



# ORMEC

## Memory Disks

Flash PROM & SRAM

PCMCIA-standard solid-state Memory Disks allow Generation III to access from 512K to 4 megabytes of additional user program and data storage.

By simply plugging a rugged, "credit card-sized" module into the memory disk controller slot (standard on the Model 40, optional on the Model 20), users can easily install and maintain motion programs, machine set-up and "product recipe" files.

The PCMCIA standard for memory card technology is rapidly emerging, fueled by its use in laptop computers, and provides a highly reliable, cost-effective standard for program and data storage.

Memory Disks are available in two types, Flash PROM and SRAM, depending on your application needs.

### Flash PROM Memory Disks

Flash PROM memory disks feature inherently non-volatile PROM technology which make them ideal for archival, installation and maintenance of motion control programs on the plant floor.

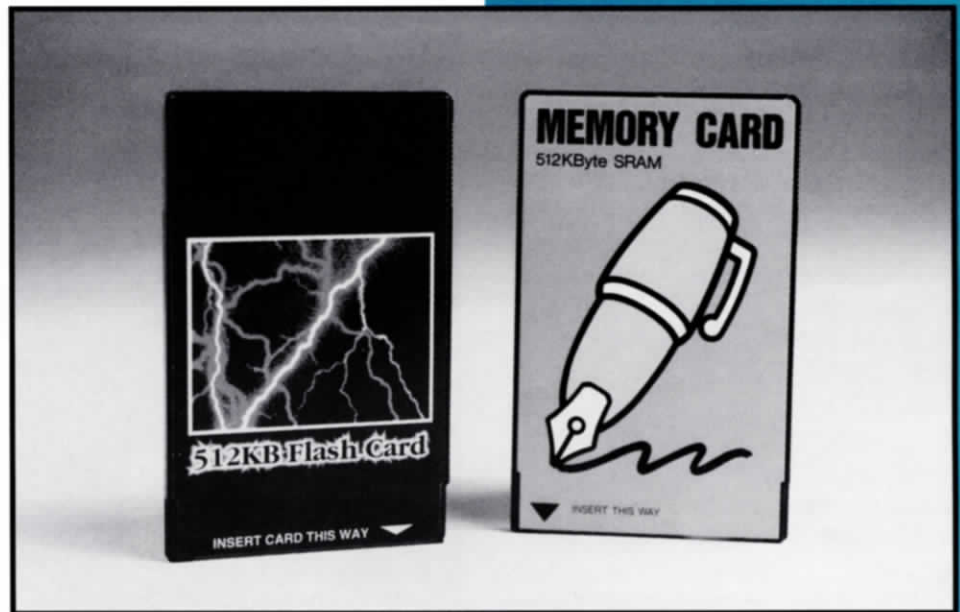
These disks (512K to 4 megabytes) feature "write speeds" similar to disk drives with "memory speed" access to disk data. With Flash PROM, memory from erased files can only be reclaimed by re-formatting the disk. So Flash PROM memory disks are generally not utilized for applications which use dynamically changing sequential or random access files.

### SRAM Memory Disks

SRAM memory disks (512K to 2 Mbytes) are battery-backed and feature random access memory "read" and "write" speeds. Battery life is four years, not counting the time that power is applied to the card. The PCMCIA standard insures data reliability, and memory will even survive a few days with the battery removed from the card. SRAM is ideal for dynamically changing information and is required for writing random access files.

### Using Memory Disks

Memory Disks act as an integral disk



Flash PROM and SRAM Memory Disks provide removable program and data storage with no moving parts.

drive to a Generation III motion controller. Programs can be stored on this media, and can be loaded into the controller via a variety of means. A program can automatically be loaded on powerup of the controller, or a program can be loaded by holding down the "PBI" button during a powerup cycle.

MotionBASIC® commands within a program can also be used to "chain in program overlays" from the Memory Disk to implement large application programs.

### Memory Disk Applications

**Supporting Remote Automation:** For manufacturers who support automation at multiple sites worldwide, the simplicity and ruggedness of memory disks provide an elegant method for updating motion control software---eliminating the need for a computer and skilled personnel to perform on-site updates.

**Storing Product Recipes:** An applica-

tion may need to reference setup or "recipe" data based on an operator selection of a specific product run for the automated machine. The controller program can access Memory Disk files to retrieve data relevant to the operator selection. Should machine performance information need to be collected during a production run, data can be written to a Memory Disk file, providing permanent storage of "live" process data.

### Sequential & Random Access Files:

MotionBASIC® also includes statements that provide access to sequential and random-access data files on memory disk. Sequential data files, for example, can be used to save "on disk" mathematical array values that define complex wind segments for traverse winding "recipes". Random access data files have been used to define "pin patterns" and "locations" for machines that insert pins into electrical connectors.

### ORDERING GUIDE

#### Memory Disks

MCD-FLASH/512	Non-volatile 512K byte Flash Memory Disk
MCD-FLASH/1024	Non-volatile 1024K byte Flash Memory Disk
MCD-FLASH/4096	Non-volatile 4096K byte Flash Memory Disk
MCD-SRAM/512	Battery-backed 512K byte SRAM Memory Disk
MCD-SRAM/2048	Battery-backed 2048K byte SRAM Memory Disk