PROGRAM DESCRIPTION

Please refer to the program listing. This description will follow the listing in the order it was programmed, not necessarily in the order it performs. It is assumed that you understand the operation of the assembler, and the use of the standard call and return technique as described in the 1802 manual.

Many subroutines of Chip-8 Assembler-3 are general enough that they could be used without modifying in other programs. For instance the ASCII-HEX conversions would be very useful in a number of possible "utility" programs. For that reason, the more general subroutines are catalogued on page 2 of the listing under the heading. SUB ROUTINE DESCRIPTIONS. In the same manner as the Chip-8 Program Library already discussed, each subroutine is listed with its input; its output; the registers that are changed by it; and any other subs it needs in order to function. (Not all of the subroutines are included —— only the ones of a general all-purpose nature.) From here on, all page numbers refer to those of the program listing.

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Page 8 begins with the initialization. R2 is the stack pointer @ OOFF, R3 becomes the program counter