C H I P - 8   P R O G R A M   E D I T O R

Those who have gotten past the game section in their Cosmac
VIP manual, and who have begun to design their own brain
teasers, will soon realize that working with the system ROM
monitor has its good points and its bad points when program-
ming in CHIP-8.

Its obvious good points are: its simplicity; the ease with
which programs may be transferred to and from tape; and its
value as a debugging tool. Some necessities are missing,
however:

1. The ability to display an entire CHIP-8 instruction at
    a time. With the VIP monitor, we can see only one byte
    at a time, which is only half an instruction.

2. The ability to read from and write to memory without
    having to reset the monitor.

3. The ability to move defined blocks of code forward or
    backward in memory to accomodate forgotten instructions.
    This is a real inconvenience - especially when you have
    to re-enter long sections of code by hand - to make room
    for a single missed instruction.

Having defined the problem (which should be your first step
in any programming effort), I devised an outline for a CHIP-8
program which would fill these requirements. The goal was
to produce a program that could be used on "stock" VIPs (i.e.,
straight from the carton - no hardware modifications required).
The program had to be usable with most existing CHIP-8 pro-
grams, even those presented in the manual, so it could not
require alteration of the standard format of CHIP-8 pro-
gramming as described in the VIP manual or the User's Guide.