

S P A C E W A R S

Space Wars is a battle simulation game that uses a modified, Two-Page CHIP-8 Interpreter that is loaded into memory locations 0000-02FF. The modifications are detailed in the section titled "CHIP-8 Messenger", and do not affect the normal operation of CHIP-8 programs except that 0300 is now the normal start address for programs. The CHIP-8 stack and work spaces are located on page 3 (0200) - a more convenient spot.

Space Wars is provided with a modified character set of 128 characters. If you examine the set with the Character Designer program, you will see the addition of the title in place of several of the lower case letters.

Once the modified interpreter is loaded, two changes need to be made (if they are not part of your "standard" usage):

- 1) At location 025E, enter 07. This is the page where the character set is stored.
- 2) At locations 024D and 028B, enter F5. These are the addresses containing the code for the first of the XY coordinate pairs used for the display.

Please refer frequently throughout this discussion to the flowcharts and program listing. This section of the chapter describes how the program was written and gives hints on modifying certain parameters for a "customized" game. If you decide to make any changes, however, it is strongly recommended that you preserve the original game on tape in case a bug develops from the modifications. (This is the "curse of the programmer", and occurs most frequently when more than 1 instruction is modified in any given program.)