



Tech Info Library

Read/Write Optical Disk Drives

Article Created: 20 September 1989

Article Last Reviewed: 27 September 1991

Article Last Updated: 27 September 1991

TOPIC-----

What can you tell me about various optical-disk drives for the Macintosh II? Do you have any tips on evaluating various models? And what about an Ethernet connection for the drive?

DISCUSSION-----

There are two types of read/write optical disks available: non-erasable and erasable. Most workstation users are interested in the erasable type of optical disk, and so will the rest of this article.

Another issue to be aware of is average seek time or access time. Different manufacturers rate this according to two different methods: the average seek time and the average access time.

Seek time is the amount of time required to move the laser beam to a particular location on the optical disk. Access time is a combination of seek time, latency time, and SCSI overhead time. When comparing the different systems, be sure that seek times are compared to seek times and access times are compared to access times. Do not compare seek times, to access times or vice versa.

Both access and seek times are averages due to the variable distances traveled by the read/write head. A seek time from track 1 to track 12 will be much less than a seek time from track 1 and track 121. Seek times may vary from 21 to 75ms. The times show an average of these two numbers.

The one measure of performance that may provide a more appropriate feel for the actual performance of a storage device (like a floppy disk, hard disk, or optical disk) is the transfer rate. When loading data from an optical drive, the optical drive feels more like a floppy drive than like a hard drive, although speed continues to improve very quickly. We have been unable to locate transfer rates for the listed optical drives.

Apple's Macintosh II EtherTalk Interface Card provides the Ethernet connection you need. In addition, there are a variety of third-party Ethernet cards

available.

Here is a list of vendors and (where appropriate) their optical drive follows. For more details, search the Tech Info Library under the names of vendors that interest you.

Peripheral Land Incorporated
Infinity Optical Disk
73 ms average access
Sony engine
(cartridges are readable by Pinnacle)

Pinnacle Micro, Inc.
REO-650
REO-1300
70 ms average seek
Sony engine
(cartridges are readable by Peripheral Land)

Relax Technology, Inc.
Optical 600 Plus
Ricoh engine
50 ms average seek

MACsetra Technologies International, Inc.
Genesis 6000
Ricoh engine
45 ms average seek

Racet Computers, Ltd.
Cosmos 600
Ricoh engine
71 ms average access

Sumo Systems
RSSM660
Ricoh engine
50 ms average seek

On AppleLink, you can find contact information on a company mentioned in this article by clicking the "Library Index" button in the lower-center of the Tech Info Library search window, then opening the "Third Party Company Directory" folder.

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Keywords: <None>

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19960215 11:05:19.00

Tech Info Library Article Number: 4590