
TRS-80®

Model 100 Portable Computer

BAR CODE WRITER

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Bar Code Writer

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INTRODUCTION

Bar Code Writer is an easy-to-use program created for your Model 100 that can convert text files that you create into bar code labels or listings. The Bar Code Writer program can produce six types of bar codes:

- Three of Nine
- Interleaved Two of Five
- Codabar
- Long UPC (UPC-A)
- Short UPC (UPC-E)
- Plessey

Bar Code Writer codes can be read with the Radio Shack Wand (Cat. No. 26-1183).

Read through the Reference section and then if you feel that you need practice, work through the examples at the end of this manual to become better acquainted with the program.

Required Equipment

- Model 100 Portable Computer with at least 24K RAM
- AC Power Supply (Cat. No. 26-3804) or 4 AA batteries
- Cassette recorder (CCR-81, Cat. No. 26-1208 is recommended)
- Radio Shack Printer
- Radio Shack Printer Cable (Cat. No. 26-1409)

Loading the Program

Follow the instructions below to load the Bar Code Writer program into your Model 100.

1. Make sure that your cassette recorder is properly connected, then insert the Bar Code Writer cassette tape, and rewind it completely.
2. Press the PLAY button on the recorder into a locked position.
3. Adjust the volume to about halfway (4 or 5).
4. On the Model 100, position the cursor at BASIC and press **(ENTER)**.
5. At the OK prompt, type **C** and press **(F2)**. The screen shows, Cload ".
6. Type **BCODE (ENTER)**.
7. The tape begins to play and after a few seconds the tape stops and the screen shows:

```
Found: BCODE
OK
```

8. Press **(F3)**, then type **BCODE (ENTER)**. The screen now shows:

```
Save "BCODE
OK
```

The Bar Code Writer program is now saved in your Model 100's memory. Press **(F8)** to return to the Model 100 Main Menu. The Bar Code Writer program is shown as BCODE.BA.

REFERENCE

Use this section as a reference tool when setting up your own bar codes. The section contains all the information needed to create and print your own bar codes. The files for the bar codes are created in the TEXT program of your Model 100. Refer to the Model 100 Owner's Manual for specific instructions on creating, editing, saving, and loading TEXT files.

Creating a Bar Code File

To create your own bar code, you must first create a file. These files can be named anything that indicates what the file contains. (For example, grocery items might be filed under names such as PRO, for produce, or CAN, for canned goods.)

After you create the file in the TEXT program of your Model 100, the Bar Code Writer program can then be used to print the file. You can create files that print as bar code only, or you can mix text and bar codes for all bar code types.

Bar Code Writer scans each line of the file that you created. If a line begins with an asterisk, Bar Code Writer prints it in bar code (excluding the asterisk). The letters (or numbers) appear beneath the bar code. One line of bar code is the same height as three printed lines. If a line does not begin with an asterisk, the program prints it exactly as it was typed.

You can type anything into a text file, but the lines that are designated for bar codes must fit the specifications for the bar code format that you choose. Choose one of the formats listed in "Bar Code Formats" and follow the instructions for that format when creating bar codes.

When you are ready to enter your own bar code information, position the cursor over TEXT at the Model 100 Main Menu and press **(ENTER)**. The screen shows: File to edit:

Name the file and press **(ENTER)**. Now, you are ready to create bar code files.

Bar Code Formats

The bar code formats shown below can be used with the Bar Code Writer Program to print bar codes which can then be read with a wand. Choose the format you want to use, and then follow the instructions for that format when creating bar codes.

UPCA

- Begin the line with an *.
- Use eleven **numeric** characters.
- The leading digit is usually a 0, but you may begin with a 2 for random weight items (produce, for example).
- Drugs and similar products can begin with a 3.
- 5, as a leading number, is reserved for coupons.

UPCE

- Begin the line with an *.
- Use six **numeric** characters.
- Bar Code Writer automatically inserts a leading 0, since a leading '1' is undefined.

3 of 9

- Begin the line with an *.
- Use only the characters shown below (maximum of 22 characters per line):

0123456789ABCDEFGHIJKLMNPOQRSTUVWXYZ-./ +%

All alpha characters must be capitalized.

Plessey

- Begin the line with an *.
- Use all numeric characters (maximum of 22 characters per line).

I 2 of 5

- Begin the line with an *.
- Use all numeric characters (maximum of 22 characters per line).

Codabar

- Begin the line with an *.
- Begin and end the text with one of the following pairs of Start/Stop tags (the first is the start, the second the stop tag):

a/t, b/n, c/*, or d/e

- Use the following set of characters to complete the line maximum of 22 characters per line):

0123456789-./ +

- For example, using b/n as a Start/Stop tag, a Codabar might look like this:

*b3635473n

Note: Each line in your text files that you want printed in bar code **must** begin with an asterisk.

Printing Bar Codes

After creating the bar codes using the chosen format, you are ready to print the file using the Bar Code Writer program.

First, make sure your printer is properly connected and turned on and loaded with labels or paper. At the Model 100 Main Menu, place the cursor on BCODE.BA and press **(ENTER)**. The screen displays:

Date	Time		(c) PCSG 84
UPCA	3 of 9	Plessey	Codabar
UPCE	I 2 of 5		
Select Bar Code to use.			Menu

Using the arrow keys, or spacebar, position the cursor on the selected bar code type and press **(ENTER)**. The screen shows: Using "bar code"? If this is the bar code you want to use, press **(Y)**.

The screen then displays a menu with your file names and the message, Select file to print. You must now select a document (.DO) file that you want to print.

Use the arrow keys (or spacebar) to position the cursor on the selected file and press **(ENTER)**. The screen then shows the message, Print "filename"? Press **(Y)** if you are sure this is the file you want to print.

The screen then displays the message:

Press any key when printer is ready

Now press any key on the Model 100 and receive a printout of the file exactly as you specified. Bar Code Writer scans and prints each line individually. Lines that begin with an asterisk (*) are printed in bar code.

Note: If you made a mistake when entering the bar code format, you will receive the message, * FORMAT ERROR *, in place of the bar code line on your printout. Check the bar code line in your text file to make sure you followed the correct format procedures for that bar code type.

If you do not want to print at this time, press **(FB) (ENTER)** to return to the Model 100 Main Menu.

To stop the printing temporarily, press **(PAUSE)** on your Model 100, and then press it again to resume printing.

To stop printing entirely, press **(FB)**. The Model 100 Main Menu then appears.

Experiment with the bar code types until you find a format that best suits your needs.

EXAMPLES

This section is designed to help you become more comfortable with the Bar Code Writer program. After working through the examples, you can begin to create your own bar codes, using the information contained in the Reference Section.

Loading and Printing an Existing File

Load the Bar Code Writer program into your Model 100 following the instructions in "Loading the Program." Now you are ready to load one of the sample text files (UPCAS) from the program cassette tape.

Make sure the cassette recorder is properly connected and the tape is rewound. Press the PLAY button to a locked position. At the Model 100 Main Menu, position the cursor over TEXT and press **(ENTER)**.

The screen shows:	You respond:
File to edit?	UPCAS (ENTER) .
←	(F2) .
Load from:	UPCAS (ENTER) .

After the file has finished loading, the screen displays:

```
Sweet Corn      16oz   $1.20
Reorder level:  1 case
*02400001443
←
←
```

This is an example of how a file using the UPCA format might be set up. The top two lines contain valuable inventory information, and the Bar Code Writer program prints the lines exactly as they appear. The third (bar code) line is written in the UPCA format. It contains an asterisk followed by eleven numeric characters beginning with a 0.

Now you are ready to print the UPCAS file. Make sure that your printer is properly connected to the Model 100 and that it contains paper.

Return to the Model 100 Main Menu by pressing **(F8)**. The UPCA file you loaded into the computer appears on the Main Menu as UPCAS.DO.

Position the cursor over BCODE.BA and press **(ENTER)**. the screen shows a list of possible bar code formats:

Date	Time	(c) PCSG 84
UPCA	3 of 9	Plessey Codabar
UPCE	1 2 of 5	
Select Bar Code to use.		Menu

Since the file you are going to print was set up in the UPCA bar code format, make sure the cursor is positioned on UPCA and press **(ENTER)**. The message, Using UPCA?, appears. Press **(Y)**.

The screen now shows the UPCAS.DO file (and other document files, if any) that you loaded into the computer along with the message, Select File to Print.

Position the cursor on the UPCAS.DO file and press **(ENTER)**. The screen shows, Print UPCAS.DO? press **(Y)**. The screen then displays the message:

Press any key when printer is ready

After you press a key, the printer begins to print the sample file.

Sweet Corn 16 oz \$1.20
Reorder level:1 case



0 2400001443

When the printing is complete you return to the document file menu. Press **(F8)** to return to the Model 100 Main Menu.

Note: Load the remaining sample files (UPCES, B3OF9S, I2OF5S, PLESYS, and CDABRS) the same way you loaded UPCAS and then see each bar code type in printed form. Refer to "Loading and Printing an Existing File" in this section if you need help.

Creating and Printing a New File

Now follow the instructions below to create a file, using the 3 of 9 format.

At the Model 100 Main Menu, position the cursor over TEXT and press **(ENTER)**.

The screen shows: File to edit? Type **SAMPLE (ENTER)**. Now type the following text:

- * THIS IS AN EXAMPLE OF
- * HOW TYPEWRITTEN WORDS
- * CAN BE CONVERTED TO A
- * BAR CODE FORMAT.

This is an example of how a 3 of 9 bar code file might be set up. The bar code actually uses 12 lines when it is printed (3 lines per bar code line).

Now you are ready to print the sample file. Return to the Model 100 Main Menu by pressing **(F8)**. The file you set up appears on the menu as SAMPLE.DO.

Position the cursor on BCODE.BA and press **(ENTER)**. The screen shows the list of possible bar code formats and displays the message, Select Bar Code to use. Since you set up the sample file using the 3 of 9 format, position the cursor on 3 of 9 and press **(ENTER)**. The message, Using 3 of 9?, appears. Press **(Y)**.

The screen now displays a menu of the document files contained on your Model 100. Position the cursor on SAMPLE.DO and press **(ENTER)**. The question, Print SAMPLE.DO?, appears. Press **(Y)**. Now the screen shows: Press any key when printer is ready. Press any key and the printer begins to print the SAMPLE file.



THIS IS AN EXAMPLE OF



HOW TYPEWRITTEN WORDS



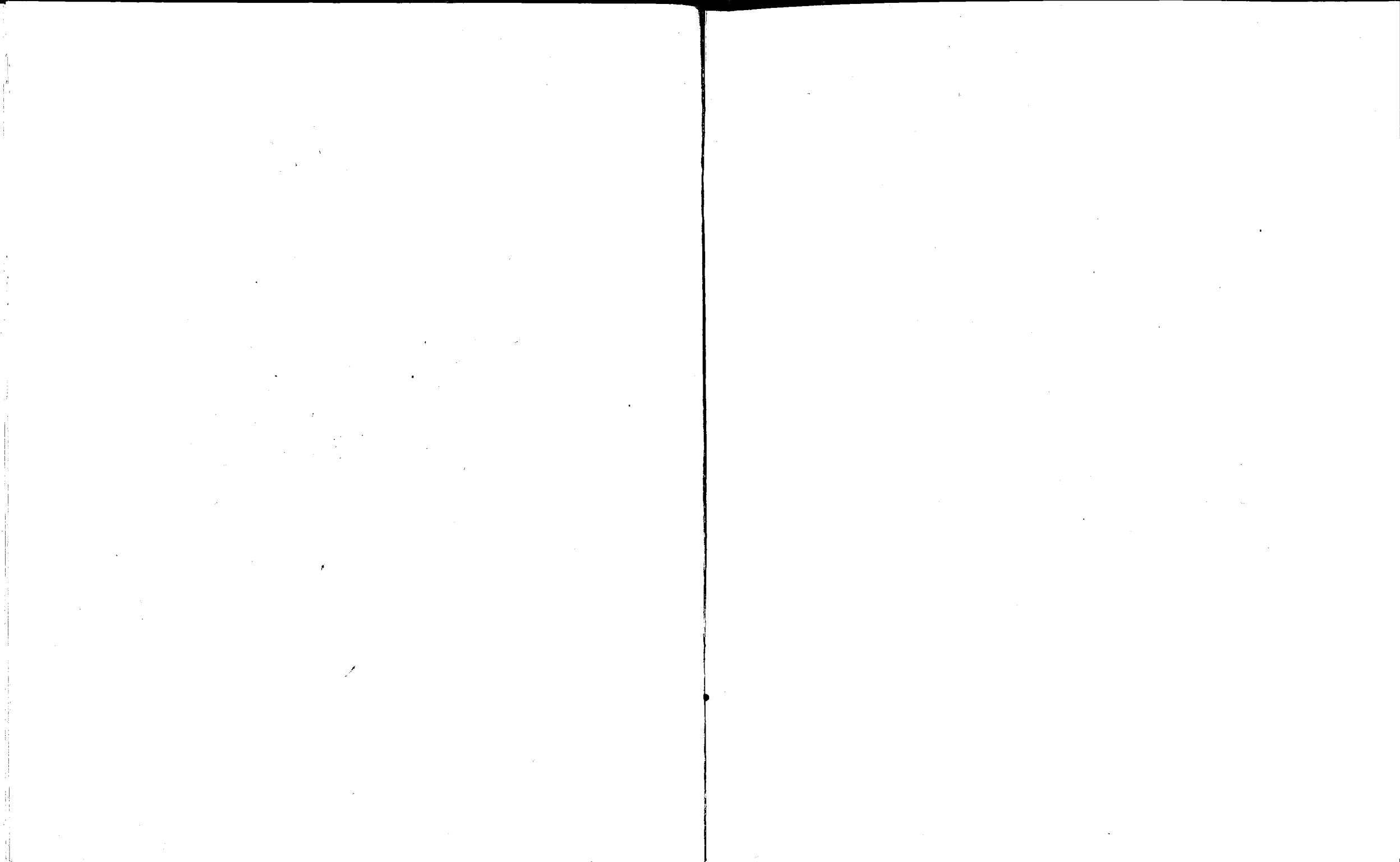
CAN BE CONVERTED TO A



BAR CODE FORMAT.

When the printing is complete, press **(F8)** to return to the Model 100 Main Menu.

You can enter more items in the sample files that are already in the computer's memory, or experiment with the other bar code sample files contained on the cassette tape. Then choose the bar code type that is right for you.



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