

**INSTRUCTIONS: HEXACON Revision 1.5 by Tim Patrick 11/9/84**

HEXACON is a very powerful number conversion utility.

It will convert all common numbering formats used by 6502 programmers and it performs integer calculations with numbers of different formats (+-\*/\*).

The program has an easy input syntax that allows quick direct entry of DECIMAL and HEXADECIMAL numbers and simple conversions of all other number formats!

The input syntax is:

Prefix Number **RETURN**

THE PREFIXES ARE:

\$ Hexadecimal (base 16 0 9/A F)  
% Binary (base 2 0 1)  
@ Octal (base 8 0 7)  
" ATASCII/ASCII (atari ASCII)  
; Assembly language routines  
= Math routines (integer)  
> Machine level math

EXAMPLES:

\$D301 (hex conversion)  
;LDA ABS/Y (assembly lang.)  
%10110010 (binary)  
>3-2 (M/L 3-2)

The input routine will determine the type of number you have entered and call all of the conversion routines for you!

Any **INVERSE** entry is assumed to be in HEXADECIMAL! (no "\$" needed!) This allows fast direct entry for HEXADECIMAL conversions!

In about a second the conversion will be complete and displayed in all number formats at once!

The Assembler and Math routines can run in a default mode. Just enter the prefix and **RETURN** and a new input prompt will appear... then enter the data without the ; or =.

(DEFAULT MODES)

The Assembler routine will print a new prompt line with the syntax of the addressing modes to enter.

The Math routine will let you input data in the following syntax

=\$4D+%11000111  
(Hex 4D + Binary 11000111)

leave out the = in the default mode.

## MACHINE LANGUAGE (BINARY) MATH

This routine performs true machine level math only + and - are allowed.

The routine will display the answer as the MSB and it will show the flag bits of the processor status register as the LSB.

Please note that this routine uses true M/L math and that the flags set are the actual bit patterns of the 6502 Processor status register.

These may not agree with results in some books on M/L (especially the CARRY flag). This is because some books describe the flags incorrectly!

The SBC (subtract) and CMP (compare) instructions have exactly the same effect on the status register!

You can input one command as follows:

```
>255-$D6RETURN  
(Decimal 255 minus Hex $D6)
```

or you may enter **>RETURN**

to get the M/L MATH input prompt.

REMEMBER: Use **INVERSE** for fast direct entry of HEX (without using the \$) and **NORMAL** (no prefix) for DECIMAL! All other number types use **NORMAL** with a prefix ("\$\$@;=>)

### LIST OF AVAILABLE COMMANDS:

```
RUN ..... restarts program  
DOS ..... exits to DOS  
OFF ..... exit program  
BOOT .... reboot system  
AUTO .... demo mode  
LIST .... this command list!  
HELP .... read help file!  
MENU .... RUN "D:MENU"  
L ..... LSB/MSB input routine
```

Use the "LIST" command to display this list directly. HEX numbers that begin with A F need no prefix.