Cartridge Tape Drive

TAPE

OVERVIEW

The Wang Cartridge Tape Drive is a peripheral device that utilizes a 1/4 inch magnetic tape cartridge to store data. The Cartridge Tape Drive was designed primarily to provide reliable backup for Wang systems with fixed disk drives. The versatility of the Cartridge Tape Drive allows users to define other applications, including storage of word-processing documents, copying specified files (including documents) and transferring information to compatible Wang systems. Three stand-alone models are available: the Model 2229, supported by the 2200 system, and Models 6529 and 2529V, supported by OIS and VS systems respectively.

System

The 1/4 inch magnetic tape cartridge is a convenient, cost-effective medium that can replace floppy diskettes or removable hard disks in many applications. The magnetic tape is contained on two hubs within a sturdy protective shell. This shell design incorporates a cover which automatically closes over the tape surface when the cartridge is not in use. An integral write-protect selector can be engaged to prevent a tape from being inadvertently recorded over. The Cartridge Tape Drive utilizes four recording tracks and a recording density of 6400 bits per inch.

Depending upon the system and application, up to 15M bytes of data can be stored on a 450 ft tape cartridge. Tape cartridges (part number 725-1227) are available from Wang Supplies Division.

The Cartridge Tape Drive is a start/stop device that employs a serpentine recording technique. This technique records (or reads) data for the entire length of one track, stops, reverses tape direction, and records (or reads) the full length of the logically adjacent track. This process continues until all 4 tracks have been recorded or read. Tape speeds are 30 inches per second (ips) during record/read, and 70 ips during rewind.

APPLICATIONS

2200 Series

The Model 2229 Cartridge Tape Drive provides an alternative to using diskettes to backup 2200 systems configured with fixed 2M, 4M, 8M, 16M, and 32M byte disk drives. Menu selections allow the user to backup a disk to tape, recover data from the disk, backup individual files to tape, recover individual or all files from tape, and view instructions. When using a 16K character block size to record data, up to 15M bytes can be stored on one tape cartridge. For instance, an LVP user can conveniently backup almost an entire 16M byte fixed disk onto one tape cartridge. Up to 16 dual-sided, double-density diskettes (each approximately 1M byte capacity) would be required to back up the same disk. In applications such as these, the tape cartridge is more economical, faster, and requires much less operator intervention.

OIS

The Model 6529 is ideally suited to backing up the OIS 105 and 115 series. These systems are configured with fixed disk drives of 4.2M, 8.4M, 16M, or 32M bytes capacity. In addition, the cartridge tape drive is compatible with all OIS systems except Models 125 and 130. The



OIS Tape Utilities menu allows a choice of operations: copy, retrieve, backup, and restore (full or incremental). For copy, a volume name and partial file name are specified, then individual files can be selected for copy from disk. For retrieve, a list of tape files is displayed, then files can be specified for retrieval from tape to a specified disk volume. Full backup is performed by specifying a volume name and file name; this option does not allow individual files to be selected. The incremental backup option allows the user to specify a date; only files created or altered after the specified date are backed up. For restore, the entire tape is copied to a specific disk volume. Using 4096 (4K) character blocks, up to 9M bytes of data can be stored on a tape cartridge. The tape cartridge offers a more efficient and cost-effective alternative to the single-sided, single-density diskettes (each approximately 300K bytes capacity) used on the OIS.

VS

The Model 2529V provides an efficient means to backup VS25 and VS45 systems configured with fixed 34M and 68M byte disk drives. By using the VS Backup Utility, a specified range of files, libraries, or volumes can be backed up to or restored from a tape cartridge. Using 4K character data blocks and

no tapemarks, up to 13.7M bytes of data can be stored on one 450 ft tape cartridge. The Cartridge Tape Drive is supported by all VS processors.

SUMMARY OF FEATURES

- Reliable utilizes proven recording technology
- Cost effective one cartridge tape can replace numerous diskettes or removable hard disk cartridges
- Convenient less operator handling required than with diskettes
- Versatile supports multiple applications

SPECIFICATIONS

Tape

Width 0.25 in. (0.64 cm) Length 450 ft (137.16 m)

Recording Density

Recording

6400 bpi
Physical Tracks
4
Formatted Capacity
Up to 15 Mb with 450 ft tape
Record Format
Single Track, serial

Tape Transport

Tape Speed
(Normal)
30 ips
Tape Speed
(Rewind)
70 ips
Read Operation
Serial/Serpentine
Write Operation
Serial/Serpentine

Start/Stop Time

Read/Write Operations 25 ms Rewind/Search Operations 75 ms

Start/Stop Displacement

Read/Write Operations 0.38 in. (0.97 cm) Rewind/Search Operations 3.38 in. (8.59 cm)

Tape Head

Recording Head Serpentine, Read after Write, Selective Erase

Data Transfer Rate (drive to controller)

192,000 bits per second (24,000 bytes per second)

Dimensions

Height
6.69 inches (16.99 cm)
Width
15.38 inches (37.07 cm)
Depth
17.81 inches (45.24 cm)

Weight 28.5 lbs (12.96 kg)

Cables

Model 2229; 10 ft (3.05 m)
parallel cable from Tape
Drive to CPU
Models 6529, 2529V; 25 ft (7.6 m)
dual coaxial cable from Tape
Drive to CPU (optional lengths
up to 2000 ft (609.6 m))

Fuses

2 amp @ 115 VAC 1 amp @ 220 VAC

Operating Environment

50° to 90° (20°C to 32°C) 35% to 65% relative humidity, noncondensing (recommended) 20% to 80% relative humidity, noncondensing (allowable)

Power Requirements

115 VAC, 50/60 Hz (98 VAC - 128 VAC allowable) consumption: 1.4 amp -2 amp @ 115 V 220 VAC, 50/60 Hz (196 VAC - 256 VAC allowable) consumption: 0.7 amp -1 amp @ 220 V

Controls

On-Line, Power On/Off

Indicators

On-Line Fault Tape Loaded Power On

Standard Warranty Applies





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