S P A C E   W A R S

Variable Assignment

VO Used in key scans. Also shows hit with VF after firing.
V1 Target-movement flag. Enables target movement while firing
V2 Used with V1 to display score
V3 X Coordinate adjuster for phaser sight movement
V4 Y Coordinate adjuster for phaser sight movement
V5
V6 XY coordinate and loop counts for phasor firing and for
V7   message displays
V8
V9 X Coordinate for target (also for destruct and return-fire)
VA Y Coordinate for target (also for destruct and return-fire)
VB Number of times starship is hit: initially 0; at 4, destroys
       your starship
VC Number of phasers. 0 ends game. Initially 1E (30 shots)
VD Number of times the target is hit. 3 is average, 6 is very
       good, 10 is excellent. Initially is 0.
VE Utility loops, miscellaneous flags, loop counts. Passes
VF   time value to timer subroutine. VF is also hit indicator

Program Structure - All Systems

0000-02FF   Modified CHIP-8 Two-Page Interpreter with "Messager"
0300-038C   Main program; initialization, key presses, scoring
038E-03B4   Fire phasers
03B6-03D2   Display new target. Entry at 03BC disables phaser
            sight movement.
03D4-03E4   Limit target to screen edges
03E6-0416   Target Destruct display
0418-0420   Display debris
0422-045A   Target returns fire. Also decides if starship was
            hit.
045C-0470   Display the score
0472-047A   Timer. VE passes value.

Other Routines And Data - 3K & 4K Systems

047C-0556   Message routines
0558-0574   Machine language subroutine - starship hit sequence
            (4K system owners note changes)
0576-05C0
05C2-05FE   Data storage. Patterns for display, etc.
0600-06A2   ASCII Coded messages
06A4-06FE
0700-08FF   Character set - modified 128-character set.
0900-0AFF   All FF's for 4K system only. Used by MLS starship
            hit sequence
0Y00-0XFF   Top two memory pages for display - all systems.