

The starting addresses for all of the standard subroutines are listed in Appendix B.

The System Monitor is a set of subroutines in the Apple IIe firmware. The Monitor provides a standard interface to the built-in I/O devices described in Chapter 2. The I/O subroutines described in Chapter 3 are part of the System Monitor.

ProDOS, DOS 3.3, and the BASIC interpreters use these subroutines by direct calls to their starting locations, as described for the I/O subroutines in Chapter 3.

If you wish, you can call the standard subroutines from your programs in the same fashion.

You can perform most of the Monitor functions directly from the keyboard. This chapter tells you how to use the Monitor to

- ☐ look at one or more memory locations
- ☐ change the contents of any location
- ☐ write programs in machine language to be executed directly by the Apple IIe's microprocessor
- ☐ save blocks of data and programs onto cassette tape and read them back in again
- ☐ move and compare blocks of memory
- ☐ search for data bytes and ASCII characters in memory
- ☐ invoke other programs from the Monitor
- ☐ invoke the Mini-Assembler

Invoking the Monitor

The System Monitor starts at memory location \$FF69 (decimal 65385 or -151). To invoke the Monitor, you make a CALL statement to this location from the keyboard or from a BASIC program. When the Monitor is running, its prompt character, an asterisk (*), appears on the left side of the display screen, followed by a blinking cursor.

To use the Monitor, you type commands at the keyboard. When you have finished using the Monitor, you return to the BASIC language you were previously using by pressing Control-Reset, by pressing Control-C then Return, or by typing 3D0G (3D-zero-G), which executes the resident program—usually Applesoft—whose address is stored in a jump instruction at location \$3D0.