# Forms and Bar Code Card 3.3

## User's Guide

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# Introduction

## Overview

*Forms and Bar Code Card* lets you print a variety of standard forms and bar codes. Using an algorithm, Forms and Bar Code Card can generate bar codes in either PCL 5 or PostScript emulation.

With PCL 5 emulation, Forms and Bar Code Card is the functional equivalent of the HP Bar Codes & More font set. It serves as an alternative to an HP LaserJet with JetCAPS BarDIMM Pro (v3.3a), including the FREESCAPE alternate escape code feature, and Intelligent Mail bar code. Forms and Bar Code Card also provides custom device types for printing with SAPscript in SAP R/3 applications.

Bar code options include the following features:

- OCR-A and OCR-B as bitmap and scalable fonts
- Independently scalable bar heights and widths
- RFID support
- Embedding text with selectable positioning
- Verifying data format, with error reporting
- Automatic bar code data compression, when required
- Automatic bar code checksum calculation and character placement, when required
- Automatic placement of special characters, when required
- Built-in 256MB flash memory

Forms options include the following features:

- Storing and printing forms from a 256MB flash memory or optional/standard printer hard disk
- Built-in RFID support
- Creating electronic forms to be merged with data
- Sending merged output through fax and e-mail

**Notes:**

- Forms Composer and Forms Manager are required to create and manage forms.
- The forms files on Forms and Bar Code Card have the file extensions .lfm and .lff.
- For more information on using RFID when printing forms, see the documentations that came with Forms Composer and with the printer.

## Supported devices

- Lexmark MX810
- Lexmark MX710
- Lexmark MX610
- Lexmark MX510, MX410, MX310
- Lexmark MS812, MS811, MS810
- Lexmark MS610de, MS610dn

- Lexmark MS510dn
- Lexmark CS510de, CS510e
- Lexmark CS410dn, CS410n

# Supported fonts and bar codes

## Supported bar codes

| Type | Availability on Forms and Bar Code Card | |
|---|---|---|
| | PCL and PS bar codes | Forms merge bar codes |
| **One-dimensional bar codes** | | |
| Australian Post 4-State bar code (37-CUST) | X | X |
| Australian Post 4-State bar code (52-FF-MET) | X | X |
| Australian Post 4-State bar code (67-FF-MET) | X | X |
| British Royal Mail 4-State customer code symbol (RM4SCC) | X | X |
| Codabar (USD -4, NW -7, Monarch, Code 2 of 7) | X | X |
| Codabar with mod16 check digit | X | X |
| Code 128 autoswitch | X | X |
| Code 128 A | X | X |
| Code 128 B | X | X |
| Code 128 C | X | X |
| Code 3 of 9 | X | X |
| Code 3 of 9 with check digit | X | X |
| Code 3 of 9 extended | X | X |
| Code 3 of 9 extended with check digit | X | X |
| Code 3 of 9 space encoding | X | |
| Code 3 of 9 space encoding with check digit | X | |
| Code 93 | X | X |
| Code 93 extended | X | X |
| Danish PTT 3 of 9 | X | X |
| Dutch Post 4-State bar code | X | X |
| EAN/JAN-8 | X | X |
| EAN/JAN-8 with 2-digit supplemental | X | X |
| EAN/JAN-8 with 5-digit supplemental | X | X |
| EAN/JAN-13 | X | X |

| Type | Availability on Forms and Bar Code Card | |
|---|---|---|
| | PCL and PS bar codes | Forms merge bar codes |
| EAN/JAN-13 with 2-digit supplemental | X | X |
| EAN/JAN-13 with 5-digit supplemental | X | X |
| EAN 128 | X | X |
| French Postal 3 of 9 A/R | X | X |
| German Postal 2 of 5 Leitcode | X | X |
| German Postal 2 of 5 Identcode | X | X |
| HIBC 39/128 | X | X |
| Interleaved 2 of 5 | X | X |
| Interleaved 2 of 5 with check digit | X | X |
| Intelligent Mail | X | X |
| Industrial 2 of 5 | X | X |
| Industrial 2 of 5 with check digit | X | X |
| ISBN | X | X |
| ISBN+5 | X | |
| ISSN | X | X |
| ISSN+2 | X | |
| ISSN+5 | X | |
| ITF-14 | X | |
| Japan Post 4-State bar code | X | X |
| Matrix 2 of 5 | X | X |
| Matrix 2 of 5 with check digit | X | X |
| MSI | X | X |
| MSI with mod10 check digit | X | X |
| MSI with mod10 and mod10 check digit | X | X |
| MSI with mod11 and mod10 check digit | X | X |
| Singapore Post 4-State bar code | X | X |
| Swiss Postal | X | X |
| UCC 128 | X | X |
| UPC-A | X | X |
| UPC-E | X | X |
| UPC-A with 2-digit supplemental | X | X |
| UPC-A with 5-digit supplemental | X | X |
| UPC-E with 2-digit supplemental | X | X |

| Type | Availability on Forms and Bar Code Card | |
|---|---|---|
| | PCL and PS bar codes | Forms merge bar codes |
| UPC-E with 5-digit supplemental | X | X |
| USPS PLANET bar code | X | X |
| USPS POSTNET 5-digit ZIP code | X | X |
| USPS POSTNET 9-digit ZIP with 4 code | X | X |
| USPS POSTNET 11-digit Delivery Point Code | X | X |
| USPS Expanded POSTNET | X | |
| USPS Tray label, 10-digit 2 of 5 | X | X |
| USPS Sack label, 8-digit 2 of 5 | X | X |
| USPS Zebra code | X | X |
| USPS FIM (Facing Identification Marking) | X | X |
| **Two-dimensional bar codes** | | |
| Aztec | | X |
| Codablock F | X | X |
| Data Matrix | X | X |
| MaxiCode | X | X |
| MicroPDF417 | X | X |
| PDF417 | X | X |
| QR | X | X |
| RSS-14 | X | X |
| RSS-14 Expanded | X | X |
| RSS-14 Limited | X | X |
| RSS-14 Stacked | X | X |
| RSS-14 Truncated | X | X |
| **Composite bar codes** | | |
| EAN-8 | X | X |
| EAN/JAN-8 with 2-digit supplemental | X | X |
| EAN/JAN-8 with 5-digit supplemental | X | X |
| EAN-13 | X | X |
| EAN/JAN-13 with 2-digit supplemental | X | X |
| EAN/JAN-13 with 5-digit supplemental | X | X |
| RSS-14 Expanded | X | X |
| RSS-14 Limited | X | X |

| Type | Availability on Forms and Bar Code Card | |
|---|---|---|
| | PCL and PS bar codes | Forms merge bar codes |
| RSS-14 | X | X |
| RSS-14 Stacked | X | X |
| RSS-14 Truncated | X | X |
| UCC-128 | X | X |
| UPC-A | X | X |
| UPC-E | X | X |
| UPC-A with 2-digit supplemental | X | X |
| UPC-A with 5-digit supplemental | X | X |
| UPC-E with 2-digit supplemental | X | X |
| UPC-E with 5-digit supplemental | X | X |
| **Font-based bar codes** | | |
| Code 128 bitmap regular | PCL only | |
| Code 128 bitmap wide | PCL only | |
| Code 128 scalable regular | PCL only | |
| Code 128 scalable narrow | PCL only | |
| Code 128 scalable wide | PCL only | |
| Code 3 of 9 bitmap | PCL only | |
| Code 3 of 9 scalable half inch regular | PCL only | |
| Code 3 of 9 scalable one inch regular | PCL only | |
| Code 3 of 9 quarter inch regular | PCL only | |
| Code 3 of 9 small high regular | PCL only | |
| Code 3 of 9 small low regular | PCL only | |
| Code 3 of 9 small medium regular | PCL only | |
| Code 3 of 9 slim regular | PCL only | |
| Code 3 of 9 wide regular | PCL only | |
| Interleaved 2 of 5 bitmap | PCL only | |
| Interleaved 2 of 5 scalable regular | PCL only | |
| Interleaved 2 of 5 scalable thin | PCL only | |
| OCR-A | PCL only | |
| OCR-B digits regular | PCL only | |
| UPC tall | PCL only | |
| UPC tall narrow | PCL only | |
| UPC tall thin | PCL only | |

| Type | Availability on Forms and Bar Code Card | |
|---|---|---|
| | PCL and PS bar codes | Forms merge bar codes |
| UPC half | PCL only | |
| UPC half narrow | PCL only | |

# Supported fonts

To obtain the PCL 5 escape sequences used to select these fonts, print the font list using the printer control panel. For more information about the printer control panel, see the documentation that came with the printer.

| Font | Type | Resides |
|---|---|---|
| Architext CMC7 | Scalable | On option card |
| CMC7 | Scalable | On option card |
| Code 3 of 9 (4.69) | Bitmap | On option card |
| Code 3 of 9 (8.11) | Bitmap | On option card |
| Electrical symbols | Scalable | On option card |
| Euro and other currency symbols | Scalable | On option card |
| Line Draw | Bitmap | On option card |
| Manufacturing symbols | Scalable | On option card |
| MICR | Scalable | On option card |
| OCR-A | Bitmap | On option card |
| OCR-A | Scalable | On option card |
| OCR-B | Bitmap | On option card |
| OCR-B | Scalable | On option card |
| OCR-B in Bubbles | Scalable | On option card |
| Roman Pillar | Scalable | On option card |
| Roman Pillar Italic | Scalable | On option card |
| Roman Pillar Bold | Scalable | On option card |
| Roman Pillar Bold Italic | Scalable | On option card |
| Roman Pillar5 | Scalable | On option card |
| UPC 10mil | Bitmap | On option card |
| UPC 13mil | Bitmap | On option card |

# SAP support

When used in PCL 5 emulation mode, SAP ERP software has built-in support for many of the functions provided by Forms and Bar Code Card.

SAP systems support the following device types:

- LEXT622
- LEXW820
- ZLXFORM2

## Installing SAP device types

**Note:** You must be the SAP Basis administrator to install SAP devices.

1. Start transaction SE38.
2. Execute report RSTXSCRP to load the device type ZLXFORM2.
3. Type the name of the device type in the Object Name field.

   **Note:** Do not include the .pri extension.
4. Select **IMPORT** mode, and then press the **F8** button (execute).
5. Reset the SAPscript cache:
   a. Call transaction SE38.
   b. Execute the report RSTXDELL, using `client = '*'`.
6. Reset the character code cache:
   a. Start transaction SP12.
   b. Click **character sets** > **Conf buffer (CCC)** > **Invalidate CCC**.

**Note:** The reset procedure is valid only on the actual instance, so you must connect on the instance where the spool work process is running.

7. Restart the spool work process:
   a. Highlight the spool work process SPO.
   b. Click **Process** > **cancel without core**.

      **Note:** The spool work process should automatically restart after a few seconds or on the next interrupt.

## Modifying device types format and default settings

1. Start transaction SPAD.
2. Click **Full Administration** > **Device Types**.
3. Double-click the device type.
4. Click **Format**, and then double-click the format you want to modify.
5. Click **Change**.

6 Double-click **Printer Initialization**, and then remove the number sign (#) from the beginning of each needed line.

7 Click **Save** > **Save**.

# Using the Visual Bar Code Designer

The Visual Bar Code Designer is a separate application that lets the user select the bar code symbology and enter data to be encoded, and then prompts the software to generate the bar code.

## Supported operating systems

The Visual Bar Code Designer provides support for the following operating systems:

- Windows 7
- Windows Vista
- Windows XP
- Windows 2000
- Windows NT 4.0
- Windows 98

## Installing the Visual Bar Code Designer

1. Insert the *Software and Documentation* CD.
2. Run **setup-vbd.exe** from the Designer subdirectory.
3. Review and accept the license agreement.
4. Select the folder where you want to install the Visual Bar Code Designer.
5. Follow the instructions on the computer screen.

## Generating bar code data

Visual Bar Code Designer generates the PCL escape sequences, PCL HEX, or PostScript command sequences for bar codes. These data can be used within an application, SAP device type, or as a file to test print the bar code using Forms and Bar Code Card.

1. Click or **Start**.
2. Click **Programs** or **All Programs**, and then select **Visual Bar Code Designer**.
3. Double-click the bar code symbology you want from the “Barcode list” window.
4. Modify the bar code settings if necessary.
5. From the Edit menu, copy the data stream you want, and then paste the text string in your application.

**Notes:**

- After the bar code data is generated, the test bar code can be printed by clicking the Print icon in the toolbar. The image of the bar code prints on any printer, including those without a Forms and Bar Code Card installed. The test bar code may be suitable for scanning.

- For additional information, click the Visual Bar Code Designer Help menu, or see the Forms and Bar Code Card *Technical Reference Manual*.

# Creating and managing forms

## Forms overview

Electronic-forms solutions integrate both electronic and hard-copy documents, and let you create custom forms to create a dynamic document workflow for any business. The forms can be either printer-based or server-based. You can quickly design electronic forms, store them on a printer, automatically merge them with text files, and then print, fax, e-mail, or archive the output.

The electronic-forms solutions contain different modules that automate workflow processes. These modules include Forms Composer and Forms Manager.

**Note:** Forms Composer and Forms Manager are required software programs that can be purchased separately.

Forms Composer is a design tool that offers the following features:

- Easy-to-use graphical user interface to create forms and map data to the forms
- Importing of existing PDF documents for compatibility
- Creating of documents for printer-based and server-based technologies

The Data pane of Forms Composer allows mapping variable data that comes from the host system. You can set the paper size and input text before downloading the form to the printer flash memory or optional/standard printer hard disk. After a form is designed and is in the printer, data can be sent directly from your host computer over a TCP/IP network, through a USB connection to the printer, through a parallel card to the printer, or through a serial card to the printer. Forms and Bar Code Card then merges the data with the correct form using predefined activation conditions.

Activation conditions are defined as triggers that let you select the correct formset on the printer memory or printer hard disk. You can define activation conditions when designing your form in Forms Composer or creating a forms directive. Every time you create a new form for a data set, you are creating a project which you must upload to a printer with both flash memory and Forms and Bar Code Card installed.

Forms Manager downloads and manages formsets on printers where Forms and Bar Code Card is installed. You can add formsets to printers, retrieve printer information, and view saved files on the printer. Using Forms Manager, you can also upgrade the Forms and Bar Code Card firmware on the printer.

Forms and Bar Code Card has firmware that automatically merges the data with the correct form design (formset) and prints the completed form. The host data stream can be SAP RDI, ASCII, or double-byte data encoded in GBK, UTF-8, or UTF-16. Forms and Bar Code Card uses TrueType fonts and Adobe Font Manager (AFM) to generate PDF output.

## Forms Composer and Forms Manager

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Forms Manager downloads and manages formsets on printers where Forms and Bar Code Card is installed. You can add formsets to printers, retrieve printer information, and view saved files on the printer. Using Forms Manager, you can also upgrade the Forms and Bar Code Card firmware on the printer.

Forms and Bar Code Card has firmware that automatically merges the data with the correct form design (formset) and prints the completed form. The host data stream can be SAP RDI, ASCII, or double-byte data encoded in GBK, UTF-8, or UTF-16. Forms and Bar Code Card uses TrueType fonts and Adobe Font Manager (AFM) to generate PDF output.

# Forms Card menu

After Forms and Bar Code Card is installed, additional menu items are added to the standard printer menus. These menu items can be found in the Forms Card menu. The Forms Card menu is also available on the Embedded Web server.

| Menu item | Description |
|---|---|
| **Forms Merge Mode**<br>Print<br>Disabled<br>Data Capture<br>Disk \| Flash<br>Thumbdrive<br>Archive and Print<br>Archive only | • If Forms Merge Mode is set to Print, then the merged output is printed.<br>• If Forms Merge Mode is disabled, then the Forms Card passes all received data to the printer. No attempt is made to merge data onto a formset.<br>• When the Forms Card is in Data Capture mode, the incoming data stream is written to a file on the printer storage device. This file can be used as a sample data file during formset creation.<br>• The Thumbdrive option under Data Capture is available only when a USB flash drive is inserted into the printer. When using this feature, make sure a formsmerge (case-sensitive) directory exists in the flash drive.<br>• “Archive and Print” and “Archive only” modes are available only when the printer has a hard disk installed and Forms and Bar Code Card is configured to use the printer hard disk for formsets.<br>• When the Forms Card is in “Archive only” mode, the merged PDF files are archived in the formsmerge/archive directory. In “Archive and Print“ mode, the merged PDF files are also printed. |

| Menu item | Description |
|---|---|
| **Data Filter**<br>Global Filter<br>Network Filter<br>USB Filter<br>Parallel Filter<br>Serial Filter | If a data filter is enabled, then the incoming forms job is run through that filter before being processed by the Forms and Bar Code Card.<br>The following are possible values for each data filter:<br>• Disabled—This indicates that all data filters are off.<br>• NULL—This removes all null characters.<br>• AS400—This removes extraneous lines of data due to AS400 formatting.<br>• PCL—This removes all PCL escape sequences and leaves plain text.<br>• ZPL—This removes Zebra Printer Language directives.<br>• ZPL-F—This it the same as ZPL, except it uses @ as the escape character instead of ^.<br>• OFIS—This removes all Optra Forms™ initialization strings.<br>• OFIS+NULL—This removes all null characters and all Optra Forms initialization strings.<br>• AS400+OFIS—This removes extraneous lines of data due to AS400 and all Optra Forms initialization strings.<br>**Note:** Some data filters may not be available depending on your printer model. |
| **Print All Forms** | This prints all formset information found on the Forms and Bar Code Card.<br>**Notes:**<br>• If a .ppf file exists for the formset, then the paper tray and output bin information is read from the .ppf file and listed under the .ppf file name.<br>• If both a printer hard disk and flash memory are installed, then both total size and available size for the flash memory are displayed. Only the forms on the user flash is accessible. |
| **Error Page Print**<br>On<br>Off | This prints an error page when an error is encountered by the Forms and Bar Code Card. |
| **Print Port Setting**<br>Network Port<br>USB Port<br>Parallel Port<br>Serial Port | This allows Formsmerge to be turned on or off for the selected port(s). Formsmerge is on for all ports by default.<br>**Note:** If a port is on, then all data sent to that port are processed by the Formsmerge code. Otherwise, all data sent to that port are processed by the printer as if the Formsmerge is not installed. Specifically, the data file is printed as determined by the basic Printer Language Setting. |

| Menu item | Description |
|---|---|
| **Local Port Timeout**<br>1–100 | This allows users to select a timeout value for forms jobs that come in on any of the local ports (serial, USB, or parallel). This setting does not apply to forms jobs sent to the network ports. The default value is 4 seconds.<br>When Formsmerge is active on a local port, then a job will time out when triggered by the Local Port Timeout or the Printer Timeout—whichever is shorter. This terminates the current job as if an “End of Form” character has been reached. |
| **Copy Formsets**<br>Copy replace duplicates<br>Copy do not replace | This allows the printer to download forms from a flash drive.<br>**Notes:**<br>• “Copy replace duplicates” allows the user to copy and replace existing formsets of the same name.<br>• “Copy do not replace” does not copy formsets with duplicate names.<br>• When using this feature, make sure a formsmerge (case-sensitive) directory exists in the flash drive. |

# Barcode menu

The Bar code menu is also available on the Embedded Web server.

| Menu item | Description |
|---|---|
| **Alt ESC Code**<br>On<br>Off | This allows the use of an alternate escape character when processing PCL escape sequences.<br>**Notes:**<br>• This is a Bar Code function.<br>• On uses an alternate escape code character in addition to the default escape code character.<br>• Off uses the default escape code character. |
| **ESC Character**<br>126 (~)<br>34 (“)<br>35 (#)<br>36 ($)<br>47 (/)<br>63 (?)<br>92 (\)<br>123 ({)<br>124 (\|)<br>125 (}) | When Alt ESC Code is set to On, the value defined in this setting is used in addition to the default escape character. |

# Storing forms on the printer

To store forms on the printer, an optional flash memory or printer hard disk must be installed. When it is installed, use Forms Manager to interact with the optional flash memory or printer hard disk.

Use Forms Manager to do the following:

- Store forms on the flash memory or printer hard disk.
- Erase all forms from the flash memory or printer hard disk.
- View all forms currently stored on the printer.

# Capturing raw data for mapping

Capturing raw data is necessary to properly map data to forms. For additional information on capturing raw data, see the documentation that came with Forms Manager.

1. In Forms Manager, select your printer from the Printer list.
2. Click **Printer** > **Properties**.
3. From the Mode section of the Printer Properties dialog, select **Data Capture**, and then click **Apply**.
4. Send the data file to the printer.
5. Refresh the printer in Forms Manager.

   The data file is now listed, and you can select to retrieve it.

# Printing forms from a flash drive

The Create Flash File option in Forms Manager is used to add one or more formsets to printers that are not attached to the network. The flash file allows Forms Manager to communicate with these printers. The flash file created contains everything needed to add the formset(s) to the printer. You can save the file to a flash drive and then access it through the USB port on the printer.

For more information on creating flash files, see the Forms Manager documentation.

**Notes:**

- If formsets on the flash drive, the printer memory, or the printer hard disk contain the same activation conditions, then the formsets on the flash drive are used when those conditions are met.
- This function is supported only on printers with a USB port.

# Identifying the version of forms on the Forms and Bar Code Card

Do one of the following:

- Print a Menu Settings page. The current version of forms is listed under Installed Features. For more information on printing a menu settings page, see the printer *User's Guide*.
- Select the printer in Forms Manager, and then view the printer properties.

  **Note:** Forms Manager is also used when upgrading the Forms and Bar Code Card firmware.

# Font limitations

Windows fonts often contain more characters than the installed printer fonts. As a result, the printer may not print all the characters on a form. This is usually a problem only for characters that fall outside of the 0–255 character code range for nonstandard code pages. Print a sample form to check whether all the characters you want are printed.

# Troubleshooting

## The printer does not respond after installation

### Make sure the option card is installed correctly

Turn the printer off, and then reinstall the option card. For more information, see the installation sheet that came with the Forms and Bar Code Card kit.

## Forms Manager cannot detect the printer

Try one or more of the following:

### Check printer connections

Make sure:

- The printer is turned on.
- The power cord is plugged into the printer and into a properly grounded electrical outlet.
- The printer is not plugged into any surge protectors, uninterruptible power supplies, or extension cords.
- The printer is securely connected to the computer, print server, or other network access point.
- You have resolved any error messages on the printer control panel display.

### Make sure the printer is connected to the network

The printer must be on the network and must match the IP or DNS name of the network.

## International fonts do not print as expected

The international font set on the client computer does not match the font set on the Forms and Bar Code card.

### Switch to one of the fonts available on the Forms and Bar Code card

The following international fonts are recommended for forms printed on a printer with an installed Forms and Bar Code card:

Intl-Univers
Intl-CG Times
Intl-Courier
ArialMT
Times New RomanPSMT

# Mismatched fonts in Forms Composer and on printed forms

Try one or more of the following:

## Check Forms Composer and printer settings

Forms Composer, the printer, or both may not be configured properly. Make sure the workflow properties for the data stream have been properly configured. For more information, see the Forms Composer documentation.

For information on configuring network settings, see the documentation that came with the printer.

## Check that font mapping has not been altered in Forms Composer

The fonts.dat file in the Forms Composer directory specifies which fonts are used for font families with nonstandard names. The format for the information contained in the fonts.dat file follows the convention **`font name, regular, bold, italic, bold italic`**. These entries specify which fonts Forms Composer uses under which circumstances.

For example, an entry for the Bookman font family in the fonts.dat file might read **`Bookman, Bookman, Bookman Demi, Bookman Italic, Bookman Demi Italic`**. In this example, Forms Composer uses the font Bookman Demi for all instances of Bookman in boldface

**Note:** The fonts.dat file only specifies usage for font families with nonstandard names. Thus, a font such as Courier that uses Courier, Courier Bold, Courier Italic, and Courier Bold Italic will not be listed.

To check or alter the fonts.dat file:

1. From the Forms Composer directory, open **fonts.dat** using a text editor.
2. Make necessary changes to the file.
3. Save the file as fonts.dat into the same directory.

## Check that font mapping has not been altered on the printer

Forms and Bar Code Card relies on font mapping to specify which fonts are used under which circumstances. The information is contained in the manager.upr file that resides in the Forms Manager directory. When you add a printer to Forms Manager, the manager.upr file is written to it.

To check or alter the manager.upr file for a particular printer:

1. From the Forms Manager\Fonts directory, open **manager.upr** using a text editor.
2. Make necessary changes to the file.
3. Save the file as manager.upr into the same directory, and then delete the manager.bak file.
4. From Forms Manager, delete the printer and its associated files, and then add the printer you just deleted.

**Note:** See the Forms Manager documentation for more information on adding and deleting printers.

## Change the fonts in Forms Composer

Fonts used on the computer that hosts Forms Composer may not match those used by the Forms and Bar Code Card. Use fonts in Forms Composer that match those on the Forms and Bar Code Card.

### Install matching fonts on the Forms and Bar Code Card

For more information on installing fonts, see the Forms Manager documentation.

## Form did not merge

### Remove unnecessary characters from the beginning of the form

A blank page prints because the first element on the page is the character for form feed or carriage return. Form feed or carriage return characters at the beginning of a data stream causes the printer to skip to the next page, so that the print job or page activation conditions may be missed.

## Form is printed in plain text

Try one or more of the following:

### Review the activation conditions in Forms Composer

The form you are printing may not be activated. Use Forms Composer to set up activation conditions for the form.

### Make sure the Formsmerge function is not deactivated by Forms Manager

From Forms Manager, open the Printer Properties menu to activate Formsmerge.

## Cannot fax or e-mail merged output

### Check Forms Composer and printer settings

Make sure that workflow properties for the data stream have been properly configured. For more information, see the Forms Composer documentation.

For information on configuring network settings, see the documentation that came with the printer.

## Characters appear as boxes in PDFs viewed with Acrobat Reader

Acrobat Reader may not correctly display all characters in archived and e-mailed attachments.

### Use a different program to view PDFs

Merged output and preview output should match exactly. If boxes appear instead of characters in PDFs, switching to a different PDF viewer (such as Foxit Reader, available from www.foxitsoftware.com) should solve the problem.

# Not all forms are listed

Use Forms Manager to view all forms stored on the optional flash memory card or the printer hard disk.

# Data filters are not working

Check the Data Filters menu to see if the filter you want is enabled.

# Cannot add new forms

Try one or more of the following:

### Delete unused forms before adding new forms

### Defragment the flash memory

The flash memory may be full. Defragmenting the flash memory frees space that is marked unavailable when files are deleted. You can access this feature from the Printer Properties in Forms Manager.

# Bar codes do not print as expected

These are possible solutions. Try one or more of the following:

### Make sure the option card is compatible with the printer on which it is installed

### Make sure that the option card is installed

Print a Menu Settings page and make sure the Forms and Bar Code option is listed under the Printer Information heading.

For more information on printing menus, see the documentation that came with the printer.

### When using a PCL 5 emulation printer driver, make sure that the escape sequence used to generate the bar code is properly constructed

The escape sequence must begin with Esc and contain the #T parameter (not case-sensitive) for the bar code to be generated. Default values are used for parameters not explicitly defined in the sequence.

# Cannot generate bar codes using PCL emulation printer drivers

The option card does not support bar code printing with PCL XL or HPGL/2 emulation printer drivers. Only printing with PCL 5 is supported.

### Disable advanced features using a PCL XL emulation printer driver

1. From a Windows-based application, open the Print Properties dialog.
2. Click the **Graphics** tab.
3. From the Graphic mode list, select **Auto select**.

## Unexpected results after printing a bar code

Try one or more of the following:

### Make sure the PCL 5 emulation escape sequences are complete

PCL 5 escape sequences that generate an embedded bar code should be immediately followed by an escape sequence that *fully* specifies the text font to return to after printing the bar code. For example, Esc **`(s0p12h0s0b4099T`** returns the text to 12-pitch Courier with fixed pitch spacing immediately following the embedded bar code.

### Make sure all parameters needed are fully specified

Parameter values are not retained for subsequent bar code PCL 5 escape sequences. Each time a bar code is generated, fully specify all parameters needed for each bar code.

Default values are used for any unspecified parameters.

## Printed bar code is unreadable

### Make sure Print Quality settings are not too dark or too light

Print Resolution and Toner Darkness settings can affect the quality of printed bar codes. From Print Properties, adjust the Print Quality settings before printing another bar code.

### Check the paper

Use only paper that meets printer specifications. For more information, see the documentation that came with the printer.

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November 2012

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