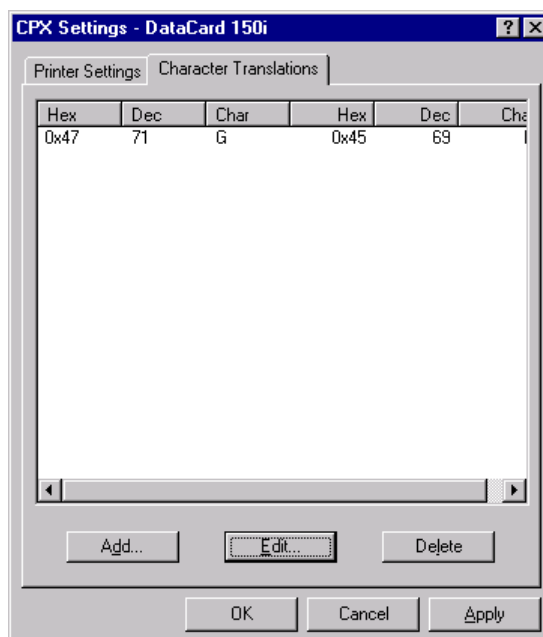
4. In the Input Character area, select **Hex** to work with hexadecimal values or **Decimal** to work with decimal values.
5. Click the arrows until the character value you want to translate appears.
6. In the Output Character area, select **Hex** to work with hexadecimal values or **Decimal** to work with decimal values.
7. Click the arrows until the character value you want to translate to appears.

8. Click **OK**. The Edit Character Translation dialog box closes and the values you entered appear in the character list.
9. Repeat steps 2 through 8 for additional character translation changes.
10. Click **OK** to save your changes and close the CPX Settings dialog box.

Deleting a Translated Character

Use the following procedure to delete a translated character.

1. Select the **Character Translations** tab of the CPX Settings dialog box. (If necessary, from the Windows **Start** button, select **Programs**, **Datacard**, and then **Datacard CPX Settings**. Select your Datacard printer from the list of printers, and then click **OK**.)



2. In the characters list, select the row you want to delete.
3. Click the **Delete** button. The row is removed from the characters list.
4. Click **OK** to save your changes and close the CPX Settings dialog box.

Printing in a Windows Environment

After the driver is installed (and if the Datacard printer is connected to the PC), you are ready to start printing plastic cards. This is similar to printing documents with paper printers. In most applications, after you have the image ready to print, you go to the **File** menu and select **Print**. (The exact printing procedure may be different in the application you will use to print cards. See your operating system documentation for more information.)

About Defaults and Overriding

There are several screen items for the printer driver for Windows NT, 2000 and XP that are available in two different dialog boxes. One of these dialog boxes allows you to set the *default* settings; with the other you can *override* the defaults.

When you open a dialog box, the system gives you *default* values for the screen items. A default value for an item is the value the system gives it automatically, every time it appears. If you do not want to use the default item value, there are two ways to change it:

- If you want to use a different value only once, you can override the default by entering another value. The next time you see the screen item, though, the system will give you the original default value. You can override the Datacard settings with the print dialog Properties button (see page 44 for more information).
- You can change the default setting to your selected value. Your selected value will appear each time you see the item until you change the value again. You can modify the Datacard defaults from the document defaults window (see page 41 for more information).

How to Get to the Driver Controls

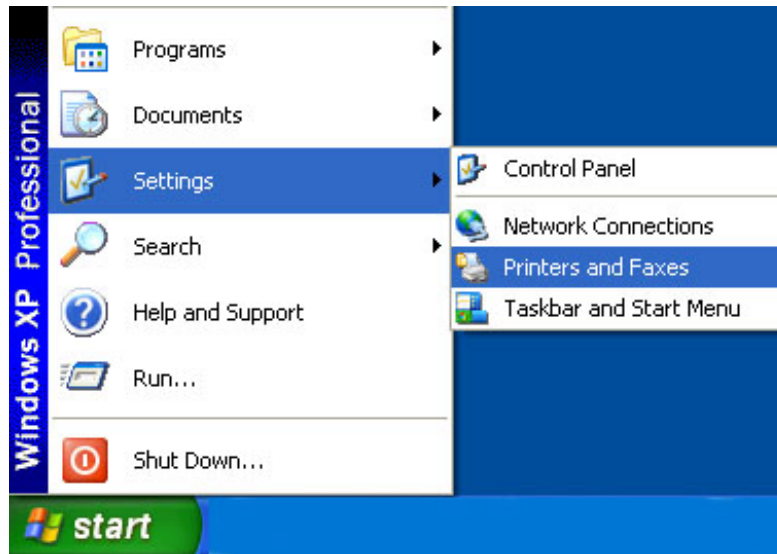
You can access the driver controls from:

- The printer device settings
- The printer document defaults
- The Properties button in a print dialog box

The Printer Device Settings

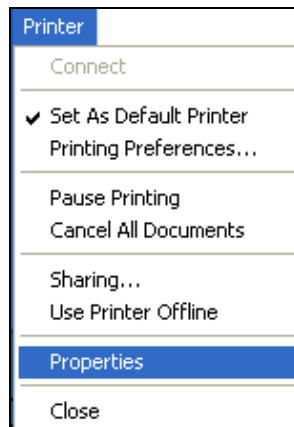
Follow this procedure to access the device settings tab of the printer properties dialog box.

1. Click the Windows **Start** button, and then select **Settings** and **Printers and Faxes** from the menu.



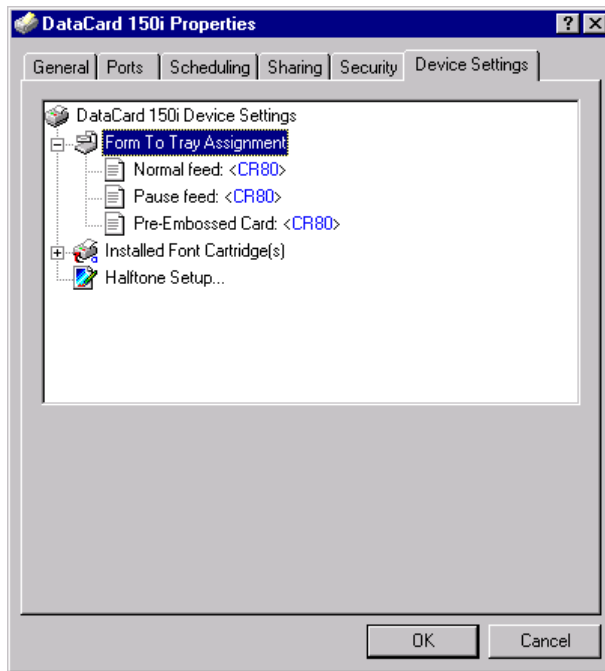
The Printers window opens.

2. Double-click the Datacard printer icon.
3. In the resulting Datacard printer window, go to the **Printer** menu and choose **Properties**.



A Datacard printer Properties window opens.

4. Click the **Device Settings** tab to see the device parameters.



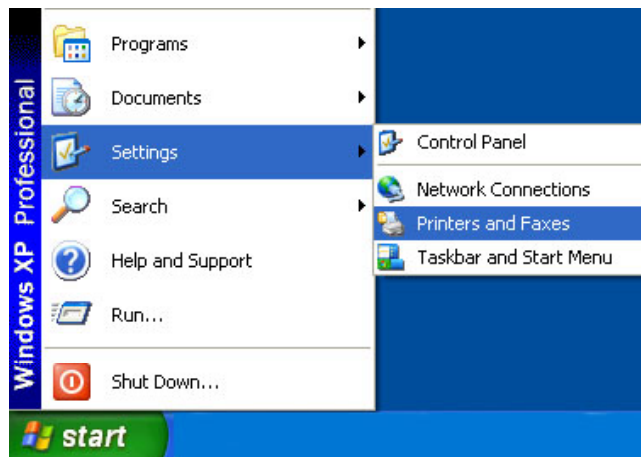
5. Click the **Ports** tab to see the assigned ports.

i If you make any changes to the port settings (by clicking the **Configure Port** button), you must restart Windows for the settings to take effect.

The Printer Default Document Properties

This procedure shows you how to display the driver's default document dialog box. In this window you can modify the default settings for the driver. (See About Defaults and Overriding on page 39 for more information on defaults.)

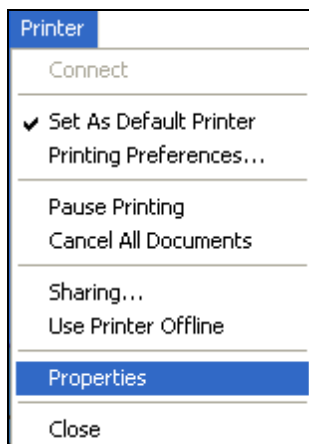
1. Click the Windows **Start** button, and then select **Settings** and **Printers and Faxes** from the menu.



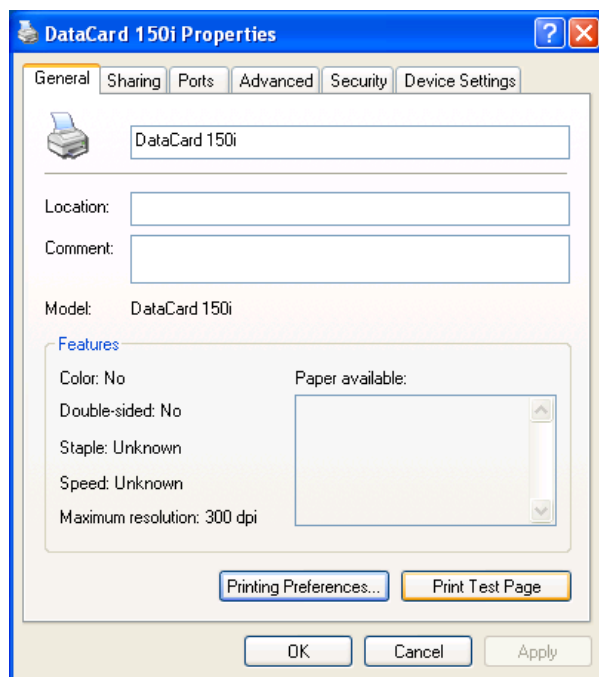
The Printers window opens.

2. Double-click the Datacard printer icon.

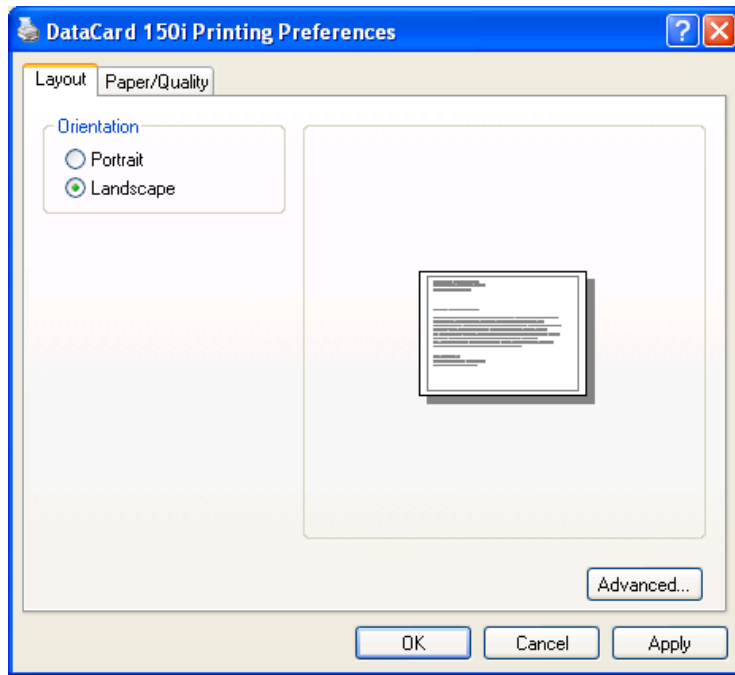
3. In the resulting Datacard printer window, go to the **Printer** menu and choose **Properties**.



The default document properties dialog box opens.



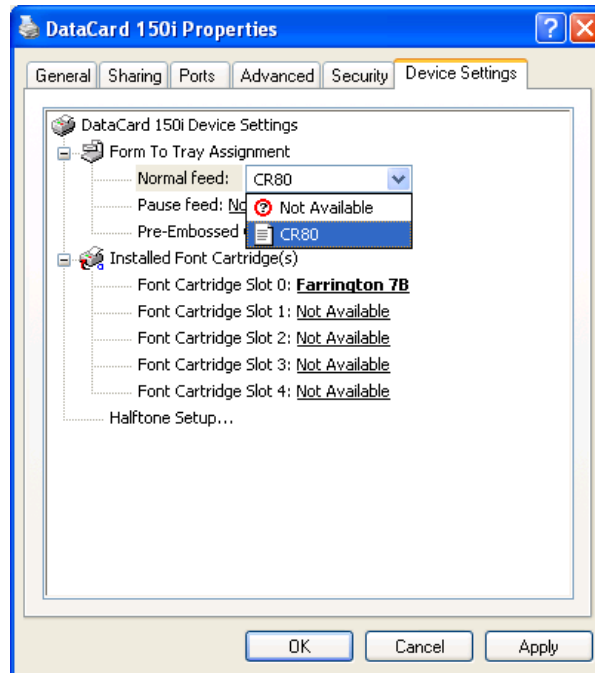
4. Select **Printing Preferences** and the following dialog box appears.



5. For Layout Orientation, select **Landscape** and then click **Advanced** to bring you to the next dialog box.

Print Dialog “Properties” Button

The application you will use to print plastic cards should have a printing dialog box similar to this one (though the actual dialog box may look different from this example). Select **CR80** for the Form To Tray Assignment and then click **OK**.



You can use the Document Properties dialog box to *override* the driver defaults. See About Defaults and Overriding on page 39 for more information.

Using Online Help

This manual does not describe all of the screen items you might see when working with the driver. When you work with the driver controls, online help is available for the different items. To get help on a particular item, first click this button, which appears in the upper-right corner of the window:




When you click this button, it changes the mouse pointer:



Move this pointer over the item you want information on and click once. You will see something like this:

Click this to view the form-to-tray assignments.

A form defines a paper size and the widths of margins. Many printing devices support more than one paper source, such as upper and lower trays. You can assign forms to any of your printing-device paper sources. Once a form is matched to a source, you can select the form when you print from your applications. The Windows NT operating system instructs the printing device to print from the source that is matched with that form.

-  The online help topics are brief, and they leave out a lot of the details. If you do not get enough information from the help, look in this manual.

Troubleshooting

Why do I get an error using embossed fonts?


The most common error occurs when embossed fonts are not positioned correctly on a card. Embossed fonts can be placed anywhere on a card, except for the margin area, which varies by printer. If embossed text is placed in the margin area of the card, an illegal font placement error will be detected by the printer and the card will not print the embossed text. The error message will appear both on the printer and on the computer screen.

The solution is to redesign the card, moving the embossed font into the legal printable area of the card.

The 150i is designed to apply topping to the lower half of a CR80 card. The topper must be disabled to emboss on the upper areas of the card.

Embossed fonts do not print as they appear on the screen.

The problem likely is traced to the orientation you are using. Emboss fonts only print horizontally on a card in landscape orientation. If the font has been rotated in landscape orientation, the font will not print as displayed. Conversely, in portrait orientation, the embossed font must be rotated to display vertically on the card. Embossing should be limited to landscape orientation because of the mechanical design of the printer and the wheel set.

-  If you are using ID Works and need to use embossed fonts on a card designed in portrait orientation, select the field to be embossed, select the rotate menu command three times, and then move the field to the proper place on the card.

Why don't embossed fonts appear in the font menu?

Embossed fonts are special printer fonts. For embossed fonts to appear in your application's font list, the font cartridge must be selected from the cartridge list found on the **Device Settings** tab of the printer's properties dialog box (see page 19). Determine which type sets have been installed in your printer and select them. Applications may need to be restarted to ensure that the new fonts are recognized and updated in the menu.

Also, in the application, make sure the correct printer is selected and the Page Setup is configured properly for card size, card orientation, and margins.

Why don't magnetic stripe fonts appear in the font menu?

The magnetic stripe fonts are special printer fonts. For magnetic stripe fonts to appear in your application's font list, the Magnetic Stripe Encoder must be selected from the cartridge list found on the **Device Settings** tab of the printer's Properties dialog box (see page 19). Applications should be restarted to ensure that the new fonts are recognized and updated in the menu.

Also, in the application, make sure the correct printer is selected and the Page Setup is configured properly for card size, card orientation, and margins.

Why do I get time-out errors?

The computer and printer have a communication protocol. If they lose contact during a print operation, a timing sequence begins and attempts are made to reconnect. If the timing sequence reaches a "time-out" state, an error occurs. (Time-out values are set in the Settings for COMx: dialog box, available by clicking the **Configure Port** button on the **Ports** tab of the printer Properties dialog box, and then the **Settings** button on the Ports dialog box.) Depending on the reason for the time-out error (for example, loose cable connection, file missing, mismatched baud rates), the solution to fix the problem will vary. If the problems persists after your attempts to resolve it or if you experience back-to-back time-out error messages, take the following steps to resolve the problem, trying to print after each step:

1. Cancel the error message and start the print operation from the beginning.
2. Purge all print jobs and restart the application issuing the card.
3. Reboot the printer.
4. Restart Windows.

When installing the driver, the most common problem is *no* communications rather than lost communications. Verify the communications settings, including PC COMM port; verify use of the correct connections and that baud rate settings match between the printer and software, printer configuration, etc. Many times the problem lies with an improperly configured PC. You may need to contact your PC technical support representative to ensure that the PC's IRQ, DMA, BIOS, and other settings are correct.

Initial setup problems printing graphics, embossing or magnetic stripe

If you have followed the prescribed steps to select embossed fonts and/or magnetic stripe fonts and still cannot print successfully, the problem may be an incorrect setting in the printer itself. In other words, some parameter is turned off that should be turned on (for example, Graphics off or Magnetic Stripe Track XX

off). The printer is set up correctly in the factory, but can be user configured and, consequently, the potential exists for incompatibility. Check technical manuals and follow prescribed steps to ensure that settings are correct.

How do I check the version of the printer driver?

From the Windows **Start** button, select **Settings** and then **Printers**. Select the Datacard printer from the list of printers installed. Select **File** and then **Properties**. The printer Properties dialog box appears. Select the **Device Settings** tab, and then click the printer name (the root of the tree view list). An About Raster Printer Driver button appears. Click the **About** button. The About Raster Printer Driver dialog box appears.

My Word 97 document doesn't print.

There is an incompatibility between Microsoft Word 97 and the printer driver for Windows NT, 2000, and XP. To print a card created in Word 97, save it in Word 6 format and then send it to your Datacard printer.

Multiple copies of Word 6 documents don't print.

To print more than one copy of a card created in Microsoft Word Version 6, start a print request for each copy you want to print.

My changes to port settings aren't taking effect.

When you change port settings, you must restart Windows for the new settings to take effect. Just exiting the application and starting it again won't work.

See the procedure to access the device settings on page 40 for information about changing port settings.

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