

is there to assemble your programs. Such versatility will be appreciated by both the beginner and the experienced programmer. CHIP-8 Assembler-3 will not become obsolete as your experience grows.

Whatever your tastes in software, I hope you enjoy using CHIP-8 Assembler-3 and will use it hard and often. As always, I wish you the very best of luck with your programming!

### REGISTER ASSIGNMENT

R0 - DMA Pointer  
R1 - Interrupt Program Counter @ 0217  
R2 - Stack Pointer @ 00FF  
R3 - Program Counter  
R4 - Dedicated Pointer To Call Routine  
R5 - Dedicated Pointer To Return Routine  
R6 - Display Cursor - otherwise available  
R7 - Pointer To Return & Arguments  
R8 - R8.0=Tone R8.1=Timer (In Interrupt)  
R9 - Address Counter (Pass 1) / Object Listing Pointer (Pass 2)  
RA - Pointer to Source Listing / Loop Count In Address Entry Sub  
RB - RB.1=Display Address  
RC - PC for Keyboard Scan Routine @ 8195 - Dedicated  
RD - Symbol Table Pointer / Available for second pass loops, etc.  
RE - Utility  
RF - Utility

### LOCATIONS OF CHIP-8 ASSEMBLER-3 ROUTINES

#### MAIN PROGRAM

0000-03FF Initialization / 0024 is First Pass Controller, 007B  
is second Pass Controller  
0400-09FF "Assembly" Storage of CHIP-8 Program  
0A00-0BFF Symbol Table. Up to 73 symbols allowed / 7 bytes  
per entry  
0C00-0EFF CHIP-8 Program - Final Form. Up to 3 pages of  
program.