UniForm

User's Guide

Preface

Congratulations on your decision to purchase UniForm. It will open new avenues of communication between your computer and many others giving you the ability to exchange diskettes full of information with other computer people. We think you'll agree that UniForm is one of the best additions you've ever made to your computer system.

UniForm currently runs on several different makes and models of computers, and the list will keep growing. Because those computers have different characteristics and capabilities, UniForm is custom-fit to each make and model. This user's guide has been generalized so it applies to all CP/M versions of UniForm. Some versions, however, may not have all the capabilities mentioned in this manual or may vary in some ways.

UniForm allows you to redefine the operating format of one of your floppy disk drives. You manipulate the data on the diskette with the tools you normally use: word processors, file transfer utilities, or other programs. UniForm is invisible to you when it is in use.

This manual assumes that you have a basic working knowledge of your computer system and the programs you will be using. If you have not yet learned to use PIP (for copying files between diskettes) and STAT (for checking how much room is left on a diskette), you should read your CP/M manuals and use a practice diskette to learn the basics of them. Once you know the basics, you can move on to UniForm.

This user's guide will provide practical examples to supplement the self-prompting menus of UniForm. If you want to know more about what UniForm does, read the introduction, which follows. When you're ready to start using UniForm, take just a moment to read about the conventions; then you'll quickly be on your way.

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1.0 Introduction

A look at today's computer market shows us that a standard format for 5 inch CP/M diskettes does not exist and most likely will not evolve from what does exist. Each computer manufacturer has chosen its own format for one reason or another. This lack of a standard creates a big problem for you as a computer user. You can't take a diskette from one make of computer and use it in another.

In the past, people have used various means to get around this problem, such as transmitting data serially through a cable or using primitive file conversion programs to convert files from one diskette to another. These methods of doing things were time-consuming and laborious. Now that UniForm is available, information can be moved between computers quickly and easily.

UniForm gives you the ability to directly read and write diskettes from most of the popular CP/M computers, to initialize blank diskettes in the format of your choice, and to transfer files from some non-CP/M operating systems. UniForm is easy to use; it has clear, self-prompting menus and sensible warning messages.

UniForm is so easy to use that you will rarely need these written instructions. Once you have invoked UniForm to select a diskette format to work in, you simply use the CP/M programs you are already familiar with (such as PIP, your word processor, or your data base) to create, move, and manipulate text or data. Your computer works the same way it always did. To help you get familiar with UniForm, we have provided directions that are as concise as possible and we have included plenty of practical examples.

1.1 Conventions Used in This Manual

To make reading this guide a little easier, we have clarified certain conventions and phrases:

- "RETURN" or "<cr>" means that you should press the **RETURN** key.

- "<ctrl>" in front of a character means that you should hold the **CONTROL** key down while pressing the character specified (just as with the **SHIFT** key).

- When a command to the computer is shown, your inputs will appear in **boldface**.

- The word "format" is used several ways in the computer world, which can lead to some confusion.

  In this guide, the word "format" is used to describe the layout of the data on a diskette. Different computers lay out the data differently and therefore use different diskette formats.

  In some manuals, the word "format" refers to the process of initializing a diskette to a particular format. Often this process is referred to as "formatting a diskette." To eliminate confusion, we will refer to the process as "initializing a diskette to a particular format."

  The diskette format your computer expects when UniForm is not in use will be referred to as the "host format."

- Most computers need to have a special type of diskette placed in drive A after the power is turned on or after the **RESET** button is pressed. Putting the diskette in causes CP/M to be loaded, and the "A>" prompt then appears on the screen. We will refer to this type of diskette as a "system diskette." It has to contain at least the CP/M operating system and probably has one or two more utility programs on it. If you are not sure how to create one of these diskettes, refer to the user's guide that came with your computer.

- The UniForm program will allow you to change the operating format of one of your floppy disk drives (usually drive B on a dual floppy drive computer). We will refer to this disk drive as the "UniForm drive."

The first step in using UniForm is to make a working copy of your diskette. Follow the directions in the next section of the manual and you'll be using UniForm in no time.

2.0 Making a Working Copy

The first thing to do is to make a working copy and save the original diskette as a backup. Make sure that the version of UniForm that appears on the diskette label matches the make and model of your computer. If it does not match, UniForm will not work.

Use the following procedure to create a working copy of UniForm on your CP/M system diskette.

1) Turn on your computer and insert any diskettes necessary to boot your system. Make sure that you have the CP/M system prompt "A>" before you proceed to the next step. Some systems include the current user number in the CP/M system prompt, so it may look like "A0>"

2) Place your UniForm master diskette into an available disk drive.

3) Now copy the UniForm files to the CP/M system diskette. For our example, we will assume that you put the master UniForm diskette into drive B. If you inserted it into a drive other than B, substitute the correct drive letter in place of the B in the following command:

   A> PIP A: = B:*.*[OV]< cr>

   If you receive a "disk write" error message while you are copying the UniForm files, then the diskette that you are copying to is full. In this case, you must either erase some files from your CP/M system diskette, using the ERA command, or try using another diskette and repeating the steps until you are successful.

4) UniForm should now be on your CP/M system diskette. You can therefore remove the UniForm master diskette and put it in a safe place.

2.1 Selecting the Proper Computer Model

Some versions of UniForm are designed to be configured for the exact model computer that they are to run on. If your UniForm master diskette does not have a file called UCONFIG.DAT on it, skip this section. If your UniForm package includes this file, use the following instructions to tailor UniForm to your machine.

1) Type the following command in response to the CP/M system prompt "A>":

   A> uconfig < cr>

   At this point your screen should show the choices of machine models that your copy of UniForm will run on. Each model will have a number to the left of it. At the bottom of the screen there should be a prompt line asking you to enter a machine number.

   If the prompt line instead asks for a line number to change and there is no list of models above it, then the UCONFIG program did not find a file called UCONFIG.DAT on the current drive. Exit the program, making sure that the UCONFIG.DAT file is on the diskette. Then try running the UCONFIG program again.

2) Find your computer model in the list, type the number associated with it, then press the **RETURN** key.

3) The next prompt will ask you if you want to edit the configuration data. Press **N** in response to this prompt.

4) Next you will be asked if you want to save any changes. Respond by pressing **Y**. The new configuration will be written to the UNIFORM.OVL file, and you will be returned to the CP/M system prompt.

After you've used UniForm and are sure it is configured properly, you can erase the UCONFIG.COM and UCONFIG.DAT files from your diskette to save space.

3.0 Using UniForm

UniForm can perform many functions, so you will see several options after you invoke it. One of the most important functions is the selection of the desired diskette format for a floppy drive (which is usually drive B on a two floppy drive system). Once you have used UniForm to select a diskette format, you can put a diskette of that format into the drive and use it just as you normally would.

The diskette that you want to work on may have come from another make of computer, or you may want to put information on a new diskette and send it to someone with a different make of computer. If you are creating a new disk, you will need to use the diskette initializer function to initialize the diskette to the proper format before you use it.

In addition to these two main functions there are also a PC-DOS < – –> CP/M file copy utility and possibly a TRSDOS/LDOS – – –> CP/M file copy utility. These utilities allow you to transfer files on disks that cannot be directly accessed under CP/M.

The most important feature of UniForm is its simplicity. Once you've selected a given format for your drive you simply use familiar commands to manipulate data on the diskette. You can work directly on that diskette with your word processor. You can easily copy files between your host format and the selected format by using the CP/M PIP command. You can, for example, display the directory by using the CP/M DIR command or display the amount of space left on a diskette by using the CP/M STAT command.

3.1 Selection of Disk Formats

Disk format selection allows you to choose the operating format for the UniForm drive. Having selected a new format, you can then place a diskette initialized to that format in the drive and use it as you normally would, with any of your CP/M programs.

1) Turn on the computer and put in the system diskette containing UniForm (for hard disk computers follow your normal system loading procedure). At this point the CP/M system should prompt with "A>".

If you are using a hard disk system you may not have to insert a diskette to load the system. However, you may have to press some keys to get to the "A>" prompt if your computer automatically loads some kind of menu program on powerup.

2) Type the command:

A> uniform < cr>

You should see a copyright message. Then, after a few moments, the main menu should appear.

3) Press **1** to select the CP/M format and diskette initializer option. After a few moments the format selection menu should appear.

Now look at the screen. At the top is the version of UniForm and the computer make and model it's configured for. Below the version is a line showing the menu number you are looking at and how many menus there are.

Next you'll see a menu in which each entry is made up of a format letter, a diskette type, and a description of the make and model of computer that it is used in. The menu is in alphabetical order.

The diskette types are as follows:

```
SS  – single sided (only one side is used)
DS  – double sided (both sides are used)
SD  – information is recorded in single density
DD  – information is recorded in double density
48  – 48 tracks of information per inch (TPI) of diskette
96  – 96 tracks of information per inch (TPI) of diskette
8"  – 8 inch floppy diskette
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Below the menu is a line showing which format is currently selected. At the bottom is a prompt line showing which options you can enter at this time. Try the options out one at a time.

In case you can't remember what the options in the disk format menu are, UniForm has a help screen to explain. Press **?** to see that screen. The disk format menu will then be replaced by the help screen, on which there is a brief description of each option available to you. After you read the screen, press any key to get back to the format selection menu.

4) Press **A**. The current format shown above the prompt line now corresponds to the format at position "A" of the format selection menu. By simply typing a format letter, you can select the format you want.

5) Press the **SPACE BAR**. The current format shown now indicates no format selected. Pressing the **SPACE BAR** makes your computer go back to its host format.

6) Press **2**. The menu number indicated now shows that you are on menu 2. Also, the menu of formats has changed to reveal the next group in alphabetical order. Try pressing other menu numbers. Note that when you select a nonexistent menu number, UniForm will beep and print a message near the bottom of the screen. If it does this, just type a good menu number and continue. Take a moment to look at the various menus and, just for fun, try some numbers that don't exist.

7) Find the menu that has the "Osborne 1 [SS:DD:48]" format on it. Press the letter for that format type. The current format should indicate "Osborne 1 [SS:DD:48]" above the prompt line. If you select the wrong format, just select another until you get it right. At this point you have found and selected the format of your choice.

   If you have been experimenting enough, you may have noticed that some of the formats display the message "(initialize only)" when selected. These formats are all non-CP/M formats. You may select them to initialize a disk, then use the diskette with one of the file copy utilities from the UniForm main menu.

   If you try to exit the format selection mode with one of these "initialize only" formats, you'll receive a warning message and be given the option of ignoring the selected format and exiting or being returned to the format selection menu.

8) Press **RETURN**. UniForm will return you to the main menu. Press **RETURN** one more time to exit UniForm. If you follow this procedure correctly, a message indicating which format your UniForm drive has been set to should be printed as UniForm exits. The message should look like this:

   Drive x set to: Osborne 1 [SS:DD:48]

   where x indicates the UniForm drive letter.

Press <ctrl>C. You should again see this message. In fact every time a program ends or you type <ctrl>C, you will get a message informing you of the format your UniForm drive is set to. This message means that UniForm is active. UniForm will stay active until one of the following conditions occurs:

1) The computers power is turned off.
2) The **RESET** button of the computer is pressed.
3) The **SPACE BAR** is typed to select "no format" while in UniForm's format selection menu.

3.2 Initializing a diskette

A program to initialize diskettes should have come with your computer, but it probably will initialize them only to your host format. UniForm performs the same function for you, but with the following additions:

- UniForm's diskette initializer allows you to select your choice from a menu of formats, including your host format. For example, if you want the diskette to operate in an Osborne 1 computer, simply select "Osborne 1" from the menu. When UniForm is finished initializing the diskette, it will be in the format used by the Osborne 1 computer.

- UniForm checks the integrity of each track on the diskette immediately after it has been initialized. If an error is detected, UniForm will automatically try to initialize that track nine more times before deciding that the diskette has a bad spot there. At the end of the initializing procedure, UniForm will report if it encountered any permanent errors while initializing the diskette.

To use UniForm to initialize a diskette in the Osborne 1 format:

1) Use UniForm to select the "Osborne 1 [SS:DD:48] format for your UniForm drive.

2) Put a blank diskette to be initialized to "Osborne 1 [SS:DD:48]" format into the UniForm drive. Press <ctrl>I (or **TAB** if your keyboard has a **TAB** key). Note the message: **Initializing a disk will erase any existing data on the disk!** Near the bottom of the screen you'll see that the diskette is going to be initialized in the "Osborne 1 [SS:DD:48]" format. If you change your mind at this point, you can reply by pressing **N** to avoid initialization. If you want to continue, press **Y**.

In the middle of the screen you should see a message alternating between "Initializing" and "Verifying." This message will continue until the diskette is completely initialized. On occasion you may notice a "Retry" followed by a number flashing on the screen. This message tells you that UniForm has detected an error while verifying the current track and is in the process of reinitializing that track. If the error persists after ten tries, UniForm will consider that track to be permanently bad and will continue with the next track.

3) When diskette initialization is complete, a message will be displayed indicating the number of permanently bad spots on the diskette. If there are any at all, you should discard that diskette. The price of a diskette is not worth the misery of losing data that may have taken you hours to create.

Usually there won't be any permanent errors, and the message will confirm that fact. In this case the diskette is ready to use. In either case, press any key when you are ready to continue and you'll be returned to the menu of disk formats.

4) Press the **SPACE BAR** to select your host format for the UniForm drive. Press **RETURN** to go back to the main menu of UniForm. Remove the diskette that you initialized to "Osborne 1 [SS:DD:48]" format. Press **RETURN** to exit UniForm.

You should now have a diskette that is ready to be used in an Osborne 1 computer (or any computer using UniForm). Hang on to it so you can use it later for learning how to copy files.

In this example, we created a diskette to be used in the Osborne 1 format. However, we could have created one in any of the formats in the menu. UniForm and your computer make a very powerful combination.

3.3 Sample File Copying

If you have read the previous sections on initializing a diskette and selecting disk formats, you should now be able to copy files between one of your host format diskettes and one of the formats of your choice. The following examples will use the CP/M PIP utility to copy a file first in one direction, and then in the other.

Remember: **CP/M requires you to type < ctrl > C *after* you insert a diskette that you plan to write on.** Not following this procedure in the proper sequence is by far the most common and most easily made mistake. Use the following directions to perform the transfer.

3.3.1 Copying a File From the Host Format to Another Format

For our example, we'll assume that you have a file on your system diskette named SAMPLE.TXT. The system diskette must also contain PIP.COM. We want to place the file SAMPLE.TXT on an "Osborne 1 [SS:DD:48]" format diskette (the one initialized in section 3.2).

1) Use UniForm to select the "Osborne 1 [SS:DD:48]" format for your UniForm drive.

2) Put a diskette initialized to "Osborne 1 [SS:SD:48]" format into the UniForm drive. Press < ctrl > C. At the CP/M prompt, type in the command:

   A> pip b: = a:sample.txt< cr >

   ("A" is the system drive and "B" the UniForm drive. Hard disk systems may use different letters.)

   The file "sample.txt" will now be copied from drive A (host format) to the "Osborne 1 [SS:DD:48]" format diskette in the UniForm drive. If you get a "disk write" error, it means there was not enough room for the file on the receiving diskette. If you get a "BDOS error on B: R/O", either your diskette has a "write protect" label on it, or you did not press < ctrl > C *after* you inserted the diskette you were going to write on.

You can see that copying files with PIP works the same way it always has. In fact, all your programs will work the same as they did before. UniForm is invisible to both you and your programs when it is in operation. You can operate on the Osborne 1 diskette directly, just as though it were in the host format.

3.3.2 Copying a File to the Host Format from Another Format

For this example, we'll assume that you have a diskette in your UniForm drive that is in the "Osborne 1 [SS:DD:48]" format (the one initialized in section 3.2). The Osborne diskette has a file on it named SAMPLE.TXT. The system diskette must contain PIP.COM. We want to place the file SAMPLE.TXT on the system format diskette.

1) Use UniForm to select the "Osborne 1 [SS:DD:48]" format for your UniForm drive.

2) Put a diskette initialized to "Osborne 1 [SS:DD:48]" format into the UniForm drive. Press < ctrl > C. At the CP/M prompt, type in the command:

   A> pip a: = b:sample.txt < cr>

   ("A" is the system drive and "B" the UniForm drive. Hard disk systems may use different letters.)

   The file SAMPLE.TXT will now be copied from the UniForm drive (Osborne 1 format) to the host format diskette in drive A. If you get a "disk write" error, it means there was not enough room for the file on the receiving diskette. If you get a "BDOS error on A: R/O", either your diskette has a "write protect" label on it, or you did not press < ctrl > C *after* you inserted the diskette you were going to write on.

You can see that copying files with PIP works the same way it always has. In fact, all your programs will work the same as they did before. UniForm is invisible to both you and your programs when it is in operation. You can operate on the Osborne 1 diskette directly, just as though it were in the host format.

4.0 File Copy Utilities

UniForm lets you directly use CP/M disks from many different formats on your computer. What about disks from other popular operating systems, such as PC-DOS and TRSDOS, that might contain some useful information? UniForm provides you with file copy utilities to get the files from non-CP/M diskettes onto your CP/M diskettes and files from CP/M diskettes onto your non-CP/M diskettes so that you can work with them.

Keep in mind that **transferred programs will not run under another operating system**. However, program source files (in standard ASCII text) that are transferred can be used, with some syntactical modification, to create programs under the new operating system.

Files created by word processors, data bases, and electronic spreadsheets can, when transferred, be used by the corresponding version of the same program for the new operating system.

UniForm will transfer any file, whether ASCII text, binary data, or program code, and retain the integrity of the original file.

The file copy utilities are designed to be easy to learn and to use. You should become comfortable with them after just a few minutes. The use of menus, prompt lines, and easy-to-understand warning messages will lead you through every operation.

4.1 Common Features of the File Copy Utilities

The file copy utilities are intended to be very similar to one another in terms of operation. We'll discuss the similarities before going into each utility in detail.

4.1.1 Displaying Disk Directories

In the menus of the file copy utilities, you can display the diskette directories. If you choose one of the directory options, you'll always be prompted to put a diskette into the appropriate disk drive and press **RETURN** when you are ready. You can change diskettes any time you see that message.

After you insert the diskette and press **RETURN**, the diskette directory should be displayed on your screen. Every file name displayed has a number to the left of it, followed by a colon. This number is a file number. (File numbers will be explained further in the next section of the manual.)

The diskette directory sometimes has more files than can be displayed on the screen all at once. The screen will display 60 file names. If you display a diskette directory that has 123 files on it, it will take three screen images to show all of them. The first two screens will contain 60 file names each and the third the remaining 3 file names. When you display the directory, the first screen of 60 file names will appear and the phrase "(screen 1 of 3)" will be displayed just above the first line of the directory. If there is more than one screen, an instruction line will appear just below the last line of file names. This line will remind you that you can use the **CURSOR DOWN** key to display the next screen of file names and the **CURSOR UP** key to view the previous screen.

When you have finished viewing a directory, press the **RETURN** key to go back to the menu.

4.1.2 Specifying File Ranges

When you use the file copy utilities, you need to specify one or perhaps several files at the same time. Instead of typing all the file names or trying to find a pattern in these names, you will use a **file range**—a way of specifying one or more file names to be used in an operation.

To specify the range, simply use the file numbers that appear to the left of the file names when the directory is displayed (see section 4.1.1). To make things easier, a file directory is always displayed when you are asked for a file range. If the directory needs more than one screen, you can use the **CURSOR UP** and **CURSOR DOWN** keys to change directory screens while entering a range.

A simple range can consist of just a single file number or several file numbers separated by blanks. Consecutive file numbers can be specified in an easier manner. The range "5-10" specifies file numbers 5 through 10. To make your job of specifying ranges even easier, if you omit the starting file number, "1" will be assumed. Similarly, if you omit the ending file number, the highest file number in the directory will be assumed.

Following are some examples of valid ranges:

2 5 7 11 <cr>	This range will specify file numbers 2, 5, 7, and 11.
− 5 10 − 13 15 < cr>	This range will include 1 through 5, 10 through 13, and 15.
5 9 − < cr>	The file numbers 5 and from 9 through the last file in the directory will be included.
− < cr>	This simple but valid range will include all the files in the directory.

For your convenience, you can use "/" or ":" instead of the "−" shown in the examples here. There is no functional difference between those characters when you specify a range; the choice is yours.

4.1.3 Interrupting an Operation in Progress

Sometimes it's necessary to stop an operation before the entire range of specified files is processed. You can easily interrupt a UniForm file copy by pressing any key. You'll then be asked if you want to stop the operation. If you really want to stop it, press **Y**. If you don't really want to stop it, press **N**, and the operation will continue.

4.1.4 Changing the CP/M User Number

The file copy utilities allow you to select the CP/M user number to be used for file transfers. This option is provided for use with hard disk systems, where the large number of files present makes it necessary to break the directory up into smaller, more manageable units. Floppy diskette systems support user numbers too. If you aren't familiar with user numbers, consult your CP/M user's guide.

This option is listed under the "Misc. Functions" heading on the main menu of the file copy utility. The current user number is displayed in parentheses along with it. Invoking this option will bring a prompt for a new user number. Valid numbers are from 0 to 15.

4.1.5 Changing the CP/M Disk Drive

Some computer systems have more than one choice for the CP/M disk drive to use for file transfers. This usually occurs on hard disk systems where the one physical hard disk is split into two logical CP/M drives and the floppy disk drive is used for the non-CP/M diskette. When this condition exists, the file copy utilities will allow you to select the CP/M disk drive to be used for file transfers. This option will appear on your menu only if the file copy utilities detect that you have more than one choice for this drive.

This option is listed under the "Misc. Functions" heading on the main menu of the file copy utility. The current disk drive is displayed in parentheses directly after the "change CP/M disk drive" option.

Invoking this option will bring a prompt for a new disk drive to use.

4.2 MS-DOS/PC-DOS < – > CP/M File Copy Utility

The MS-DOS/PC-DOS file copy utility will allow you to copy files between a CP/M diskette and an MS-DOS/PC-DOS diskette.

Operation of this utility is straightforward once you understand the features described in section 4.1. To enter this utility, select the corresponding option number from the UniForm main menu. You will then be presented with the MS-DOS/PC-DOS file copy utility menu. At this point, just select the operation you want from the menu.

Important Note

This file copy utility will copy any file between CP/M and MS-DOS/PC-DOS regardless of what type of file it is. But this doesn't mean that programs will work after they are copied. **CP/M programs will not work in MS-DOS/PC-DOS and MS-DOS/PC-DOS programs will not work in CP/M.**

4.3 TRSDOS/LDOS to CP/M File Copy Utility

The TRSDOS/LDOS to CP/M file copy utility will allow you to copy files from a TRSDOS/LDOS diskette to a CP/M diskette. (This file copy utility copies only in one direction.) Some versions of UniForm do not contain this utility because of hardware limitations for the particular model of computer.

Operation of the utility is straightforward once you understand the features described in section 4.1. To enter the utility, select the corresponding option number from the UniForm main menu. You will then be presented with the TRSDOS/LDOS utility menu. At this point, just select the operation you want from the menu.

Important Notes

Only BASIC language programs from TRSDOS/LDOS can be made to work on a CP/M computer. If you want to copy BASIC programs from TRSDOS/LDOS, they must be ASCII text files. To create ASCII text files from BASIC you must use the ",A" option of the SAVE command while in BASIC. Consult your BASIC manual for further details on the SAVE command. You should be ready for some syntactical modification of the BASIC program to make it operate with the BASIC supplied with your computer.

It's possible that you may need to transfer a data file from a TRSDOS/LDOS diskette. Depending on the data, you may need to transfer in either a BINARY or an ASCII mode. It is for this reason that the BINARY file transfer option is provided.

LDOS Note

The LDOS diskettes used with this utility are assumed to have 40 tracks and the directory must be on track 20. Other LDOS formats will not work.

5.0 Advanced Features

This section describes the many advanced features of UniForm. Although the terminology is as simple as possible, it is geared to the experienced computer user.

5.1 Invoking UniForm Functions from the Command line

Often it is desirable to perform certain UniForm operations without having to type responses to many prompt lines. UniForm has the capability of changing CP/M disk formats and initializing diskettes by entering the responses to each prompt on the command line. This is sometimes referred to as batch processing of commands. Batch processing is very useful if you have to change CP/M formats or initialize a diskette from a SUBMIT file.

To use this feature, you must know every key that you type in response to each prompt line. These keys are then typed after the UNIFORM command.

Before using UniForm functions from the command line, you should be aware of the following important points:

- The file copy utilities do not have this feature. They can be used only interactively and will ignore any attempt to use their functions from the command line.

- At least one blank must be present between the UNIFORM command and the prompt responses. After that point, blanks are ignored and can therefore be inserted between keystrokes to make the command more readable.

- Control characters cannot be entered on a command line, so UniForm will accept the following character sequences in place of certain keys:

/c It is often desirable to accept a response from the keyboard in the middle of a command string. If the **/c** sequence is used in place of a keystroke, UniForm will wait for the next response from the console before continuing.

/e The **/e** sequence is used in place of the **ESC** key. The **ESC** key is used instead of the **RETURN** key when you want to exit the format selection menu and go directly back to the CP/M system prompt instead of returning to the UniForm main menu.

/I The **/I** sequence is used in place of the **< ctrl > I** key to indicate that you want to initialize a disk in the currently selected format. Be careful if you use this sequence, since initializing a disk erases everything on it.

/q This is the "quiet" option, and it doesn't replace any key. It is used in a command line when you don't want any console output to be sent to the screen. If you don't want any console output at all, you must enter the **/q** sequence before typing any other key in the command line. Once the quiet option has been used, there is no way to turn the console output back on. Remember that if you have specified the quiet option and you are then prompted for a response, the prompt line will not be displayed and UniForm may appear to lock up. UniForm isn't really locked up, however; it's just waiting for you to type the proper response to its invisible prompt line.

/r The **/r** sequence is used in place of the **RETURN** key. Anywhere you would normally press the **RETURN** key, you will need to use this sequence instead, since a **RETURN** cannot be imbedded in a command line.

/s The **/s** sequence is used in place of the **SPACE BAR**, since spaces are ignored in the command line.

5.1.1 UniForm Batch Processing Examples

The following UniForm batch processing commands are provided as examples. They should answer any questions you have about this feature.

A> uniform 1 a /e <cr>

In this example, UniForm's format selection menu will appear, format "A" will be selected as the current CP/M format, and UniForm will then exit to the CP/M system.

A> uniform /q 1 a /e <cr>

This command line will perform the same function as in the last example, but UniForm will not display anything on the console.

A> uniform /q 1 /s /e <cr>

This command will enter UniForm's format selection menu, reset the current CP/M format back to the host format, and then exit back to the CP/M system. All this will be accomplished without any console output.

A> uniform 1 /s /r <cr>

In this example, the current CP/M format will be reset back to the host format and you will be returned to the UniForm main menu. All input from this point on will be made from the keyboard.

A> uniform 1 2 c /i /c /c /e <cr>

This command line will enter UniForm's format selection menu option, switch to menu #2, and select format "C" as the current CP/M format. Next the /i will instruct UniForm to initialize a diskette in the current format. The next response that verifies your intent to initialize the diskette will be taken from the keyboard. When you respond by pressing **Y**, the diskette will be initialized. Once the diskette has been initialized, the number of permanent errors discovered will be displayed on the screen, and UniForm will again wait for you to type the next response. This has been done so you will have a chance to see if any permanent errors have been discovered on the diskette just initialized. After you press any key to continue, UniForm will display menu #2, and the /e sequence will cause UniForm to exit back to the CP/M system. Format "C" on menu #2 will be UniForm's current CP/M format.

5.2 UniForm and Additional Disk Drives

Most versions of UniForm are capable of supporting one 96 TPI disk drive in addition to your existing 48 TPI drive(s). Some versions of UniForm can also support an additional 8 inch disk drive. Since this capability requires the installation of another disk drive, it should be done only by someone who has the proper hardware knowledge. We cannot supply specific instructions for adding additional disk drives to your system. If you must use this feature of UniForm and you don't know how to add the drive, contact your computer dealer for assistance.

Before you can access additional disk drives, you must configure UniForm. Refer to Appendix A for instructions on how to use the UCONFIG program. You will need to specify the physical drive address of the additional drive and whether your drive is single or double sided.

If you have installed everything properly, UniForm should now be ready to work with your additional disk drives.

5.2.1 Using an Additional Disk Drive with UniForm

Once you have properly configured UniForm for the additional drives, you should notice more formats in UniForm's CP/M format selection menu. You can identify the 96 TPI formats in the menu by the 96 and the 8 inch formats by the 8" at the end of the "Type" column. When you select a 96 TPI CP/M format from the menu, UniForm will make your 96 TPI drive the "UniForm drive." You will still use the same drive letter to reference your UniForm drive, but UniForm will select your 96 TPI drive instead. This will effectively assign more than one disk drive to the same drive letter, but UniForm will use the proper disk drive according to the format you have selected. Similiarly, when you select an 8 inch format from the menu, UniForm will make your 8 inch drive the "UniForm drive.

Appendix A Configuration

A configuration program is included with the UniForm package to allow some customization of UniForm by experienced users. Customization will be needed if you add additional disk drives to your system. UniForm always requires that you have at least one 48 TPI disk drive on your system. UniForm can accommodate a 96 TPI disk drive added to your system and will provide you with additional CP/M formats that can be used. Some versions of UniForm will also support an additional 8 inch disk drive, but your system must have been designed to handle it and your version of UniForm must have 8 inch drive support already.

The UniForm package is extremely hardware dependent and will work only on the machine that it was written for. If the UniForm version on the master disk label does not exactly match the type of machine you have, don't try to use it. It won't work.

A.1 Changing Terminal Characteristics

Some computers that UniForm has been written for require the use of an external video terminal. Since the video display is not integrated along with the computer, its characteristics vary according to the type of video terminal attached. If your computer has a video display included with it, you can skip this section, because UniForm already has been configured properly.

In order for UniForm to display menus properly on your terminal, it must be configured to match the type of terminal you are using. To configure UniForm for a different type of terminal, you must find the proper hexidecimal codes to perform the following functions on your terminal:

1) The terminal must be capable of clearing the screen and positioning the cursor to the upper left corner.

2) The terminal must have the capability of positioning the cursor anywhere on the screen.

3) If the terminal can erase from the current cursor position to the end of the line, UniForm's menu display will be faster. If the terminal cannot perform this function, UniForm will still work, but the screen updating may be slower.

4) If the terminal can erase from the current cursor position to the end of the screen, UniForm will make use of that feature to speed up the menu display. If the terminal cannot perform this function, UniForm will still work properly.

5) If the terminal has the capability of turning the cursor display on and off, UniForm will turn off the cursor display during screen updating. This helps eliminate screen flicker on some terminals.

6) You must know which codes are sent by your terminal when you press a **CURSOR UP** or **CURSOR DOWN** key. If your terminal does not have cursor keys or if such keys transmit more than one character when pressed, then you must assign a control character to use instead. We suggest that you use CONTROL-U (15 hex) for **CURSOR UP** and CONTROL-D (04 hex) for **CUR-SOR DOWN** if you don't have any other preferences.

7) The terminal must also be able to do a nondestructive backspace when the ASCII backspace character is sent to it.

To configure UniForm for your terminal, use the following instructions:

1) Type the following command in response to the CP/M system prompt "A>":

   A> **uconfig** **<cr>**

2) If the prompt line at the bottom of the screen is asking for a line number to change, then skip the rest of this step.

   Press **RETURN** in response to the prompt asking you for a machine number. Next press **Y** when asked if you would like to edit the configuration data.

3) At this point your screen should show the various parameters that can be changed and their current values.

4) The values that you are interested in are on lines 1 through 8. Each parameter is displayed along with its current value. If any parameter needs to be changed, simply enter its line number and follow the prompts. If you select a parameter to change and you decide that you really don't want to change it when you are prompted for a new value, just press **RETURN** and the value will be left unchanged.

See Table A-1 for a description of all of the terminal configuration parameters.

5) When all the changes are made, press **RETURN** and you will be asked if you want to save any changes. Press **Y** and your changes will be saved in the UNIFORM.OVL file.

TABLE A-1
UniForm Terminal Configuration Parameters

CLEAR SCREEN—This parameter tells UniForm what character sequence to send to the terminal to clear the screen and home the cursor to the top left corner. It should be entered as a series of up to 8 hex bytes. You will then be prompted for a delay factor from 0 to ff hex. If your terminal doesn't need a delay, enter a **0**.

Note: If the first part of a displayed menu looks like garbage and the last part looks all right, then you probably need some delay here. Experiment with this delay until you get the lowest possible value.

ERASE TO END OF LINE—This parameter is the character sequence that will erase from the current cursor position to the end of the line. It should be entered as a series of up to 8 hex bytes. You will then be asked for a delay factor from 0 to ff hex. If your terminal doesn't need a delay after erasing, enter a **0**.

If your terminal can't erase to the end of the line, enter a **0**.

ERASE TO END OF SCREEN—This parameter should be the character sequence that will erase from the current cursor position to the end of the screen. It should be entered as a series of up to 8 hex bytes. The next prompt will be for a delay factor from 0 to ff hex. If your terminal doesn't need a delay after erasing, enter a **0**.

If your terminal can't erase to the end of the screen, enter a **0**.

CURSOR POSITIONING—This parameter describes the sequence of characters to send the cursor to a position anywhere on the screen. The cursor positioning parameter allows a great deal of flexibility, but is a bit more complicated. The general format of a cursor positioning sequence could look like this:

sequence before row/column
row/column + offset
sequence between row/column
row/column + offset
sequence after row/column

You will be prompted for the three character sequences first. If a particular sequence is not needed for your terminal, enter a **0**.

Now you will be asked if the column gets sent first. If it does, press **Y**.

Next you will be asked for any offset that must be added to the row and column addresses. UniForm assumes that the top left corner address is row = 0 and column = 0.

The next prompt will ask you if the row and column addresses should be sent in binary or as ASCII decimal digits. If you specify decimal, you will then be asked if two or three digits should be sent.

The last prompt will be for a delay factor from 0 to ff hex. If no delay is needed after cursor positioning, enter a **0**.

ENABLE CURSOR DISPLAY—This parameter should specify the character sequence needed to turn on the cursor display after it has been turned off. This is an optional parameter. If your terminal doesn't support it, enter a **0**.

DISABLE CURSOR DISPLAY—This parameter defines the character sequence that should be sent to the terminal to turn off the cursor display. This is an optional parameter. If your terminal doesn't support it, enter a **0**.

CURSOR UP KEY—This cursor defines the control character that UniForm will use as a **CURSOR UP** key. It does not have to be the same character that your terminal uses to move the cursor up a line. It can be any control character that you want to use as the **CURSOR UP** key for UniForm. If your terminal doesn't have a **CURSOR UP** key or if it transmits two characters when the key is pressed, you must choose a single control character to be used instead.

CURSOR DOWN KEY—This cursor defines the control character that UniForm will use as a **CURSOR DOWN** key. It does not have to be the same character that your terminal uses to move the cursor down a line. It can be any control character that you want to use as the **CURSOR DOWN** key for UniForm. If your terminal doesn't have a **CURSOR DOWN** key or if it transmits two characters when the key is pressed, you must choose a single control character to be used instead.

A.2 Configuring UniForm for Additional Disk Drives

This section is provided for experienced users who add extra disk drives to their computers. These may be hard disk drives, 96 TPI drives, extra 48 TPI drives, 8 inch drives, or a combination of different types of drives.

When adding additional drives to your system, the following points should be noted:

- You *must* have at least one 48 TPI disk drive attached to your system. UniForm will not double step a 96 TPI drive to work with 48 TPI formats.

- If you have added 8 inch drives to your system, your computer must have been designed to support 8 inch drives using its standard floppy disk controller and UniForm must have been written to support them. Because only a few of the computers that UniForm has been written for support 8 inch drives, make sure that your version will work with them before you install the option. UniForm will not work with any add-on 8 inch drive controllers that are not standard equipment for your machine.

- If you have a properly installed 96 TPI or 8 inch disk drive on your system, you must know its physical drive address in order to configure UniForm. The physical drive address should be a number from 0 to 3 and should not be confused with the logical drive letter (A, B, etc.) that CP/M uses to refer to disk drives. A unique physical address is assigned to each drive by a jumper on the drive itself. The first floppy disk drive is usually assigned address 0, the next will be 1, etc.

To set up UniForm for different disk drive configurations, use the following instructions:

1) Type the following command in response to the CP/M system prompt "A>":

   A> uconfig \<cr>

2) If the prompt line at the bottom of the screen is asking for a line number to change, then skip the rest of this step.

   Press **RETURN** in response to the prompt asking you for a machine number.

3) At this point your screen should show various parameters that can be changed and their current values.

4) The values that you are interested in are on lines 9 through the end. Each parameter is displayed along with its current value. If any parameter needs to be changed, simply enter its line number and follow the prompts. If you select a parameter to change and you decide that you really don't want to change it when you are prompted for a new value, just press **RETURN** and the value will be left unchanged.

   See Table A-2 for a description of all the disk drive configuration parameters.

5) When all the changes are made, press **RETURN** and you will be asked if you want to save your changes. Press **Y** and your changes will be saved in the UNIFORM.OVL file.

TABLE A-2
UniForm Disk Drive Configuration Parameters

CP/M DRIVE LETTERS—This parameter is used to inform UniForm of all
the available CP/M disk drive letters on your system. If a drive
letter of "Z" is specified, UniForm will automatically determine
which drive letters are available on your system when needed.
Some systems may issue a "drive select" error when UniForm
tries to determine the available drives using the "Z" option. If
this occurs, then you must specify the individual drive letters
available on your system.

UniForm DRIVE LETTER—This is the letter that references the physical
disk drive that UniForm will use. This parameter usually can be
any letter from A through P. It is normally set to the letter that
already references the physical disk drive that UniForm will use.

48 TPI DISK DRIVE TYPE—This parameter tells UniForm whether or not
your 48 TPI disk drive is capable of double sided operation. If
double sided is specified, UniForm will display all supported
double sided 48 TPI formats in the menu. If you specify that your
drive is double sided but it actually is not, UniForm will still
display the double sided formats in the menu, but they will not
work properly.

48 TPI DRIVE ADDRESS—This parameter informs UniForm of the
physical drive address for your 48 TPI disk drive. At least one 48
TPI disk drive is required for proper UniForm operation. Physical
drive addresses can be in the range 0 to 3. On computer
systems that only support two floppy disk drives, the drive ad-
dress must be either 0 or 1. Also, the drive letter used to refer to
a disk drive is completely different from its physical drive ad-
dress.

96 TPI DISK DRIVE TYPE—This parameter tells UniForm whether or not
your optional 96 TPI disk drive is capable of double sided opera-
tion. If double sided is specified, UniForm will then display all
supported double sided 96 TPI formats in the menu. If you
specify that your drive is double sided but it actually is not,
UniForm will still display the double sided formats in the menu,
but they will not work properly.

96 TPI DRIVE ADDRESS—This parameter informs UniForm of the physical drive address for your optional 96 TPI disk drive. Physical drive addresses can be in the range 0 to 3. On computer systems that only support two floppy disk drives, the drive address must be either 0 or 1. This drive address should be different from your 48 TPI drive address. When you select a 96 TPI format from the menu, UniForm will use this drive address to access your 96 TPI drive. Also, the drive letter used to refer to this disk drive is the same one used to access the 48 TPI drive. UniForm will determine which drive to use by the type of format you selected from the UniForm menu.

8 INCH DISK DRIVE TYPE—This parameter tells UniForm whether or not your optional 8 inch disk drive is capable of double sided operation. If double sided is specified, UniForm will display all supported double sided 8 inch formats in the menu. If you specify that your drive is double sided but it actually is not, UniForm will still display the double sided formats in the menu, but they will not work properly.

8 INCH DRIVE ADDRESS—This parameter informs UniForm of the physical drive address for your optional 8 inch disk drive. Physical drive addresses can be in the range 0 to 3. When you select an 8 inch format from the menu, UniForm will use this drive address to access your 8 inch drive. Also, the drive letter used to refer to this disk drive is the same one used to access the 48 TPI drive. UniForm will determine which drive to use by the type of format you selected from the UniForm menu.

Appendix B Limitations/Hints

UniForm has a few limitations that you should be aware of. Familiarity with the following points is recommended.

- There are a number of disk formats that will not work reliably on some computers (specifically those that use the NEC 765 disk controller chip). Because there is a way around this problem, these formats were not eliminated from the UniForm menu.

  Some manufacturers did not follow disk initialization specifications closely enough. Disks created on these computers may not work properly on some computers although they will work properly on the machine that they were created on.

  Since the problem exists when disks are initialized on these computers, disks that are initialized on your computer using UniForm will work properly on both computers. If you find a disk that will not work properly, try the following procedure:

  1) Initialize a disk in the proper format using UniForm.

  2) Place the disk that was just initialized into the computer that created the incompatible disk and copy the desired files to this disk using PIP.

  3) Remove the disk and put it back into your computer; you should now be able to use this disk without problems.

  In short, a disk initialized on your computer using UniForm will work in both computers, but a disk created on another computer may not work properly in your machine.

- Using UniForm to copy will not modify the files in any w˅ ˡt is your responsibility to determine whether or not the ˅ will work properly on your computer.

- Many programs need to be installed for the particular hardware that you are running on. When you are running the program, if the characters on the screen look misplaced or if the screen doesn't look like it should according to the manual, then it probably has not been installed correctly. Consult your manual for installation instructions.

- If you get a "Bdos" error while using PIP to copy files, this message was issued by CP/M, not by UniForm. Refer to the proper message in Appendix C for an explanation.

- When you exit a file copy utility, any previously selected disk format will be cancelled and your UniForm drive will be returned to the host format.

Appendix C Messages

If you give UniForm a command that it can't make sense of, such as a menu number or letter that doesn't exist, or if you try to exit with the UniForm drive set to an "initialize only" format, a warning message will appear on the screen. Warning messages will also appear if your UniForm program files are missing or damaged. The messages have been made as clear as possible and as concise as space allows. Following are all the warning messages, with a brief explanation of each one.

A disk format must be selected from the menu before you can initialize

You have tried to initialize the diskette in the UniForm drive without first telling UniForm what format to initialize to. Make your choice from the format selection menu; then perform the initialization.

A write error occurred on the UNIFORM.OVL file – not updated.

UCONFIG was in the process of trying to make permanent the new configuration parameters when an error occurred. UCONFIG was unable to successfully modify the file UNIFORM.OVL on your diskette, so the new configuration was not made permanent. Make sure that the UniForm system diskette you have created contains all the files from the master diskette. Also make sure that the "write protect" notch on the diskette is not covered. It's possible that you have a defective diskette. If you follow the steps for configuring again and get the same error, try making another working copy.

Bdos Err On x: Bad Sector

If you get this CP/M message, CP/M found errors while trying to use the diskette in drive " x ". This error could mean either that you have a bad diskette or that you selected the wrong format from the UniForm menu.

Bdos Err On x: R/O

This CP/M message means that you tried to write to the disk in drive " x " but CP/M noticed that you had changed diskettes in that drive. The error occurred because you did not press < **ctrl** > **C** *after* you changed diskettes and *before* you issued the PIP command.

Bdos Err On x: Select

This CP/M message indicates that you tried to access drive " x ", which does not exist on your computer.

Can't return to main menu. . .I can't find UNIFORM.COM

UniForm would like to return from one of its utilities to its main menu. However, it can't find the file UNIFORM.COM on the system drive. Most likely you switched diskettes during use of the program and have not yet put the UniForm diskette back in the proper drive. Do so now and try to exit this utility again.

ERROR: Can't find UNIFORM.OVL on drive A or the current drive

The UniForm program resides in a file called UNIFORM.COM on your system diskette. It needs to pull information from the file UNIFORM.OVL in order to do its job. Both files need to be on the system diskette to run. This warning message means that UniForm can't find the UNIFORM.OVL file on either drive A or the one you were on when you invoked UniForm. Make sure you have UNIFORM.OVL on the system diskette before you try to run UniForm again.

ERROR, Couldn't create a file on CP/M disk in drive *
ERROR, Couldn't create a file on drive *

If either of the above messages appears, the asterisk will have been replaced by the letter of your UniForm drive. UniForm tried to put a file on the diskette in the indicated drive and was unable to do so. Either the diskette has no more room for file names in its directory area, or the diskette is damaged. Either use another diskette or erase some files from this one before you try again.

Fatal ERROR while reading MS-DOS disk directory

The directory area is a vital part of the MS-DOS diskette. UniForm has found errors while reading it. You probably have a damaged diskette. The information on it cannot be accessed by UniForm.

Fatal ERROR while reading MS-DOS disk's file allocation table

The file allocation table is a vital part of the MS-DOS diskette. UniForm has found errors while reading it. You probably have a damaged diskette. The information on it cannot be accessed by UniForm.

Fatal ERROR while reading * directory

When this message appears, the asterisk will have been replaced by the name of the appropriate type of directory. UniForm tried to read some information from the disk in the UniForm drive but was unable to do so. Assuming you have the proper diskette in the drive, it is probably damaged and you won't be able to use it on your computer with UniForm.

Fatal ERROR while writing MS-DOS disk's file allocation table
Fatal ERROR while writing MS-DOS disk directory
Fatal WRITE error on MS-DOS disk

When one of these three messages appears, it means that UniForm was trying to put some information on the MS-DOS diskette but was unable to do so. Make sure that the "write protect" notch is not covered. The diskette may be physically damaged, in which case you should try a different diskette.

I don't support the format of the disk in drive *.

When this message appears, the asterisk will have been replaced by the letter of your UniForm drive. The diskette that you placed in the UniForm drive for use with the PC-DOS utilities does not correspond to any of the supported PC-DOS formats. Possibly it was created on a computer that does not adhere strictly to the PC-DOS conventions for diskette storage. It's also possible that you inadvertently tried to use a non-PC-DOS diskette. Check the diskette carefully before trying again.

Not a valid option; try again or press ? for help

The character you pressed did not correspond to any of the allowable inputs. Read the prompt line near the bottom of the screen to find out what the allowable inputs are. If you are unsure what they mean, press ? and a help screen that explains their functions will appear. Try again when you're ready.

Not enough memory to process the range you specified

The file range you specified was so elaborate that UniForm did not have enough internal storage to process it. Try a simpler range, or break the range up into steps and perform them one at a time.

Permanent errors were detected when verifying the disk

While initializing the diskette in the UniForm drive, places that would not initialize properly were found. You have either a bad diskette or a hardware problem with your computer. Try another diskette. If you determine that the diskette is bad, throw it away. Bad diskettes cause a lot of misery when you lose valuable data.

Read ERROR on MS-DOS disk in drive *

When this message appears, the asterisk will have been replaced by the letter of your UniForm drive. UniForm was trying to read some information from the MS-DOS diskette in the indicated drive but was unable to do so. Assuming you have the proper diskettes in the proper drives, the diskette is most likely damaged and cannot be used on your computer with UniForm. It should be replaced.

Read error on UNIFORM.OVL

One of the UniForm utilities tried to get some information from the UNIFORM.OVL file. However, it was unable to do so. Make sure that the UniForm system diskette you have created contains the UNIFORM.OVL file. Also make sure that the diskettes are in the proper drives and that you are following the steps in the proper order. It's possible that the UNIFORM.OVL file or the diskette is damaged. If you get this message when you try again, and you are reasonably sure you aren't doing something out of sequence, make a new working UniForm diskette and try again.

Sorry, can't handle this file (too many extents).

This TRSDOS file is too widely scattered across the diskette to be used by UniForm. Use the TRS-80 to copy the file to a new diskette by itself. Then UniForm should be able to accept it.

That is not a valid choice

The entry you made in response to the prompt didn't make sense to the computer. Read the choices available to make sure you understand them; then try again.

That is not a valid CP/M drive letter

The entry you made in response to the prompt for a new CP/M drive letter didn't make sense to the computer. It is looking for a letter from "A" to "P." The letter you enter can't be the same as your UniForm drive letter. It must correspond to one of the drives available on your computer.

That is not a valid CP/M user number

The entry you made in response to the prompt for a valid CP/M user number didn't make sense to the computer. It is looking for a number from 0 to 15. Read up on user numbers in your CP/M documentation if you aren't sure what they are.

That menu does not exist, use 1 thru

The number you entered while in the format selection menu does not correspond to a valid menu screen. The "#" in the message will be replaced by the highest menu number available when it appears on your computer. Near the top of the screen is a message showing the number of screens available. Use a number in that range and try again.

The file * could not be found on the disk in drive *

When this message appears, the asterisks will have been replaced by the file name and the letter of the UniForm drive. UniForm tried to access a file it expected to find on the diskette but was unable to do so. This message could occur if, while running one of the file copy utilities, you changed diskettes *after* specifying a file range.

The MS-DOS disk is double sided; this machine can't process it.

The MS-DOS disk you are trying to work with was created by a computer that uses both sides of the diskette to store files. Your computer uses only one side of the diskette. Therefore, you cannot use the diskette in your computer with UniForm.

There doesn't seem to be enough memory to proceed
There isn't enough memory to process the CP/M directory

These messages are internal diagnostics and should not appear during the use of UniForm. If one of them does appear, either your UNIFORM.COM or your UNIFORM.OVL has been damaged. Make another working copy of UniForm and try again.

There is no more space left on the MS-DOS disk

UniForm was trying to put some information on the MS-DOS diskette but was unable to do so. The diskette is full and cannot hold any more information. You should either erase some files or use another diskette.

There isn't any more directory space on the MS-DOS disk

There is a limit to the number of file names you can have on a diskette. The MS-DOS diskette you are using has been filled to its limit. You must either erase some files or switch to another diskette before you can proceed.

This selection can only initialize; use the MS-DOS file copy program
Do you want to ignore this selection and exit the program (y/n)?

You have tried to set the UniForm drive to an improper format by exiting the format selection menu with an "initialize only" format selected. Only CP/M formats are allowed for the UniForm drive. If you want to access the information on the non-CP/M disk, you must use the file copy utilities. Press **Y** to return to the main menu with no format selected. Press **N** to go back and select a CP/M format for the UniForm drive.

UniForm's SETDISK program must be active for proper use

This is an internal diagnostic message and should not appear during the use of UniForm. If this message does appear, either your UNIFORM.COM or your UNIFORM.OVL has been damaged. Make another working copy of UniForm and try again.

Warning! Initializing the disk will erase any existing data.
Are you sure that you want to initialize this disk?

Information on a diskette is stored magnetically. Writing new information erases anything that was there previously (just as recording music on a cassette tape does). Initializing a diskette will write information on the entire diskette, so it will wipe out anything that previously existed. Don't initialize a diskette that has any valuable information on it.

Write ERROR or out of space on CP/M disk in drive *

When this message appears, the asterisk will have been replaced by the letter of a CP/M drive. UniForm was trying to put some information on the diskette in the indicated drive but was unable to do so. Make sure that the "write protect" notch on the diskette is not covered. The diskette may be damaged or just full. Use the CP/M STAT command to check how much room is left on the diskette.

Your disk has a write protect label on it

You have just tried to write some information on a diskette, but the "write protect" notch on the diskette is covered. This inhibits the write operation. Remove the tape from the "write protect" notch and try again.

Your UNIFORM.COM file has been damaged. Replace; then try again

UniForm tried to run. However, either the UNIFORM.COM file or the diskette has been damaged. Make a new working UniForm diskette and try again.

Your UNIFORM.OVL file has been damaged. Replace; then try again

One of the UniForm utilities tried to get some information from the UNIFORM.OVL file on your diskette. However, it was unable to do so. It's possible that the UNIFORM.OVL file or the diskette is damaged. Make a new working UniForm diskette and try again.

Appendix D Update Policy

Since UniForm is updated periodically with new formats and features, registered users can send in their master diskettes for updating to the latest version. Please note the following policy for updating UniForm master diskettes:

- There is a nominal charge for updating UniForm master diskettes. Contact Micro Solutions for the current update charge before sending your master diskette. Payment for the update must be included with the diskette.

- A registration card for your copy of UniForm must be on file with us before your diskette will be updated. If you did not receive one with your package or if you lost it, contact us and we'll send one to you. You can then return the completed card along with your disk for updating.

- In order to obtain an update, you must send in your original master UniForm diskette. Copies will not be accepted.

- UniForm is available for many different machines, and each version is considered a different product. We will not update your UniForm to run on a different machine.

Appendix E Technical Help

Most questions about UniForm and its operation are answered in this manual. If you are still in need of help, contact Micro Solutions and ask for UniForm technical assistance. Please have your UniForm master diskette and the following information handy before calling:

- The make and model of the computer that you are using.

- The UniForm menu's version number.

Our technical assistance staff will be happy to answer your UniForm questions Monday through Friday during normal business hours.