

CONTROL DATA® 9747 DISK STORAGE UNIT DESIGNED FOR ORIGINAL EQUIPMENT MANUFACTURERS

CONTROL DATA
CORPORATION



The CONTROL DATA 9747 Disk Storage Unit is a 60-million byte, random-access storage device. It uses CDC® 9873 Disk Pack, or equivalent, for the recording and reading of information in IBM (or customer derived) format compatible recording modes. Each removable pack contains eleven disks. Information is stored on 20 oxide-coated surfaces at 200 tracks per inch, 400 tracks per surface.

The 9747 disk storage unit is a single-channel unit. Features include T^L I/O levels and direct I/O interchangeability with the CDC 9427H Cartridge Disk Drive. The signals are identical in function and operation to the 9427H plus the additional I/O signals for head select.

This disk storage unit is easily integrated with existing cartridge disk drive formatters which enables an easy attachment of mass storage to small systems presently using cartridge drives. Because the changes necessary to attach the 9747 are minimal, the same inexpensive controller or formatter can be used for multiple products.

Disk packs written on the 9747 are interchangeable and magnetically compatible with disk packs written on any other 9747.

The basic 9747 consists of the spindle and associated drive motor, logic chassis, power supply, head-positioning mechanism, and cabinet enclosure. Head positioning is performed by a closed-loop, proportional servo system. The carriage is driven by a voice-coil linear actuator.

SPECIFICATIONS

RECORDING CAPACITY

Capacity: 7812 bytes/track, nominal
156,250 bytes/cylinder, nominal
62,500,000 bytes/spindle, nominal
(based on 400 tracks/disk)

Recording Mode: Double frequency
Recording Density: 2220 bpi, inner track
1530 bpi, outer track

Tracks per Surface: 406 (400 data tracks plus 6 spare tracks)

PROCESSING SPEED

Data Transfer Rate: 312,000 bytes/second
Bit Rate: 2.5 MHz, nominal
Spindle Speed: 2400 rpm

ACCESSING TIME

Full Stroke: 70 milliseconds (maximum)
Average: 35 milliseconds
One Track: 10 milliseconds

DISK PACK

Type: CDC 9873 or equivalent
Number of Disks: 11
Usable Surfaces: 20
Diameter: 14 inches
Coating: Magnetic oxide

