

Altair DOS Memory Test Disk

This bootable Altair DOS disk contains a memory test program, MTST. Both the source and executable files are on the disk. The disk also contains the DOS editor, assembler, linker and a file copy utility to allow modification of the program if desired.

MTST provides row pattern, galloping pattern, and galloping column memory tests. It was written by MITS specifically to test their 4K DRAM boards with which they were having so many problems. In its default mode of operation, the program works in 4K blocks (i.e., the 4K memory board) and provides testing and results per 4K block.

Certain test stages take a very long time to execute. You may think the test is hung, but it is still running. Choose a smaller range of memory (all inputs are in octal) to see the various tests complete in a more reasonable amount of time.

On copies of the original disk that have been circulated within the Altair hobbyist community, the MTST source file was damaged and could not be opened (i.e., we all obtained the disk from the same bad original). I looked at the disk image in a hex file editor and found the problem was caused by one bad sector in the source file. I recreated the source code for the missing sector of data by disassembling the executable and then patched the disk image with valid data in the bad sector. I also added the Altair DOS editor, assembler, linker, and a file copy utility so the original source could be viewed and/or modified if desired.