Meadows Publishing Solutions

MPS Bar Code Module™

This manual describes the use of the Meadows Bar Code Module[™] for Adobe[®] InDesign[®] with the DesignMerge[®] Pro software and the AutoPrice[™] software from Meadows Publishing Solutions. When used in conjunction with DesignMerge or AutoPrice, the Bar Code Module[™] allows you to create variable linear or one-dimensional bar codes inside an Adobe[®] InDesign[®] document based on data taken from a database field. With the Bar Code Module, DesignMerge or AutoPrice can create the following bar codes:

PostNet

- CODABAR
- CODE 128-A
- CODE 128-B
- CODE 128-C
- CODE 39
- CODE 39 (Full ASCII)
- EAN-13

- USPS Intelligent Mail
- Interleaved 2 of 5
- Interleaved 2 of 5 (Text)
- JAN-13
- MSI-Plessey
- UPC-A
- UPC-E

The Bar Code Module is designed to be used with the bar code font library from Rivers Edge. The fonts for the bar codes listed above are included in the Bar Code Module software package. You may use these fonts on a royalty-free basis, so long as you use the Bar Code Module and DesignMerge or AutoPrice to create the bar codes.

Overview

About the MPS Bar Code Module™

The Meadows Bar Code Module is an optional component of the Meadows DesignMerge® software package and the Meadows AutoPrice™ software package for Adobe® InDesign®. The Bar Code Module is designed to place linear or one-dimensional bar codes in an Adobe InDesign document when used in conjunction with DesignMerge or AutoPrice software. The Bar Code Module provides support for a number of popular Linear bar codes. Note that PostNet and USPS Intelligent Mail are each a standard feature of the DesignMerge software.

Additionally, the Bar Code Module software package includes a royalty-free set of bar code fonts for these bar codes. The Bar Code Module is designed to be used only with the bar code font library from Rivers Edge. The fonts are included in the Bar Code Module software package, or can be downloaded from the Documentation page on the Meadows web site (www.meadowsps.com/documentation). You may use these fonts on a royalty-free basis, so long as you use the Bar Code Module and DesignMerge or AutoPrice to create the bar codes.

About this Manual

This manual presents detailed descriptions of the installation, features, and user interface of this software. At the end of this manual, you will find information about requesting Technical Support and ordering additional copies of this software. This manual was written for all versions of the software. Since for the most part, the software operates the same regardless of the version, screen shots from the Macintosh InDesign platform are used throughout the documentation. In the few cases where a particular window or functionality differs significantly from one version to another, specific pictures and settings are fully identified.

Installation

Prerequisites

The Bar Code Module can be used only in conjunction with the DesignMerge® software or the AutoPrice™ software from Meadows Publishing Solutions.

Required Modules

MPS Bar Code Module

(file name: MPS Bar Code Module)

This is the module that enables the variable linear, one-dimensional bar code output capabilities of the DesignMerge® software and the AutoPrice™ software from Meadows Publishing Solutions for a number of popular linear or 1D bar codes.

MPS Administrator

(file name: MPS Administrator)

MPS Administrator is required to use the Bar Code Module and many of the other Meadows Publishing Solutions (MPS) software products.

System Requirements

Unless otherwise stated, all Meadows software is compatible with the hardware and operating systems currently supported by the version of the Adobe InDesign application where the Meadows software is installed.

Be sure to download the Meadows software that is appropriate for the version of Adobe InDesign that you are running. If you do not see a download that matches your version of Adobe InDesign, feel free to send an email to our sales department at sales@meadowsps.com and they can provide further information about when the release might be available.

You can also find information about System Requirements for Meadows software on the Meadows web site at: www.meadowsps.com/systemrequirements

Install the Software

Since the Bar Code Module software is a component of the DesignMerge or AutoPrice software package, run the DesignMerge installer or run the AutoPrice installer to install the Bar Code Module. For a successful installation, use the installer that corresponds to the version of DesignMerge or AutoPrice that is currently installed in your copy of InDesign, or also install DesignMerge or AutoPrice while installing the Bar Code Module.

To install the Bar Code Module, follow the steps below:

1) Quit your Adobe InDesign application.

Before installing, confirm your InDesign application is not running.

2) Launch the DesignMerge or AutoPrice installer.

Double-click the DesignMerge or AutoPrice installer to start it.

3) Enter Password (if required) and click <u>Continue</u>.

The installer may require permission to install some of its software components. Enter your system password if prompted to do so. When the installer window is presented, click the **Continue** button to begin the installation.

4) Accept the Software License Agreement.

Click the **Agree** button to accept the terms of the license.

5) Select Destination Volume/Drive.

Select the volume/drive where your InDesign application is installed.

6) Choose the <u>Custom</u> Installation Type (see <u>Note</u>).

Select **Custom Install**, place a check in the **Optional Software Modules** check box, and click **Install**. The installer will prompt you to select which optional modules you wish to install. Select the **Bar Code Module** and any other optional modules you have purchased or would like to demo.

Note: If you prefer to install DesignMerge or AutoPrice at the same time, select **Easy/Typical Install** instead. Then, when the installer prompts you to select optional modules, select the **Bar Code Module** and any other optional modules you have purchased or would like to demo.

7) Select your InDesign folder (if prompted).

The installer will search the selected volume/drive for copies of Adobe InDesign. If more than one folder is located, you will be prompted to choose the folder where you want to install the software. Otherwise the installation will proceed.

8) Installation is complete.

You are now ready to begin using the new software! To do so, see the following section for information about activating your software.

Activate the Software

Once you have installed the software, you are now ready to activate it. Follow the steps below to activate your software:

1) Run the InDesign application where you installed the software.

Start by running your InDesign application. The first time a software module loads, you will be prompted to "activate" it. If you are not prompted to activate it, proceed to the "Verifying Installation" section of this manual.

2) Enter your Name, Company, and Activation Code (or click <u>Demo</u>).

Enter your **Name**, **Company**, and **Activation Code** for the module that is requesting activation. You will have received your Activation Codes via e-mail. When ready, click the **Activate** button.

Running in Demo Mode: If you do not have an Activation Code for a module that supports being run in Demo Mode and wish to try out the software, click the **Demo** button instead to activate the software in Demo Mode. When the software is running in Demo Mode, the software is fully functional, however there may be limitations. For more details about a module's Demo limitations, see the software's Downloads page on the Meadows web site: www.meadowsps.com/downloads.

3) Read and Accept the Software License Agreement.

If you entered a valid Order Code and Validation Key (if required), or if you clicked the **Demo** button, you will now be presented with the Software License Agreement.

You may choose to **Print** a copy of the software license agreement if you wish to retain a paper copy before continuing. Then, click the **Accept** button to accept the terms of the agreement, or click **Decline** if you do not agree with the terms. You must accept the terms of this agreement to use the software.

Note also that these terms apply to any other Meadows software modules that may be required by DesignMerge or AutoPrice.

Verify the Installation

To confirm successful installation of the Bar Code Module for InDesign, open the **Options** menu inside the **DesignMerge** or **AutoPrice** menu. You should see a menu item named **Linear Bar Code Module**.

Click on **Linear Bar Code Module** to open its menu and select **Bar Code Utility**. This should open the **MPS Bar Code Utility** window and no warning message should be displayed.

You can now close the MPS Bar Code Utility window, which is described later in this manual.

Install the Bar Code Fonts

The Bar Code Module software package includes a royalty-free set of bar code fonts from the Rivers Edge Corporation. The Bar Code Module is designed to be used only with these provided bar code fonts. Using the Bar Code Module with fonts from a different manufacturer may yield unpredictable results and is not supported.

The Bar Code Module Fonts package is available in the DesignMerge Documentation package, which is available on the Meadows web site (www.meadowsps.com/documentation). When ready, you may install whichever Linear Bar Code Fonts you wish in the same manner as you would normally install fonts on your system.

About Bar Code Fonts Licensing and Usage

By purchasing the Bar Code Module, you receive a royalty-free license to use the included Rivers Edge bar code fonts on the same computer where you have loaded the Bar Code Module and DesignMerge or AutoPrice software. You may use these fonts on a royalty-free basis so long as you use the Bar Code Module and DesignMerge or AutoPrice to create the bar codes.

Install or Move a Copy to Another Computer

Since this software is a component of the Meadows DesignMerge® software package or the Meadows AutoPrice™ software package, see the instructions provided with that software's installer to install or move a copy to another computer.

Activating a Meadows software product binds that software installation to your computer. To install an additional purchased copy or to move a copy to another computer, see the instructions provided with the DesignMerge or AutoPrice installer.

Using the Bar Code Module[™]

To use the Bar Code Module, you will create what we call a "Keyword Link." A Keyword Link is a DesignMerge or AutoPrice Variable Link with a specific name. Below are the names of the Keyword Links for the currently supported bar codes:

Bar Code Type	Keyword Link Name
Codabar	_BARCODE_CODABAR_
CODE 128-A	_BARCODE_CODE128A_
CODE 128-B	_BARCODE_CODE128B_
CODE 128-C	_BARCODE_CODE128C_
CODE 39	_BARCODE_CODE39_
CODE 39 (Full ASCII)	_BARCODE_CODE39ASCII_
EAN-13	_BARCODE_EAN13_
Interleaved 2 of 5	_BARCODE_I2OF5_
Interleaved 2 of 5 (TEXT)	_BARCODE_I2OF5TEXT_
JAN-13	_BARCODE_JAN13_
MSI-Plessey	_BARCODE_MSIPLESSEY_
PostNet	_BARCODE_POSTNET_
UPC-A	_BARCODE_UPCA_
UPC-E	_BARCODE_UPCE_
USPS Intelligent Mail	_BARCODE_USPS_IM_

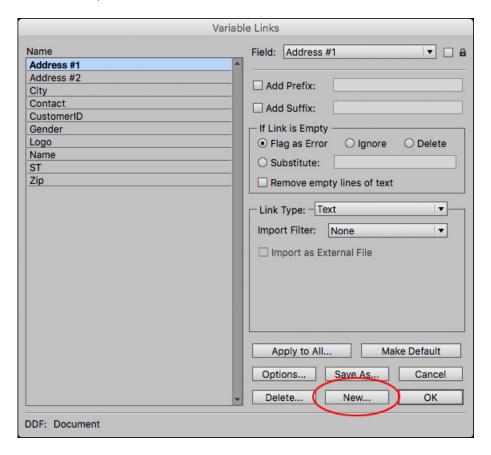
Based upon the name of the Keyword Link, DesignMerge or AutoPrice will process data for that Link accordingly. You should have a field in your database that contains the data that is to be encoded for the bar code. Or, you should use a Link Rule to set the data that is to be encoded for the bar code. This data should <u>not</u> include any of the required start or stop characters for the bar code. It also should <u>not</u> include any of the check or correction digits for the bar code. The Bar Code Module will automatically add these characters and digits for you when the data is placed in a document.

Once you have the data set, all you need to do is add a Variable Link to your document's DDF (**DesignMerge/AutoPrice** \Rightarrow **Setup** \Rightarrow **Variable Links**), giving the Variable Link one of the names listed above, and map the new Variable Bar Code Link to the field that contains the data for this bar code. Then place the Variable Bar Code Link in the document and go. The following section provides instructions to create a Variable Bar Code Link.

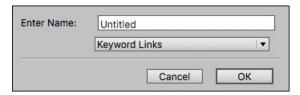
Create a Variable Bar Code Link

To create a Variable Link for a bar code, display the document where you wish to use the Variable Bar Code Link, and then open the **Variable Links** window for the document by selecting the **Variable Links** menu item from the **DesignMerge/AutoPrice** ⇒ **Setup** menu.

The **Names** list on the **Variable Links** window will display the Variable Links that have been created for the document's DDF up to this point. To add a Variable Bar Code Link to this list, click the **New** button, shown circled below:

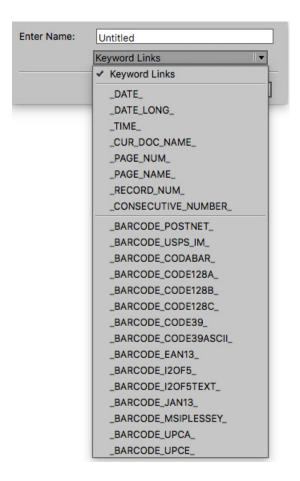


A window will appear, as shown below:

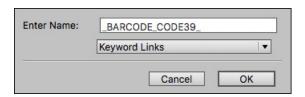


MPS Bar Code Module™

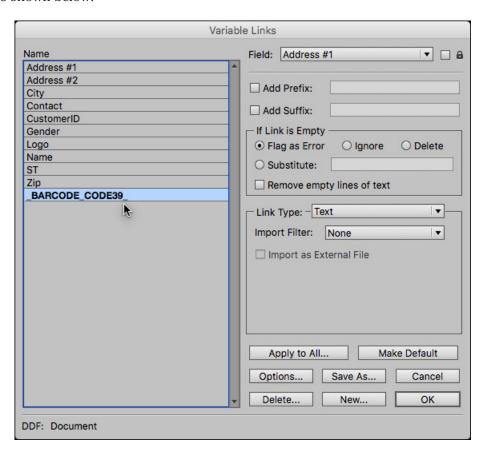
When the Bar Code Module is installed, the **Keyword Links** popup menu on this window will include the names of the Keyword Links for the bar codes listed previously in this manual, as shown below:



Select one of the Keyword Link names for a bar code from this menu. The selected name will be copied automatically into the **Name** box for you, saving you from having to remember the exact syntax of the name of a Keyword Link each time you want to create one. For example, after you select "_BARCODE_CODE39_" from the **Keyword Links** popup menu, the **Name** box will appear as shown below:



Click the **OK** button on the **Name** window to return to the **Variable Links** window where you will see the name of the new Link in the **Names** list. An example of a **_BARCODE_CODE39_** Link is shown below:

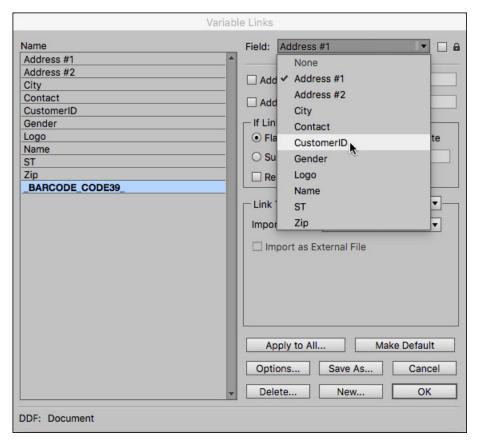


0

If you would like to use more than one instance of a particular Bar Code Keyword Link where each one imports data from a different field in the database file, append a unique single digit to the Link's Name when you are adding it. For example: Click New to add a Link. Select _BARCODE_CODE39_ from the Keyword Links popup menu, and the Name box will display _BARCODE_CODE39_. Next, append a single digit to this name to give it a unique Variable Link Name. For example, add the number 1 to use _BARCODE_CODE39_1 as the name. Then, click the OK button to add this Keyword Link to your DDF. You can now select the appropriate Field for this first Code39 Link, as described in the next set of steps. To add a second Code39 Link: Repeat these steps except append a different single digit to the Keyword Link's name. For example, add the number 2 to use _BARCODE_CODE39_2 as the name for the second Code39 Keyword Link. You can then select a different Field for this second Code39 Keyword Link.

Set Up the New Bar Code Link

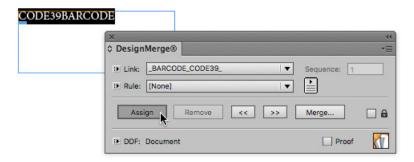
Next, you need to select the database field for your new Bar Code Link. Select the field in your database file that contains the data to be encoded for that bar code. For example, if the database file has a field named "CustomerID" that contains data to be encoded for a Code 39 bar code, select the **_BARCODE_CODE39_** Link in the list on the **Variable Links** window and then select "CustomerID" from the **Field** popup menu, as shown below:



Note that you do not need to specify on the **Variable Links** window any of the supplemental prefix or suffix characters that are required by a bar code font for translation purposes. The Bar Code Module will automatically add these for you when it processes your data.

Place the Bar Code Link in a Document

Once you have created a Bar Code Link, you can place it in your document in the normal fashion. Below is an example of placing a _BARCODE_CODE39_ Link in a document:



When you assign a new Bar Code Link to text in a document, the Link will contain the same characters that were highlighted when the Link was assigned. However, when data is merged into a Bar Code Link, the Bar Code Module will first translate the data to the appropriate code and then will place that code in the Link.

After inserting a Bar Code Link, you must also apply the appropriate bar code font to the Link. When you merge data, the appropriate bar code translation and character mapping will be applied automatically to the incoming data, which will then be placed into the document. Below is a picture of the above example after applying a Code 39 font to the _BARCODE_CODE39_ Link:



Using the Bar Code Utility

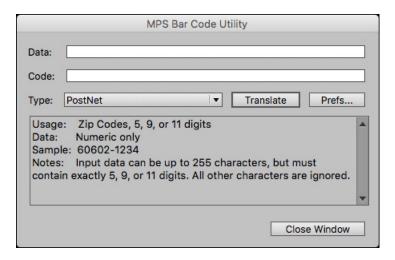
About the Bar Code Utility

You can use the Bar Code Utility to display the code that the Bar Code Module will create for specific data. This utility is provided principally for support purposes, but can also be used as a tool for creating one-off bar codes or as a quick reference for information relating to a specific bar code, such as the type of data supported, valid string lengths for the data, etc.

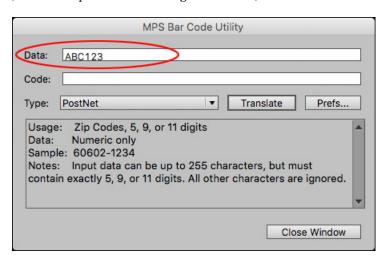
There are many different types of bar codes and each has its own appearance as well as its own rules governing valid values and formatting. Some bar codes include a "check digit" to assure the bar code has been accurately scanned. Bar codes may also include start and stop characters indicating where the value represented by the bar code begins and ends.

Test Bar Code Data

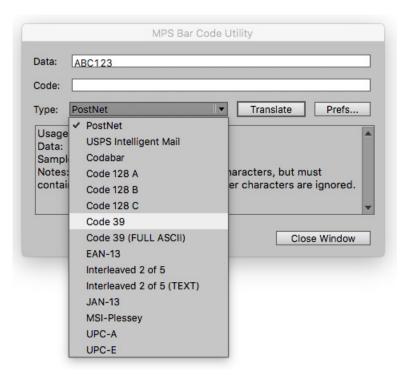
To test bar code data, open the **DesignMerge** or **AutoPrice** menu and select **Options** ⇒ **Linear Bar Code Module** ⇒ **Bar Code Utility**. The **Bar Code Utility** window will appear, as shown below:



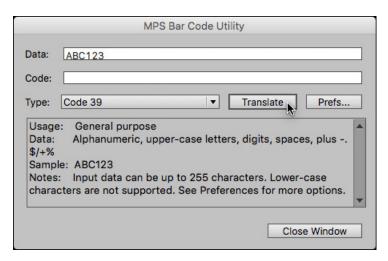
In the **Data** box, enter sample data for a single bar code, as shown below:



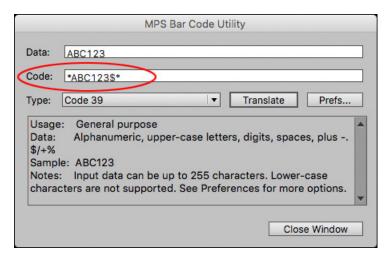
Choose a bar code type from the **Type** popup menu, as shown below:



Next, click the **Translate** button, as shown below:



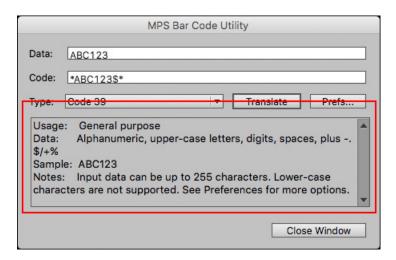
The Bar Code Module will translate the sample data into the appropriate code, automatically adding any required start and stop characters as well as calculating and adding any required check and correction digits. The resulting code will be displayed in the **Code** box, as shown in the picture below:



You can use this feature to confirm the data you are testing is valid for the selected bar code. Also, by comparing the resulting code in this window to the content that DesignMerge or AutoPrice places in a merged Link, you can use this to confirm DesignMerge or AutoPrice is placing the correct result in the merged Link.

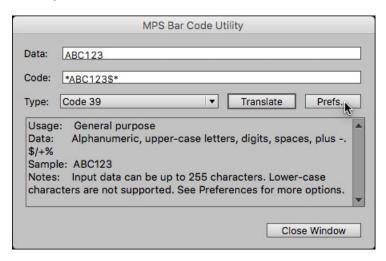
Additional Information

To display additional information about any bar code, simply select the bar code from the **Type** popup menu. The **Additional Information** box will be filled with helpful information about that bar code, including a description of the valid data for use with that bar code. Below is an example for Code 39:

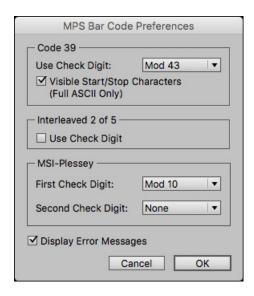


Bar Code Module[™] **Preferences**

You can open the **Preferences** window for the Bar Code Module by clicking the **Prefs** button on the **Bar Code Utility** window, as shown below:



This will open the **Preferences** window, as shown below:



Code 39 Preferences

You can set two preferences for Code 39 Links. Check the **Use Check Digit** option if you would like the Bar Code Module to calculate and insert a check digit in the code for a Code 39 bar code when the data is translated.

Turn On (check) the **Visible Start/Stop Characters** option if you would like the Bar Code Module to add the appropriate start and stop characters to the code for a Code 39 bar code when the data is translated. Below are examples of a Code 39 bar code with and without visible start/stop characters.

The picture below shows a Code 39 bar code that has been translated without visible start and stop characters (a Code 39 font that displays both bars and text has been applied to the Code 39 Link):



The picture below shows a Code 39 bar code that has been translated with visible start and stop characters (a Code 39 font that displays both bars and text has been applied to the Code 39 Link):



The start and stop characters will be visible only in merged Links. Turning on (checking) the **Visible Start/Stop Characters** option to include start and stop characters in the code will not affect the data for the bar code, which should always exclude the start and stop characters.

Interleaved 2 of 5 Preferences

Turn On (check) the **Use Checksum** option if you would like the Bar Code Module to calculate and insert a check digit into the Interleaved 2 of 5 bar code when the incoming data is translated.

MSI-Plessey Preferences

MSI-Plessey supports 0, 1, or 2 check digit characters. The check digit can be calculated using either a Modulo 10 or a Modulo 11 checksum. Note that certain combinations of check digit characters are not allowed, and these will be dimmed in the menu. By default, this preference is set to use a single, Modulo 10 check digit. You many need to modify these settings depending upon the scanner or customer requirements for a particular job.

Error Messages

Turn On (check) the **Display Error Messages** option if you would like an error message to be displayed when a translation error occurs, for example, when data is invalid. The picture below shows an example of a translation error message for a Code 39 Link:



Additional Bar Code Information

This section includes information that may be helpful when trying to use certain bar code types. Each bar code is described below.

Code 128 (A, B, C)

To generate a Code 128 bar code, use one of the Code 128 bar code variations (Code 128A, Code 128B, or Code 128C). To select between the variations of the Code 128 bar code, consider the type of data that will be encoded. Each variation supports a different set of characters as valid incoming data, as described below:

Code 128 A accepts upper-case alphanumeric data (e.g., ABC123) and ASCII 0-31 characters. This version of Code 128 does not support lower-case characters.

Code 128 B accepts upper-case and lower-case alphanumeric data (e.g., ABCabc123). Input data can be from the full printable ASCII character set (Decimal 32 - 127). This version of Code 128 does not support ASCII 0 - 31.

Code 128 C accepts numeric data only (0123456789) and the encoded data must be an even number of characters. The Bar Code Module will pad incoming data that has an uneven number of characters with a leading 0.

You may assign <u>any</u> Code 128 font to <u>any</u> Code 128 variation. Either Code 128A fonts or Code 128B fonts can be used to print all three variations of Code 128 (Code 128A, Code 128B, and Code 128C). The difference between the fonts is that the B font is wider than the A font.

Interleaved 2 of 5

Interleaved 2 of 5 uses a special format to create numeric-only symbols that are extremely compact. Interleaved 2 of 5 uses the bars to represent one character, and the spaces between the bars to represent another character.

Symbols Must Contain an Even Number of Digits

Because characters are interleaved, you must use an even number of digits when creating a symbol. If your number contains an odd number of digits, then the Bar Code Module will add a leading zero to make an even number of digits. When counting the number of digits to be encoded, remember to <u>include the Check Digit</u> if your Bar Code Module preferences are set to add it automatically.

Check Digit Character

Interleaved 2 of 5 can be used with an optional Check Digit character. This feature is enabled via the Bar Code Preferences, as described in the previous section. If a Check Digit character is used, this character must be encoded along with the data string. If the addition of a check digit character forces the data string to contain an odd number of characters, the Bar Code Module will automatically add a leading zero to the data string before encoding it.

Human Readable Characters

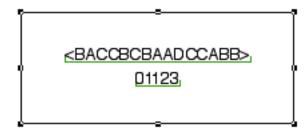
It is often recommended to include a human readable version of the bar code above or below the bar code. Only the numbers should be shown in the human readable interpretation. The start/stop characters should not be shown. There are no specific guidelines for the size or typeface that should be used for the human readable digits. Therefore you can use whatever best suits your particular application.

The Bar Code Module provides a special Keyword Link that will return the text version of the Interleaved 2 of 5 bar code. The name of this Keyword Link is _BARCODE_I2OF5TEXT_. You can place this Link above or below a _BARCODE_I2OF5_ Link in a document to display a human readable form of the bar code. The _BARCODE_I2OF5TEXT_ Link should reference the same field as the _BARCODE_I2OF5_ Link (the field that contains the data to be encoded in the bar code. The Bar Code Module will add a leading zero if required, and return the text version of the string. Below are examples of a text box that contains both of these Links before and after being merged with data.

The picture below shows two Keyword Links for Interleaved 2 of 5. The top Link will translate the data into a format appropriate for the bar code font, while the bottom Link will translate data into text format.



The picture below shows what the data "1123" looks like after being merged into the example above. Notice that the top Link has been encoded for use with the bar code font and includes the start and stop characters. The bottom Link has been encoded for a standard font. Notice that a leading zero has been added so that the encoded data (plus check digit in this case) contains an even number of characters.



The picture below shows the merged data from the example above after an appropriate Interleaved 2 of 5 bar code font has been applied.



UPC- (A, B, C, D)

The UPC-A bar code can also be applied to the variant sizes B, C, and D. UPC-A is the standard format for retail products in the USA. UPC-A bar codes are numeric only. The UPC data is expected to have a data length of 11 digits. The first digit represents the number system for the code, which will vary depending upon the application. The remaining 10 digits represent the product code. UPC-A also permits a 2 or 5 digit supplement, typically used in special situations such as with printed publications. Therefore, valid input data for a UPC-A bar code must be 11, 13, or 16 characters in length. If the data is any other length, an error string will be returned and placed into the document instead.

More Information

For more information about DesignMerge and its modules, see the information that is included in PDF format in DesignMerge Documentation. To download the latest version of DesignMerge Documentation, go to www.meadowsps.com/documentation.

For more information about AutoPrice and its modules, see the information that is included in PDF format in AutoPrice Documentation. To download the latest version of AutoPrice Documentation, go to www.meadowsps.com/documentation.

Technical Support

For clients that are using this software along with a licensed copy of the DesignMerge® or AutoPrice™ software from Meadows Publishing Solutions, go to www.meadowsps.com/support for details about how to obtain support for your software. You can also go to this web page by opening the **DesignMerge** or **AutoPrice** menu and selecting **Help** ⇒ **Online Support Center**.

For all other customers, for information about Meadows Support and to access both the Meadows Help Desk and the Meadows Knowledgebase, go to www.meadowsps.com/support.

From the Meadows Support website page, you may open a new support ticket, view the status of your open tickets, review any of your tickets that have been resolved, or view the Meadows Knowledgebase. The Knowledgebase is a categorized collection of answers to FAQs and serves as an excellent source for resolving your technical support questions.

Providing top-notch technical support has always been a priority for us, and we are confident that the Meadows Help Desk and Meadows Knowledgebase will allow us to provide the fastest, most efficient response to your technical support requests.

Contact Information

Meadows Publishing Solutions

1305 Remington Road, Suite G Schaumburg, IL 60173

Toll-Free Sales: (888) 983-6746 (U.S. and Canada)

Office/Support: (847) 882-8202 **Fax:** (847) 882-9494

Sales: <u>sales@meadowsps.com</u>
Web: <u>www.meadowsps.com</u>

Support: <u>www.meadowsps.com/support</u>

Legal Stuff

Copyright & Trademark Information

This document is © Meadows Information Systems, LLC d/b/a Meadows Publishing Solutions. All rights reserved worldwide. Unauthorized reproduction of this document or its content without permission is expressly prohibited.

DesignMerge is a registered trademark of Meadows Information Systems, LLC. AutoPrice, CopyFit, GroupPicture, Price Style, 2D Bar Code Module, Bar Code Module, Data Exporter, PDF Exporter, Squinch Reporter, Index Builder, Page Printer, Picture Namer, Batch Print, Batch Update, Copy Grabber, Math Grabber, Tab Grabber, and Text Grabber are trademarks of Meadows Information Systems, LLC.

EngageIT is a registered trademark of Konica Minolta.

Adobe, PostScript, Acrobat, Distiller, and InDesign are either registered trademarks or trademarks of Adobe Systems Incorporated.

All other product names used herein are for identification purposes only and may be trademarks of their respective companies.