B L U E R A M U T I L I T Y

LOADING: Connect the BLUE RAM and place the RANGE switch in the 6K-RAM position and the MODE switch in the AUTO position. Load the tape in the usual way using :INPUT. Program will auto-start showing BLUE RAM UTILITY at the top followed by 6000 on the third line. Stop the tape, it is now ready to use. Disregard the pause after ...TV=82;TV=13.

ENTRIES: 00 through FF enters that hexidecimal byte into memory at the specified address and sequences to the next address. NOTE: Up to seven entries can be shown on a line. After the seventh entry, the program will show the current address on the next line, ready for another entry.

ERASE erases the previous entry from the screen but not from memory. The cursor is backed up such that another entry can be made to replace the existing memory contents if desired. An erase after the first digit continues at the current memory address. Otherwise, the memory address is backed up by one to maintain its relative position on the screen. Erasure of a non-displayed entry is an error.

SPACE or x or NEXT or STEP displays the contents of the current memory address in hexidecimal and advances to the next address. Similarily, after seven contents have been displayed, the program will show the current address on the next line, ready for another display. This entry can be mixed with normal entries (00 through FF) as desired.

+ or GOTO allows the entry of a new address in hexidecimal. Any address may be specified from 0000 through 7FFF. Four digits are required.

- or LIST allows a hexidecimal listing of a number of addresses (their contents) without repetitively pressing the SPACE key. Enter two four digit addresses in hexidecimal and receive a listing of their contents inclusively.

= or PRINT shifts to the dump mode where entries are made in the format: BBBB EEEE O where BBBB is a four digit beginning address, EEEE is a four digit ending address, and O is an option from the set: GO, R, C, or L. GO indicates that another block of memory is to be dumped (to a maximum of four). R indicates that once the program being dumped is loaded, the loader (bootstrap) will run the BASIC portion of the program-if any. C indicates that the loader will auto-call the loaded program (in RAM) vice the BASIC portion. L indicates that nothing should be done upon loading, that more program segments follow. Once an option other than GO (or the fourth GO which is interpreted as option L) is entered, the program prompts for tape recording to begin. After depressing GO, the dumping process begins. The data being dumped is in two parts: the reload "bootstrap" which begins: &(192)=0;A= ...followed by the data to be dumped from memory which usually takes the form of mostly ??????'s. The ? occurs wherever the memory content is not a printable

The ROM position forces the first 4096 bytes of BLUE RAM memory into the read-only mode where its contents cannot be altered as long as power is applied to the BLUE RAM. This position is helpful whenever it is important to preserve the contents of memory, say prior to writting it to tape. Remember, however, that in this position, memory cannot be changed even if you want to change it. Strings cannot be altered, at least not the first 2096 entries. The switch must be moved to the RAM position or the AUTO position with write enabled (&(192)=0).

For more information see:

Arcadian Vol. 1, Pg. 36 - Convert Hex to Decimal (Program)

Arcadian Vol. 1, Pg. 43 - Binary Memory Dump (Program)

Arcadian Vol. 2, Pg. 79 - Machine Language Program

Arcadian Vol. 2, Pages 98-103 - Tutorial and Program