RMON
RELOCATABLE MONITOR FOR THE COLOR COMPUTER
by Dave Philipsen

RMON is a simple, small, relocatable monitor for the Color Computer 1, 2, and 3. It allows the user to view and modify memory, manipulate registers and I/O locations, and run programs/subroutines. It is written using relocatable code so that it can be loaded and executed anywhere in memory. Its size is less than 1300 bytes and it does not depend on the CoCo ROMs for keyboard or character output routines. This means that the user can switch between ROM/RAM and all RAM modes without problems.

Most machine language programs are loaded by simply typing “LOADM <program>” and then EXECuting the program. However, since RMON is designed to be loaded anywhere in memory, its load address must be specified. If no load address is specified then RMON will load at $0000 and will almost surely crash BASIC by overwriting its page zero variables. For example, to run RMON at $4000 type 'LOADM "RMON", &H4000' and then EXEC.

Commands

G Go. Executes at last used address. An RTS in the program will return to the monitor. To execute at a specific address type XXXXG where XXXX is the start address of the code you wish to execute.

L List. Begin listing memory contents at the last used address. To specify a start address just type XXXXL where XXXX is the start address in hex. The monitor will list indefinitely. Any keypress terminates the list.

V Prints the version number.

W The monitor responds with WOOF! It’s just something that shows that it’s alive and working.

Numeric entry:

: Starts data entry mode at current address. You may type a two-digit hex numeral and that data will be stored. Pressing <space> will bump up to the next higher address. Pressing <ENTER> terminates data entry mode and returns to address entry mode.

/ Display data at current address.

< Subtract one from current address, display address and data.

> Add one to current address, display address and data.

Examples

To display data at $FFA0-FFA7, type FFA0 followed by / then successively type > to show each successive address.

To change data at $FFA0, type FFA0 followed by : then enter two-digit hex value followed by ENTER. To change multiple sequential bytes, type FFA0 followed by : then type each two-digit hex number separated by a space. Press ENTER when finished.

Notes

For troubleshooting OS9 boot I normally load RMON at $4000. It won’t interfere with the boot track (booter) or the boot file.