
Searching for bytes in memory

The SEARCH command lets you search for one or two bytes (either hexadecimal values or ASCII characters) in a range of memory. You must type in the ASCII string (or hexadecimal number or numbers) in reverse of the order that they appear in memory. Think of the SEARCH command as looking for items in a last-in, first-out queue.

The syntax of the SEARCH command is

`{value or ASCII}<{start}.{end} S`

If the byte (or two-byte sequence) that you specify is in the specified memory range, the Monitor will return with a list of the addresses where that byte (or byte sequence) occurs. If the byte (or byte sequence) is not in the range, the Monitor just displays the prompt

The following example looks for the character string "LO" in memory between \$0300 and \$03FF:

`*'O'L<300.3FFS`

❖ *High bit set:* Remember that ASCII input mode sets the high-order bit of each character that you enter.

The next example searches for the two-byte sequence \$FF11.

`*11FF<300.3FFS`

You can't search for a two-byte sequence with a high byte of 0. The Monitor ignores the high byte and searches for the low byte only. The sequence 00FF is seen by the Monitor SEARCH command as FF.

Original IIf

The Monitor in the original Apple IIf does not recognize the SEARCH command.

Examining and changing registers

The microprocessor's register contents change continuously whenever the Apple IIf is running any sort of program, such as the Monitor. The Monitor lets you see what the register contents were when you invoked the Monitor or a program that you were debugging stopped at a break (BRK). The Monitor also lets you set 65C02 register values before you execute a program with the GO command.