

DATAPOINT DISKETTE MEMORY

For systems requiring fast, compact and randomly accessible data storage, the Diskette Memory combines these features in an operator-oriented, economical system.

The memory utilizes IBM-type diskettes. These small, flexible and economical magnetic storage devices operate in much the same manner as larger, conventional data processing disks. Mounted permanently in a paper jacket, the small diskettes are easily inserted and removed from cabinet-mounted drives at the touch of a button.

The diskettes find wide application where a local database is to be accessed and modified. The speed of access permits multifile operations on a single diskette and can allow sophisticated operations such as table lookups, sorting and merging of file data along with storage of keyed-in information.

The diskette hardware architecture is structured along the lines of the larger Datapoint disks. Four buffers are used, each corresponding to a 256 byte sector on the disk. This total buffer of 1024 bytes is randomly addressable by the processor and provides not only a convenient access to disk data, but also a powerful tool for sector manipulation. Error detection is accomplished in the controller by use of a polynomial cyclic redundancy character check (CRCC) between the controller and the diskette drives.

Datapoint's disk memory technique permits great similarity between Disk Operating Systems (DOS) for the various types of disks. The standard Disk Operating System is compatible with the diskette along with other utilities such as SORT and Indexed Sequential Access Method (ISAM). This compatibility among disks permits software to be used almost universally throughout the disk products. For example, a diskette system can be easily upgraded to a 2.5 megabyte cartridge disk, or a system originally developed for a large disk be adapted to handle the diskettes. With this capability, a user is often spared the cost of new software development for the diskette.

The hardware recording techniques duplicate that of an IBM 3741 Data Entry Terminal. Software formatted diskettes are interchangeable with the IBM 3741 diskettes. Where Datapoint diskettes are to be transferred to an IBM 3741, a software utility program will convert from Datapoint to IBM format.

The diskette is an optional peripheral for all Datapoint processors except for the Diskette 1100, Datapoint 1150, and Datapoint 1170, where the unit is integral with the processor.

Functional Characteristics

Capacity:
Tracks/Disk: 77
Sectors/Track: 26
Bytes/Sector: 128
Bytes/Diskette: 256,256
Sectors are paired electrically to 13 logical sectors per track.

Buffer memory size:
1024 characters

Bit Density:
(Inside Track) 3200 bpi (approximately)

Bit Transfer Rate:
250 kilobits/second (into sector buffers)

Diskette Timing:
Rotational Speed: 360 RPM

Access Time:
Track-to-track: 10 milliseconds
Settling time: 20 milliseconds
Average access time: 83 milliseconds

Recording mode: Frequency Modulated, IBM 3741 compatible

Interconnection:
Connects directly to any Datapoint Processor (except Cassette 1100)

Media Requirements:
IBM "Diskette" or equivalent

Media Dimensions:
Disk Diameter: 7.875 inches (20 cm)
Envelope size: 8x8 inches (20.3 cm x 20.3 cm)

Physical Characteristics

Equipment Dimensions:
Console
Width: 53.0 in. (134.6 cm)
Height: 28.0 in. (71.1 cm)
Depth: 24.0 in. (60.9 cm)
Weight: 200.0 lbs. (91 kg)

Freestanding
Width: 36.0 in. (91.4 cm)
Height: 28.0 in. (71.1 cm)
Depth: 24.0 in. (60.9 cm)
Weight: 175.0 lbs. (80 kg)

Power Requirements:
115 or 230 VAC, 50 or 60 Hz

Environment:
50 to 100 degrees F
10 to 38 degrees C
20 to 90% relative humidity, non-condensing

Model Codes

9381 Diskette Controller with one drive, console mounted
9382 Diskette Controller with two drives, console mounted
9383 Diskette Controller with three drives, console mounted
9384 Diskette Controller with four drives, console mounted
9385 Diskette Controller with one drive, freestanding
9386 Diskette Controller with two drives, freestanding
9387 Diskette Controller with three drives, freestanding
9388 Diskette Controller with four drives, freestanding
9380 230 VAC, 50 or 60 Hz Power Option



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