

CHAPTER 2 STARTING MiniMNC

POWERING THE SYSTEM

This chapter explains the proper handling of MiniMNC equipment and the preparations required for using the system.

The terminal and chassis each have a power switch located on their back panels (see Figure 6). Turn on the terminal by pulling up on the switch and allow the terminal ten to twenty seconds to warm up. Some of its lights will flash as it tests itself, then it will "beep" when finished. Proceed when a small blinking box or underscore (called a cursor) appears in the screen's upper left corner. If the screen remains blank, examine the terminal's back panel and make certain that the power cord is connected to both the terminal and the power source.

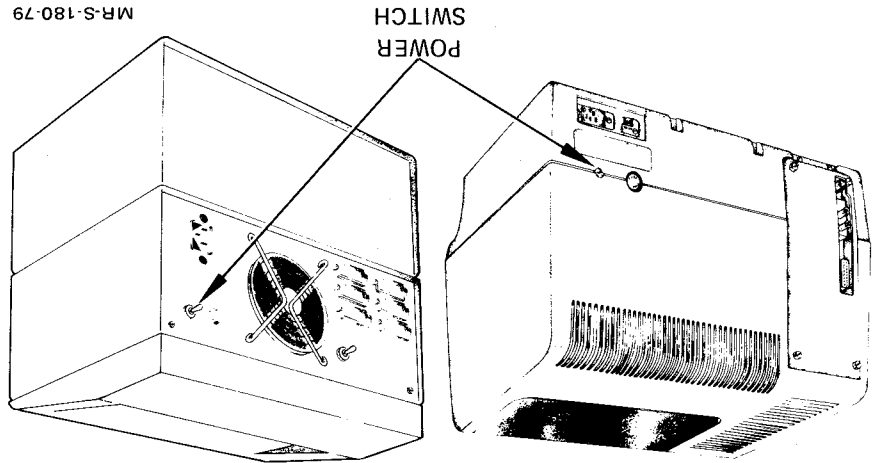
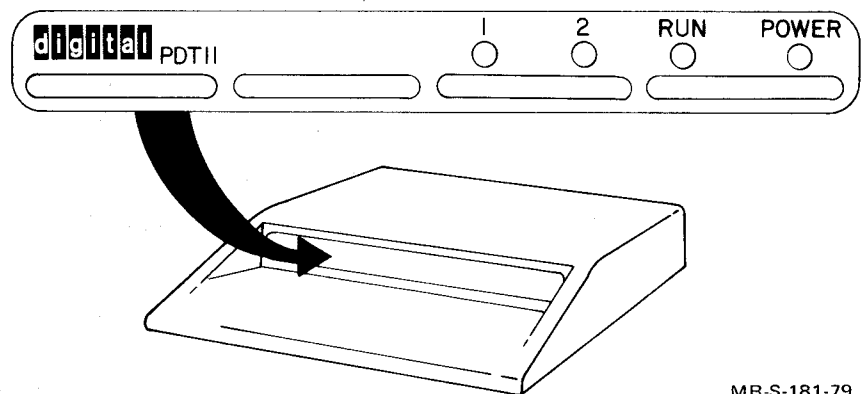


Figure 6. MiniMNC Switch Settings

Before turning on the chassis, open both of the drive doors located on its front panel and remove any diskettes (the next section describes proper handling of diskettes). A drive door opens when you squeeze the middle of its central ridge between your fingers. Release it, and the door lifts under its own power.

Now turn on the chassis. When you pull up on the power switch, three red indicator lamps situated in the chassis' top light up; they are labeled 1, 2, and POWER. Lamp 1 should go out immediately, leaving POWER and 2 burning steadily. RUN, the fourth indicator lamp, lights up later and remains lit while the MiniMINC programming system is running. Figure 7 shows the placement of these lamps. Should the appropriate lamps fail to light, refer to the Troubleshooting section of the *MiniMINC Supplement*.



MR-S-181-79

Figure 7. Light Panel on the MiniMINC Chassis

Also on the chassis' back panel is the mode switch, a three-way toggle switch marked RESET, NORMAL, and TEST (see page 37). RESET, the momentary up position, prepares the chassis for acceptance of the MiniMINC system programs; you should make a habit of doing one or two RESETs before inserting the system diskette or you may damage the MiniMINC programs it contains. NORMAL is the position to which the toggle automatically returns after a RESET; this position allows normal operation of the chassis. TEST, the down position, starts the self-tests built into the chassis and should be avoided during normal system operations; the *MiniMINC Supplement* contains all directions regarding test procedures. Any attempt to use MiniMINC with the mode switch in the TEST position may erase the contents of diskettes inside the chassis.

Move the mode switch to RESET. The toggle automatically returns to NORMAL and the indicator lamp 1 comes on, then goes

out. Lamp 2 comes on. The chassis is now ready to accept the system diskette.

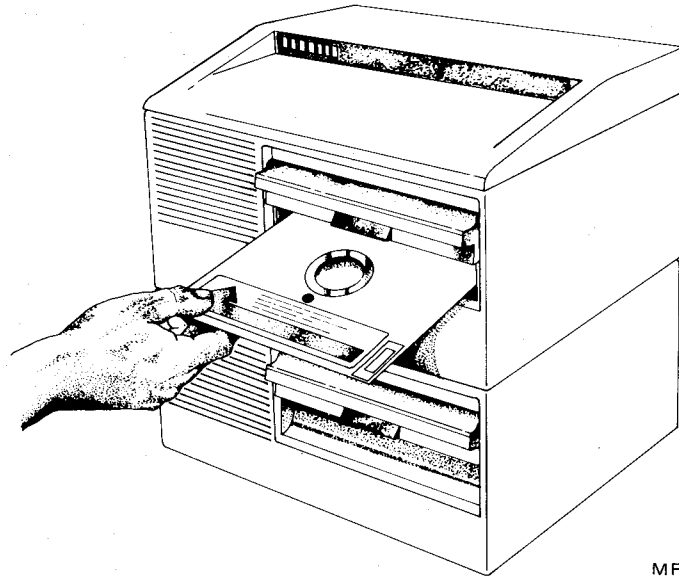
Diskettes require special care to prolong their usefulness and the accuracy of their contents. Like anything else in this world, diskettes wear out; however, you can prolong their life with the following precautions:

- Avoid touching the internal disk. Handle only the plastic envelope surrounding it.
- Never write directly on the diskette's envelope with anything but a felt-tip pen. For identification purposes, attach previously marked labels.
- Remove unnecessary labels when possible. Excess labels can interfere with the loading of a diskette.
- Do not apply chemicals or solutions to the envelope or internal diskette.
- Do not attach rubber bands or clips to the diskette.
- Avoid placing objects on the diskette.
- Keep diskettes away from sharp objects and magnetic fields (such as the one generated by the MINIMINC terminal).
- Do not bend or mutilate.
- Never remove the internal disk from its plastic envelope.
- Keep diskettes away from dust and dirt.
- Keep from direct sunlight or excessive heat.
- Allow diskettes to reach room temperature before using them.

Neglect of diskettes can cause loss of information and unnecessary expense. Protect them.

To load a diskette, gently insert it into an empty drive unit as shown in Figure 8. Notice that the label enters last and face up.

When the diskette is fully inserted, push down the ridge on the drive door until you hear a click. The diskette is now loaded.



MR-S-182-79

Figure 8. Inserting a Diskette

Diskettes should be returned immediately to their protective pockets after removal from the drive unit.

THE DISKETTES SUPPLIED WITH MiniMINC

Examine the diskettes you have at hand. If you are the first to use this MiniMINC system and you possess all the diskettes provided with MiniMINC, then you have seven diskettes:

- 1 Master Demonstration Diskette
- 1 Master System Diskette
- 1 Master User Diskette
- 3 blank diskettes
- 1 System Exerciser Diskette

Master diskettes cannot be erased or otherwise altered by conventional methods like regular diskettes. The master diskettes' sole function is to generate system, demonstration, and user diskettes. Store them safely after use.

The Master Demonstration Diskette generates demonstration diskettes. Demonstration diskettes contain a complete

MiniMNC programming system, together with the demonstration programs required for exercises in this manual.

The Master System Diskette generates system diskettes that contain the MiniMNC programming system and nothing else.

The Master User Diskette prepares (initializes) a blank diskette for the eventual storage of programs and data files. The resulting user diskette also contains a file used by the MiniMNC HELP feature (see Getting HELP in this manual).

Store the System Exerciser Diskette in a safe place. DIGITAL Field Service personnel use it to locate problems should you ever need on-site repairs. If you want to run the System Exerciser yourself, refer to Appendix A of the *MiniMNC Supplement* for operating instructions.

Treat the System Exerciser diskette as you would a master diskette by copying the original diskette, storing the original in a safe place, and then using the copy to exercise the system. This precaution can save you from inadvertently erasing your only copy.

Figure 9 shows the terminal keyboard. The arrangement of the large, left-hand group of 65 keys closely resembles a standard typewriter keyboard. The unfamiliar keys are called special terminal keys. This section describes only the special terminal key functions necessary for performing the demonstration programs used in this manual. *Book 2: MINC Programming Fundamentals* supplies details on all special terminal keys.

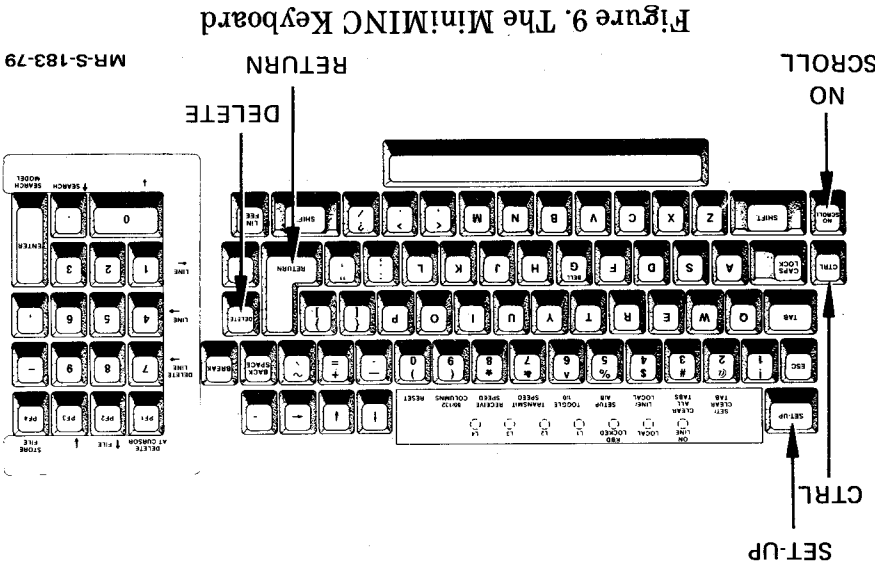


Figure 9. The MiniMNC Keyboard

MR-S-183-79

KEYBOARD CHARACTERISTICS

Book 2: MINC Programming Fundamentals also describes the text-editing procedures reserved for the the small, right-hand group of keys and the arrow keys located on the main keyboard.

The SET-UP key is located in the upper left-hand corner of the main keyboard (see Figure 9). This key plays an important part in the alteration of screen and terminal attributes, as described in *Book 4: MINC Graphic Programming* and the *MiniMINC Supplement*.

The CTRL key, located on the keyboard's left side (see Figure 9), works in tandem with several letter keys to perform control commands. *Control commands* interrupt user and computer operations to assert your "control" over the computer. For instance, the demonstration programs in this manual use CTRL/C, a common control command that halts program execution and MiniMINC operations immediately. To invoke CTRL/C, simply press the letter "C" key (lower- or upper-case) while holding down the CTRL key; interruption of some MiniMINC operations requires two strokes of the "C" key while holding down the CTRL key. You implement all control commands in this fashion, merely substituting the appropriate letter for the "C" in this example. Books 2 and 3 describe the control commands and their functions.

The NO SCROLL key, situated below the CTRL key, halts the continuous display of information (even graphic displays) on the terminal screen. Whenever the terminal must display more characters than its screen capacity of 24 lines (with 80 or 132 characters per line), MiniMINC makes room for a new line of information by erasing the top line of the current contents of the screen, moving the remaining 23 lines up, and writing the new line at the bottom. Sometimes this scrolling occurs faster than you can read. At such a time, you can press the NO SCROLL key and the scrolling halts, resuming when you press the NO SCROLL key again.

The RETURN key, located on the right side of the main keyboard (see Figure 9), terminates most commands and statements (except control commands). Until you press this key, MiniMINC ignores whatever you type; press it, and MiniMINC accepts the typed line. This feature permits you the luxury of considering what you've typed before you submit it to MiniMINC for analysis and execution. Throughout this manual, one press of the RETURN is represented by **RET** .

The DELETE key, placed next to the RETURN key, erases typ-

ing mistakes. Each time you press the DELETE key, the most recent character disappears. In this fashion, you can erase backward to an earlier mistake and then retype fresh characters. You cannot, however, use the DELETE key to erase a character on a preceding line. To change a previous line, use the keypad editor, following the procedure in *Book 2: MINIC Programming Fundamentals*. For changing lines in programs, see the description of the SUB command in *Book 3: MINIC Programming Reference*.

You can repeat any letter, number, or special character by holding down its key (except TAB, RETURN, and CTRL). The character will reproduce for as long as you hold down the key or until it encounters the end of the current line, whichever is first. Even the DELETE key repeats when you hold it down.

ENGAGING THE SYSTEM

You should now be ready to start the MINIMINC programming system. The terminal and chassis are powered, the chassis' mode switch is in the NORMAL position (following a RESET), and you're familiar with the MINIMINC diskettes and their proper handling and loading.

If you have a diskette labeled Demonstration Diskette, then someone has already created the diskette you need for the remainder of this manual. You don't need to generate another one with the Master Demonstration Diskette. Instead, load the demonstration diskette into the chassis' top drive unit (called unit 0).

If you do not have a demonstration diskette, take the Master Demonstration Diskette, load it into drive unit 0, and proceed directly to the next section, Using the Master Diskettes.

Now, assuming that you have a demonstration diskette in drive unit 0, type two @'s in succession. As on a typewriter, typing an @ requires use of the SHIFT key. The indicator lamp 2 goes out and the RUN lamp comes on. Don't be alarmed by the chassis' clunking noises. You should expect these sounds of the drive heads seeking information on the diskettes with almost every request you make of MINIMINC.

Master diskettes perform a single function: to transform a blank or recycled diskette into a system, demonstration, or user diskette. Store your masters in a safe place so that you can always create copies.

The next few paragraphs describe how to use masters. If you currently have a demonstration diskette in drive unit 0, read

USING THE MASTER DISKETTES

this section for future reference but do not act upon it. Reserve further action for the next section, Entering The Date And Time.

To create a demonstration, system, or user diskette, insert the appropriate master in drive unit 0 after powering up MiniMINC and pushing the mode switch to the RESET position. Now insert a blank diskette in drive unit 1, the bottom slot in the chassis' front panel. Hold down the SHIFT key and press the @ key twice. Instructions will appear on the screen.

During the duplication process, MiniMINC asks you for permission to proceed, reports its progress, and issues instructions.

Part way through the instructions, MiniMINC asks for the blank diskette's new *volume identifier* (Vol id) and new *owner name* (Owner name). These names are assigned to the diskette and appear whenever you request the diskette's directory. The volume identifier can be any identifying name; for instance, you might wish to identify a demonstration diskette as MINIMNC DEMO. The owner name can be anything except DIGITAL. The volume identifier and owner name must each be 12 characters or less in length (including spaces), otherwise MiniMINC truncates them at 12 characters.

When the duplication process is finished, remove the duplicate diskette from drive unit 1 and label it appropriately (demonstration diskette, system diskette, or user diskette). Remove the master from drive unit 0 and store it safely.

If you created a demonstration diskette to keep pace with this manual, push the chassis' mode switch to the RESET position, install the new demonstration diskette in drive unit 0, and press the @ key twice while holding down the SHIFT key.

ENTERING THE DATE AND TIME

Typing the date and time for MiniMINC is a necessary part of the start-up procedure. Once you provide these values, MiniMINC's system clock and calendar take over maintaining the date and time until you turn off the system.

An accurate date and time can help you in several ways. MiniMINC affixes the date to every file you transfer, alter, or create. This information allows you to easily distinguish your most recent entries from older files, thus saving you the necessity of scanning several files to find your last stopping point. MiniMINC also has functions that supply the time whenever ex-

ected; when included in your programs, they can trigger time-related events.

When MiniMINC displays an identifying message and a request for the date, type the day, month, and year as follows:

dd-mm-yy (RET)

where:

dd is the day of the month

mm is the first three letters of the month's name

yy is the last two digits of the year

(RET) represents one press of the RETURN key.

NOTE

This manual represents everything you should type at the terminal in red. Enter all characters and spaces exactly as shown.

Example:

MiniMINC V1.1

Please enter

Today's date: 5-JAN-79 (RET)

Remember, use the DELETE key to correct typing mistakes.

After you press the RETURN key, MiniMINC responds with:

current time:

To which you reply:

hh:mm:ss (RET)

where:

hh is the hour of the day in 24-hour notation

mm is the minute

INTRODUCTION TO MiniMINC

ss is the second

(RET) represents one press of the RETURN key.

For 24-hour time notation, add 12 to anything from 1 P.M. to midnight. For instance, 10 A.M. remains 10 but 1 P.M. becomes 13. Midnight is 0. For example,

MiniMINC V1.1

Please enter

Today's date: 5-JAN-79

current time: 15:32:00

MiniMINC responds with the word READY, signaling the system's readiness to accept a command or statement (the same is true of a system diskette).

STARTING MiniMINC — A SUMMARY

The general procedure for starting MiniMINC is as follows:

1. Check the drive units and remove any diskettes.
2. Turn on the terminal and the chassis.
3. Push the chassis' mode switch to the RESET position.
4. Install a system or demonstration diskette in drive unit 0.
5. Press the @ key twice while holding down the SHIFT key.
6. Enter the date and time.

The word READY appears, signaling MiniMINC's readiness to accept a command or statement.