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About This Supplement

This ProDOS Supplement replaces Chapter 4 in the Apple Ile Owner's Manual. Not all Apple Ile owners need to read it.

Who Should Read It: Look at the back cover of your Apple Ile Owner's Manual. Find the part number in the lower-right corner. If that part number is 030-0356-A, 030-0356-B, or 030-0356-C, you need this Supplement. Your Owner's Manual was written with the DOS 3.3 operating system in mind, but you have the ProDOS™ operating system.

If your Owner's Manual has any other part number, you can ignore this Supplement. Your Owner's Manual was written with ProDOS in mind.

If you plan to use both ProDOS and DOS 3.3, you will want to refer to both versions of Chapter 4.

Your Owner's Manual still refers to some terms that don't apply to you if you are using only ProDOS. When you see DOS 3.3, think ProDOS. The DOS 3.3 SYSTEM MASTER disk is equivalent to the ProDOS User's Disk. Ignore references to Integer BASIC.
Chapter 4
Using the ProDOS Operating System

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4 What an Operating System Does
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**Introduction**

Using the ProDOS Operating System

This chapter describes the role of operating systems in general and introduces the ProDOS operating system.

This chapter includes some hands-on exercises that show you what an operating system does. It also introduces you to programming in Applesoft BASIC.

ProDOS (rhymes with slow toss) is short for Professional Disk Operating System.

You will learn how

- to restart the computer when the power is already on
- to back up your ProDOS User's Disk by making a new copy of it
- to see what files are on a disk
- to start a program running and then stop it
- to format new disks
- to understand error messages
- to use Applesoft BASIC to do calculations
- to write a simple program and save it on a disk.
Did you notice that most of an operating system's jobs have to do with disks? The DOS in ProDOS stands for Disk Operating System.

What an Operating System Does

An operating system is the software that organizes the computer's resources and makes them available to you and to application programs running on the computer. At your command, an operating system

- copies programs, data files, and volumes (whole disks)
- tells you what files are on a disk
- sends information to printers and other output devices
- prepares disks for use
- stores (writes) information on disks
- retrieves (reads) information from disks.

What an Application Program Is

Application programs work together with an operating system to let you perform specific tasks. For example, a word processing program is an application program that lets you write, edit, file, and print reports, letters, and so on. Other application programs let you manipulate numbers, draw graphs, study French, play simulation games, and so on.

Before you can run an application program, two things must happen:

- First, you must load operating system software from a disk into your computer's memory.
- Second, you must load the application program itself into memory.

The operating system does not have to be ProDOS—it can, for example, be DOS 3.3 or Pascal—but it does have to be the same operating system for which the application program is designed.
In computer jargon, a startup disk is sometimes called a boot disk, and starting up a system is sometimes called booting. This alludes to a system pulling itself up by its bootstraps.

What a Startup Disk Is

In brief, a startup disk is one that contains both an operating system and one or more application programs. Such a disk is called startup because it lets you load the operating system, load an application program, and start the program running, simply by putting the disk in the disk drive and turning on the power.

When you buy an application program from your dealer, it is usually on a startup disk, so you don't have to be concerned about the operating system. Follow the instructions that come with the program. Generally, you start such a program by simply putting the disk in disk drive 1 and turning on the power.

Without any hardware modifications, your Apple IIe can run startup disks that contain any of three operating systems: ProDOS, DOS 3.3, and Pascal. For other operating systems, check with your dealer.

The ProDOS User's Disk is a startup disk. It contains the ProDOS operating system (including utility programs).

Non-Startup Disks

Many Apple computer users create their own programs and trade them with friends and coworkers. Programs like these are usually stored on non-startup disks—disks that contain application programs but no operating system.

Before you can run one of these programs, you must do two things:

- Load the operating system for which the program was written. Remember, the ProDOS User's Disk contains the ProDOS operating system.

- Load the application program itself from another disk.

You'll learn more about this later.
By now, you're probably tired of reading about operating systems and eager to put one to work. Let's do it!

**Restarting the Computer When Power Is Already On**

This is the best way to restart your computer when the power is already on. This procedure works with *any* startup disk.

<table>
<thead>
<tr>
<th>What You Do</th>
<th>What Happens</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Insert the <em>ProDOS User's Disk</em> in drive 1, and close the drive door.</td>
<td>The computer beeps at you, and the disk drive's light comes on. The drive whirs and clicks while the information on the disk is read into (transferred to) the computer's memory.</td>
</tr>
<tr>
<td>2. Press ( delaying), then hold it down while pressing (CONTROL) - (RESET).</td>
<td>Then the drive's light goes out, and a startup display appears on the screen.</td>
</tr>
<tr>
<td>3. Release (CONTROL) - (RESET).</td>
<td></td>
</tr>
<tr>
<td>4. Release ( delays).</td>
<td>It is possible to restart your computer by turning the power first off, then on again—but this causes unnecessary wear on the computer's power switch and circuitry.</td>
</tr>
</tbody>
</table>
The ProDOS Startup Display

Every startup disk has its own startup display, and startup displays don’t all look alike. The display shown is the one you see when you either start up or restart the system with the ProDOS User’s Disk in drive 1.

```
***********
* PRODOS USER’S DISK *
* COPYRIGHT APPLE COMPUTER, INC. 1983 *
***********
YOUR OPTIONS ARE:
? - TUTOR: PRODOS EXPLANATION
F - PRODOS FILER (UTILITIES)
C - DOS <-> PRODOS CONVERSION
S - DISPLAY SLOT ASSIGNMENTS
T - DISPLAY/SET TIME
B - APPLESOF BASIC
PLEASE SELECT ONE OF THE ABOVE
```
When you copy a disk, you need to know the number of the slot where your disk controller card is located. If you know where it is, skip the next three steps. If you don’t remember, this tells you where it is.

<table>
<thead>
<tr>
<th>What You Do</th>
<th>What Happens</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. With the ProDOS startup display on the screen, press [S].</td>
<td>This selects the <strong>DISPLAY SLOT ASSIGNMENTS</strong> option.</td>
</tr>
<tr>
<td>2. When the <strong>DISPLAY SLOT ASSIGNMENTS</strong> display appears on the screen, notice the slot location of the disk drive controller card. This is the number of the slot where <em>your</em> disk controller card is located.</td>
<td>In the illustration, the disk controller card is in <strong>SLOT 6</strong>.</td>
</tr>
<tr>
<td>3. Press (RETURN).</td>
<td>This takes you back to the ProDOS startup display.</td>
</tr>
</tbody>
</table>
Here's how to make a backup copy of the *ProDOS User's Disk*:

<table>
<thead>
<tr>
<th>What You Do</th>
<th>What Happens</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. With the ProDOS startup display on the screen, press (F).</td>
<td>This selects the ProDOS Filer. The disk drive whirs for a moment.</td>
</tr>
<tr>
<td>2. When the Filer menu appears on the screen, press (V).</td>
<td>This selects VOLUME COMMANDS, operations on whole disks.</td>
</tr>
<tr>
<td>3. When the VOLUME COMMANDS menu appears, press (C).</td>
<td>This selects the COPY A VOLUME process. The program first asks for the slot number of your disk controller card.</td>
</tr>
<tr>
<td>4. If your disk controller card is in slot 6, press (RETURN). If it is in some other slot, type the slot number over 6.</td>
<td>The cursor moves down to the next line, asking you for the number of the disk drive (there can be two drives connected to each controller card).</td>
</tr>
<tr>
<td>5. Because your <em>ProDOS User's Disk</em> is already in drive 1, press (RETURN).</td>
<td>The cursor moves down again, to ask you for the slot and drive numbers of the blank disk where you want the <em>ProDOS User's Disk</em> to be copied.</td>
</tr>
</tbody>
</table>
6. Indicate the slot and drive numbers as before, and press (RETURN).

7. If you have only one drive, leave the ProDOS User's Disk in the drive.

8. Press (RETURN).

9. In the space between the parentheses, type PRODOS.BACKUP and then press (RETURN). If you type any improper characters, the program ignores them and beeps at you in warning.

10. The Filer program asks whether it's all right to overwrite the former contents of the disk.

   If it's all right, press (Y).

   If it's not all right, press (N) and go back to step 4.
11. If your source disk (the disk you are copying from) and the destination disk are in two different drives, they can stay where they are throughout the COPY A VOLUME process. The program formats the destination disk before starting the copy.

If you have only one disk drive, you must follow the instructions that appear on the screen—removing the source disk and inserting the destination disk, then doing the reverse, until the COPY A VOLUME process is complete.

12. When the copying is complete, you see the message COPY COMPLETE. The COPY A VOLUME display remains on the screen. This returns you to the ProDOS startup display.

Press (ESC) twice, press (Q), and press (RETURN).

13. Remove the new backup ProDOS User's Disk and label it. Use a felt-tip pen to protect the disk from damage.

You now have two copies of the ProDOS User's Disk. Keep one of them in a safe place, as a backup.
A file is a collection of related information, with its own filename, stored on a disk or other storage device.

The catalog is like a table of contents for the disk. It lists information about each file on the disk.

Seeing What's on a Disk

Whenever ProDOS stores information on a disk—whether that information is a program, a list of telephone numbers, or a report—it stores the information as a file, under the name you give it. The names and locations of all files on a disk are stored in a special disk area that ProDOS calls the catalog.

Here's how to get a ProDOS disk's catalog onto the screen, where you can read it:

<table>
<thead>
<tr>
<th>What You Do</th>
<th>What Happens</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If you're not already in Applesoft BASIC, choose option B from the ProDOS Main Menu.</td>
<td>`: and a cursor appear on the screen.</td>
</tr>
<tr>
<td>2. Type <code>CAT</code> and press (RETURN).</td>
<td>The catalog appears on the display. It should resemble the one illustrated.</td>
</tr>
</tbody>
</table>

You're in Applesoft BASIC when the `:` prompt character is displayed.

The disk's volume name.
The name of the file or program.
The amount of disk space this file occupies, expressed in blocks. The bottom line of the display indicates the total number of BLOCKS FREE and the number of BLOCKS USED.
The date when the file was most recently MODIFIED.
File Protection

If the disk's catalog shows an asterisk (*) to the left of a filename, that file is locked. You can't accidentally change or overwrite a locked file. If there is no asterisk, the file is not locked.

Warning

Being locked does not protect a file from being erased by the COPY A VOLUME process. To protect an entire volume (entire disk) from being overwritten, cover the write-enable notch. If there is no write-enable notch in the side of the disk's jacket, the disk is permanently write-protected.

To unlock, for example, a file named HYPNOSIS, type after the ▼ prompt

UNLOCK HYPNOSIS

To confirm that HYPNOSIS has really been unlocked, use the CAT command to see that the name HYPNOSIS is not preceded by an asterisk.

To lock HYPNOSIS, simply type LOCK HYPNOSIS.

Running a Program Stored on a Disk

The ProDOS User's Disk contains some application programs you can run right now. With Applesoft's ▼ prompt character displayed, type CAT, and press (RETURN).

When the disk's catalog appears, look at the program names and file types.

By the Way: You can run a file even if it's locked—you just can't change or delete it.

Here's how to run any program that has the file type BAS (for BASIC):

<table>
<thead>
<tr>
<th>What You Do</th>
<th>What Happens</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Type RUN followed by a space and the program name.</td>
<td>It takes a few seconds for your computer to find, load, and start the program.</td>
</tr>
<tr>
<td>2. Press (RETURN).</td>
<td></td>
</tr>
</tbody>
</table>
3. Follow the instructions, if any, that appear on the screen.

4. To stop a running program, see the instructions in the next section.

## Stopping a Running Program

Suppose you want to stop a program while it's in progress. Programs usually tell you how, but if one doesn't, you can still exit from a program at any time. This section describes six methods. Try number 1 first, and go down the list until you find one that works.

<table>
<thead>
<tr>
<th>What You Do</th>
<th>What Happens</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press <strong>ESC</strong>.</td>
<td>Some programs use this key to let you escape.</td>
</tr>
<tr>
<td>2. Press <strong>CONTROL</strong>-<strong>C</strong>. (While holding down <strong>CONTROL</strong>, press <strong>C</strong>.)</td>
<td>To some programs, <strong>CONTROL</strong>-<strong>C</strong> means cancel.</td>
</tr>
<tr>
<td>3. Press <strong>CONTROL</strong>-<strong>C</strong> and then <strong>RETURN</strong>.</td>
<td>Some programs don't get the hint unless you reinforce it!</td>
</tr>
<tr>
<td>4. Press <strong>CONTROL</strong>-<strong>RESET</strong>.</td>
<td>The program stops or returns to its opening menu and, in most cases, remains in memory, unharmed.</td>
</tr>
<tr>
<td>5. While holding down <strong>C</strong>, press and then release <strong>CONTROL</strong>-<strong>RESET</strong>.</td>
<td>This is the restart procedure discussed earlier in this chapter. It is a pretty drastic way to stop a program—it clears the computer's memory, destroying any work you have there.</td>
</tr>
<tr>
<td>6. Turn off the power, then restart the computer.</td>
<td>You will rarely have to go this far to stop a program. But it shows the computer who's boss. This method also clears memory.</td>
</tr>
</tbody>
</table>
### Formatting a New Disk

When you buy blank disks, they have nothing recorded on them—just like blank tape for a tape recorder. Before a disk can receive information from ProDOS, you must **format** it.

If you keep on hand a supply of disks formatted by ProDOS, or by any other operating systems you might use, you never have to interrupt your work to format a disk.

The Filer, among other things, formats disks.

**By the Way:** You don’t have to format a disk if you’re going to copy the contents of another disk to it. The `COPY A VOLUME` function of the ProDOS Filer program automatically formats the destination disk before it begins a copy operation.

---

**What You Do** | **What Happens**
---|---
1. To get the Filer’s menu on the screen, do one of the following:

If Applesoft’s `:` prompt is not on the screen, put the *ProDOS User’s Disk* in drive 1 and start up the system as described earlier in this chapter. When the ProDOS startup display appears, press `F`.

If `:` is on the screen, type `-FILER` and press `RETURN`.

The Filer’s menu appears on the screen.
APPLE'S PRODOS SYSTEM UTILITIES
FILER VERSION 1.0
COPYRIGHT APPLE COMPUTER, INC., 1983

? - TUTOR
F - FILE COMMANDS
V - VOLUME COMMANDS
D - CONFIGURATION DEFAULTS
Q - QUIT

PLEASE SELECT AN OPTION: *

2. Press (v) to select VOLUME COMMANDS. Soon the VOLUME COMMANDS menu appears.

****************************************

? - TUTOR
F - FORMAT A VOLUME
C - COPY A VOLUME
L - LIST VOLUMES
R - RENAME A VOLUME
D - DETECT BAD BLOCKS
B - BLOCK ALLOCATION
K - COMPARE VOLUMES.

SELECT AN OPTION OR <ESC>: *
3. Press (F) to choose the
   FORMAT A VOLUME option. The FORMAT A VOLUME
display now appears, asking
you for a slot and drive number.
The Filer wants to know exactly
where to find the disk that is to
be formatted.

```
* * *
****** FORMAT A VOLUME **********
* * *
****** FORMAT A VOLUME **********
* * *

-FORMAT-
THE VOLUME IN SLOT: (6)
DRIVE:

NEW VOLUME NAME:
```

4. Put the disk volume you want
to format into any available disk
drive. If you have only one disk
drive, that means taking the
ProDOS User's Disk out of the
drive and replacing it with the
disk you want to format.

5. Complete the steps in
   FORMAT A VOLUME in much
   the same way you completed
   those in COPY A VOLUME.

```
NEW VOLUME NAME: ( /BLANKnn )
```

By the Way: If you ever feel unsure of yourself while you're using the
Filer, just press (ESC) until you're on familiar ground.

6. Later in this chapter, you'll
   need to save an Applesoft
   program on a disk. With this in
   mind, name this disk
   PROGRAMS and press
   (RETURN).
7. If the disk to be formatted is blank, formatting begins. When formatting is complete, the message **FORMAT COMPLETE** appears on the screen.

If the disk to be formatted is not blank (if it already contains information), the program asks **DESTROY "OLD, VOLUME, NAME"?** (Y/N). If you're sure it's all right to destroy the old information on the disk, press (Y). If you've mistakenly put the wrong disk in the drive, and you don't want to destroy its contents, press (N) and go back to step 4.

8. Press (ESC) twice, press (Q), and press (RETURN). This returns you to the ProDOS startup display.

9. Remove the newly formatted disk from the drive and use a felt-tip pen to write the new volume name on the disk label. Remember that pencils and ball-point pens can damage the disk!

---

### Using Applesoft BASIC

The ProDOS operating system works hand in hand with the Applesoft BASIC programming language.

#### Selecting BASIC

Applesoft BASIC is one of the options that can be selected from the ProDOS startup display.

<table>
<thead>
<tr>
<th>What You Do</th>
<th>What Happens</th>
</tr>
</thead>
<tbody>
<tr>
<td>With the ProDOS startup display on the screen, press (B).</td>
<td>The Applesoft display appears. Applesoft's prompt character (&gt;) is a cue that Applesoft is waiting for your instructions. To the right of the prompt is the cursor.</td>
</tr>
</tbody>
</table>
Some BASIC Basics

In this section, you'll learn a little bit about error messages.

<table>
<thead>
<tr>
<th>What You Do</th>
<th>What Happens</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If you haven't already done so, either start up or restart the system with the ProDOS User's Disk in drive 1, and press (B) to select Applesoft BASIC.</td>
<td>The computer beeps at you and displays the message ?SYNTAX ERROR because neither Applesoft nor ProDOS recognizes HOM as a valid command.</td>
</tr>
<tr>
<td>2. Lock (CAPS LOCK) in the down position, type HOM, and press (RETURN).</td>
<td></td>
</tr>
</tbody>
</table>
3. Now type HOME and press (RETURN).

This time, Applesoft understands your command—it clears the screen and moves the cursor to the upper-left corner of the screen (the home position).

You will probably see the message SYNTAX ERROR now and then. It simply means that a program couldn’t make sense out of what you typed. It usually means you misspelled a command or accidentally pressed the wrong key while typing a command.

By the Way: ProDOS commands, those that tell the computer to do something with a disk, can be either uppercase or lowercase characters. Some versions of Applesoft require that commands be uppercase. To be sure, it’s a good idea to type all commands in uppercase.

Calculating With Applesoft BASIC

Did you know that your Apple II is a calculator? Of course, it’s much more than that, but this exercise shows you one of a computer’s most basic applications.

If you’re already an experienced programmer, skip to “Where to Learn More” later in this chapter.

The exercises in the next two sections don’t require ProDOS. In fact, you can do them even if you have no disk drive.
### What You Do

1. With Applesoft's ![ on the screen, type

   ```plaintext
   PRINT 2+2
   ```

   and press [RETURN].

2. Try some more calculations. Use – for subtraction, * for multiplication, and / for division. Use the period (.) for the decimal point. Just remember to begin each problem with `PRINT` and end it with [RETURN].

3. Try something more complex, such as

   ```plaintext
   PRINT 345+99-435.
   ```

### Writing a Simple Program

Maybe you’re not going to be a programmer, but this gives you a taste of it. With Applesoft’s ![ displayed, you’re ready to go.

### What You Do

1. After the ![, type `NEW` and press [RETURN].

   This clears the computer’s memory, making it ready to receive your program.


   This helps you avoid the message `?SYNTAX ERROR`.

3. Type `10 PRINT "WHAT IS YOUR NAME?"` and press [RETURN].

   10 is a line number. Each instruction in an Applesoft program must have a line number. This tells Applesoft in what order you want it to perform the instructions. You can type instructions in any order. It’s good practice to number lines 10, 20, and so forth, to leave room for adding lines later.
To **enter** a program means to use the keyboard to send it to the computer's temporary memory.

A **program** is a series of detailed instructions that tell the computer how to accomplish a specific task.

To **run** a program means to cause it to perform the instructions you entered.

---

**4. Type 20 INPUT NAME$ and press (RETURN).**  

The word INPUT tells Applesoft to expect something called NAME to be typed at the keyboard. The $ means that when you use the program, you're going to type text, as opposed to numeric data.

**5. Type**  

```plaintext
30 PRINT "HELLO, ";
NAME$
and press (RETURN).
```

This program line tells Applesoft to display HELLO, and the name that you type in response to program line 20.

You just **entered** a three-line **program** into the computer's memory.

**6. To run your program, type RUN.**

**7. When the program asks you for your name, type it next to the ? prompt and press (RETURN).**

Does the program do what you expected? If it did, congratulations! That's programming! If not, start again by typing `NEW` and be sure to type every character exactly as shown.

---

Now you know how application programs learn your name and talk to you in a personal way!
Modifying Your Program

To insert lines in a BASIC program, just type new lines that begin with line numbers that you haven't already used.

<table>
<thead>
<tr>
<th>What You Do</th>
<th>What Happens</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. With your program still in memory, type 5 HOME and press (RETURN).</td>
<td>Two new lines (numbered 5 and 25) are inserted into your program. They cause the display to clear before each message is printed.</td>
</tr>
<tr>
<td>2. Type 25 HOME and press (RETURN).</td>
<td>You modified a program by inserting new lines.</td>
</tr>
<tr>
<td>3. To see what effect your changes have on the program's operation, type RUN and press (RETURN).</td>
<td></td>
</tr>
</tbody>
</table>

Saving Your Program

Now that you're the author of a program, you need to know how to save that program on a disk. You can use the disk that you formatted earlier in these exercises.

<table>
<thead>
<tr>
<th>What You Do</th>
<th>What Happens</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Put your formatted blank disk named PROGRAMS in drive 1.</td>
<td>MYFIRSTPROGRAM is your program's filename. ,D1 indicates disk drive 1. The disk drive hums for a moment while your program is written (copied) from memory onto the disk.</td>
</tr>
<tr>
<td>2. Type SAVE MYFIRSTPROGRAM, D1 and press (RETURN).</td>
<td>The disk's catalog appears on the display.</td>
</tr>
<tr>
<td>3. To confirm that your program is now on the disk, type CAT ,D1 and press (RETURN).</td>
<td></td>
</tr>
</tbody>
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Where to Learn More

You've now had a taste of BASIC programming, and you've used some of the most important ProDOS procedures.

To learn more about programming, use the Applesoft Tutorial.

To learn more about ProDOS, see the ProDOS User's Manual.

If You Have a Problem

Disks That Don't Seem to Work

Sooner or later you will come across a disk that just doesn't seem to work.

- A faulty or blank disk might just spin, causing an even whirring sound when you try to start up the system with it or try to load a program from it.

- Non-startup disks formatted by an operating system other than the one currently in the computer's memory can cause the drive to clack away noisily.

In either case, press (CONTROL)-(RESET) (you may have to do this more than once). After about a second, the disk drive stops. Remove the disk that causes the problem, and replace it with another.
Some Error Messages

Just about every program has error messages that appear on the screen when you make a mistake. Don’t panic. If you get yourself into a real mess, you can always restart the system and begin anew.

Error messages can come either from ProDOS or from Applesoft.
- The message SYNTAX ERROR comes from ProDOS.
- The message ?SYNTAX ERROR comes from Applesoft.

For a complete explanation of all ProDOS error messages, see the ProDOS User’s Manual. For a complete explanation of all Applesoft error messages, see the Applesoft Tutorial or the Applesoft BASIC Programmer’s Reference Manual.

Here are some of the error messages you may encounter:

FILE LOCKED

This message appears when you try to store information in a locked file. To unlock a file named TESTDATA, type UNLOCK TESTDATA and press \( \text{RETURN} \).

FILE TYPE MISMATCH

Certain commands work only with certain file types. For example, the RUN command works with BAS (BASIC) files, but not with SYS (system) files. This message indicates that you tried to use an inappropriate combination of command and file type. To determine a file’s type, use the CAT command.
I/O ERROR

This can mean there is a poor connection between the computer and the disk drive or a printer, that a disk is not properly aligned, that there is no disk in the drive, or that the disk drive door is not closed. If there is no disk in the drive, insert one. If the drive door is open, close it. If there is a disk in the drive, remove the disk, replace it in the drive, and close the drive door. If none of these things helps, check the connections between the disk drive cable and the disk controller card, and between the disk controller card and its slot.

SYNTAX ERROR

To a computer, syntax has to do with the way words and statements are used together and how they are spelled. The most common cause of a SYNTAX ERROR message is a typing mistake.

WRITE-PROTECTED

You see this message if you try to copy data onto a write-protected disk. A write-protected disk is one that either has no write-enable notch on its right edge, or has a covered write-enable notch.

As long as a disk is write-protected, none of its files can be modified, added to, or removed. This is an important and useful feature. It prevents you from accidentally writing over important information or valuable programs. Software that you buy from your dealer is almost always supplied on write-protected disks.

To remove write-protection from a disk that has a covered write-enable notch, remove the tape that covers the notch.