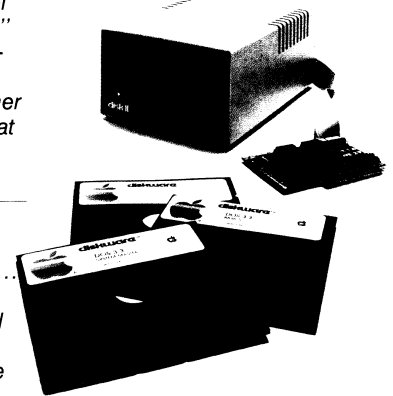


# Apple Disk II Floppy Disk Subsystem

Dynamic and Versatile Data Storage

## Accessories

*The Apple Disk II Floppy Disk Subsystem increases the capability of your Apple Computer System through the use of flexible, or "floppy," disks for data storage. Expanded memory capacity, greater data retrieval speed, and random access to your stored data—all of these, and more, are made available through the Disk II subsystem. Whether you use your Apple with a Disk II in business to control inventory, or at home for household management, you'll find that it's the superior answer to your data storage needs.*



### Benefits

#### The Apple Disk II Floppy Disk Subsystem...

- optimizes efficiency by offering one of the highest storage capacities available with any personal computer on today's market...
- offers an economical advantage over other disk drives by providing one of the lowest storage costs per character of any personal computer disk drive...
- increases productivity by allowing you to access data much more quickly than is possible with cassette tape...
- makes possible a wide range of computer applications by allowing software to access data...
- provides for greater system expansion than is possible with any other personal computer system, because it supports up to three interface cards and six disk drives.

### Disk II— A Closer Look

The Disk II drive, unlike the Apple II Plus, is a mechanical device with motors and moving parts. Understanding the principle behind the Apple Disk II drive is as simple as understanding the way a phonograph turntable works. Disk II has been designed in the same manner, although it is enclosed in a special cabinet. The record, or "diskette," is flexible ("floppy") and fits on a spindle inside the drive. The drive turns the diskette at much faster speeds than a phonograph turns a record.

Within the drive, a special record/playback head replaces the phonograph needle, and it reads the diskette the way a tape head reads an audio cassette. The head is mounted on a positioner, the counterpart of the phonograph arm, and it moves the head laterally across the floppy diskette to any area requested by the computer program. This capability is called "random access." It allows you to retrieve information from the diskette much more quickly than is possible with cassette tape.

Apple's Disk II may be purchased with or without a controller; however, the first one you buy must have the controller in order to interface the Disk II system to your Apple. Because each controller supports two disk drives, you'll be able to attach a second drive to it when you wish to expand your system. Your Apple will support a recommended maximum of three interface cards and six drives.

In addition to the advantages offered by a disk storage system, you'll also receive a special disk operating system program (DOS)\* when you purchase a Disk II with controller. It automatically keeps track of your files, saves and retrieves information on a diskette, and performs a variety of other functions.

**Note:** Disk II drives purchased prior to September, 1980 were generally supplied with 13-sector PROMs. To use these products with 16-sector software (see software Technical Specifications), you must upgrade them through the purchase of the DOS 3.3 Kit (Apple Product A2D0023) or the Apple Pascal package (Apple Product A2B0006).

\*DOS 3.2.1 has been superseded by DOS 3.3. Programs which operate under DOS 3.2.1 cannot be read by DOS 3.3 (unless converted by "Muffin," a DOS 3.3 utility program). Conversely, DOS 3.2.1 cannot read DOS 3.3 programs.

For those Apple II Plus owners who wish to use, or are currently using, programs running under the previous operating system, Apple will continue to offer and support DOS 3.2.1 (Apple Product A2D0010).

**Apple Disk II Floppy Disk Subsystem**

**System Configuration** To use the Apple Disk II Floppy Disk Subsystem, you will need:  
 ■ Apple II Plus with a recommended minimum of 32K memory.

**Technical Specifications**

**Format:**  
 Sectoring: soft (hard-sectored diskettes may be used)  
 Recording surfaces: one  
 Tracks per surface: 35  
 Sectors per track: 16  
 Bytes per sector: 256

**Capacity:**  
 Formatted data capacity: 140K bytes, 16-sector (with Pascal and DOS 3.3)  
 Available data capacity: 137K bytes with Pascal  
 124K bytes under DOS (both 16-sector)

**Characteristics:**  
 Head movement time (track to track): 25 msec.  
 (across all tracks): 600 msec.  
 Head load time: 50 msec.  
 Average rotational delay: 100 msec.

**Packaging:**  
 Controller: PC board that plugs into one of the Apple's eight expansion slots  
 Drives per controller: two  
 Drive dimensions (H x W x D): 3.25 in. (8.3 cm.) x 5.75 in. (14.6 cm.) x 8.0 in. (20.3 cm.)  
 Weight: 3.0 lb. (1.36 kg.)  
 Power source for drives: Apple system power supply

**The Apple Disk II Package**

**Order No. A2M0044 (with controller)**  
**Order No. A2M0003 (without controller)**

With your order for a Disk II drive with controller, you will receive:

- Apple Disk II drive (the main box);
- a printed circuit card (the controller) that plugs into the Apple;
- a flat ribbon cable already fastened to the disk drive, for connecting the disk drive to the controller card;
- System Master diskette (DOS);
- BASICS diskette;
- warranty card;
- DOS Instructional and Reference Manual.

With your order for a Disk II without controller, you will receive:

- Apple Disk II drive (the main box);
- a flat ribbon cable already fastened to the disk drive, for connecting the disk drive to a controller card;
- warranty card.

