



THE MICROMATION DOUBLER CONTROLLER.

SINGLE DENSITY, DOUBLE DENSITY,
COMPLETE SOFTWARE SUPPORT.

DOUBLE DENSITY MEANS CAPACITY.

The Micromation Doubler has set the standard for double density disk controllers for over a year. With double-density recording, over 500K Bytes are recorded on each side of an 8" floppy disk system. This means you can access a full Megabyte of on-line storage in a conventional two-drive floppy disk system.

DOUBLE DENSITY MEANS SPEED.

Data transfer with the Micromation Doubler is twice as fast as single density. Since there is twice as much data on each disk track, your drive steps only half as often. And because CRC error checking is done with hardware, the Micromation Doubler can read consecutive sectors. Your system boots in an instant!

MICROMATION DESIGN MEANS RELIABILITY.

Micromation's solid state design incorporates write precompensation electronics and a phase lock oscillator on a single, all digital circuit board. We guarantee the Micromation Doubler will be more dependable than your single density controller, and back our guarantee with a one-year warranty.

EXTREMELY VERSATILE.

The Micromation Doubler supports up to four 8" drives, or up to three 5" drives. The Doubler operates automatically in either single or double

density. Just insert a diskette, and you're running properly. You can transfer files from double density to single, from single to double, with no software or hardware changes. Easy. You can run single and double on different drives at the same time. So you can read industry standard IBM Single Density, but work in the large capacity medium of double density.

The Micromation Doubler will operate with virtually all standard mini and full sized floppy disk drives. And it will run them from any 8080 or Z-80 based S-100 system. At 2 or 4 MHz.

READY FOR THE HARD DISK CONTROLLER.

When you're ready to add a hard disk subsystem, we have the Hard Disk Controller. And it talks to the Doubler. So you can transfer files from any floppy running under the Doubler to your hard disk running under our Hard Disk Controller, and vice versa.

UNBEATABLE CONVENIENCE.

The Micromation Doubler is easy to install. There's a hardware UART on board, and the software is all ready to go. There's an on-board bootstrap, configured so you can run without a front panel.

Since the Doubler uses a programmed data transfer, it will work with any type of memory. Memory mapped I/O means no I/O port conflicts. The standard version occupies 2 Kbytes of memory at the "top" of your system, and "phantom" line support lets you fill the rest of your system with memory.

CHOOSE FROM A VARIETY OF FINE OPERATING SYSTEMS.

The Doubler is compatible with CP/M from Digital Research. Including version 2.0. With PASCAL. With OASIS. There is a huge variety of software available to run on these systems, from a vast array of vendors.

And we ship ready-to-boot versions of the above named operating systems.

MICROMATION

MICROMATION WARRANTY:

All Micromation products are shipped with a full 6-month parts and labor warranty. An optional one-year extended warranty is available.

SPECIFICATIONS:**FORMAT:**

Single Density: IBM 3740
Double Density: 128 bytes/sector modified
IBM 2D
256 bytes/sector IBM 2D

POWER REQUIREMENTS:

+ 8 Volts at 1.1 Amp
+ 16 Volts at .1 Amp
- 16 Volts at .1 Amp

SERIAL PORT:

UART type 8251
Interface RS 232
Baud Rate 110 to 9600

FIRMWARE:

2708 EPROM

ERROR RATE:

Less than one recoverable error per 10^9 bits read.

CAPACITY:

Single Density: 256 Kbytes per side.
Double Density: 512 Kbytes per side.

DATA TRANSFER RATE:

Single Density: 250 Kbits/second.
Double Density: 500 Kbits/second.

DRIVES SUPPORTED:

Four 8 inch, or Three 5 inch.

DRIVE TYPE:

5 inch Shugart 400 type.
8 inch Shugart 800/850 type; Per Sci 277-299.

MICROMATION