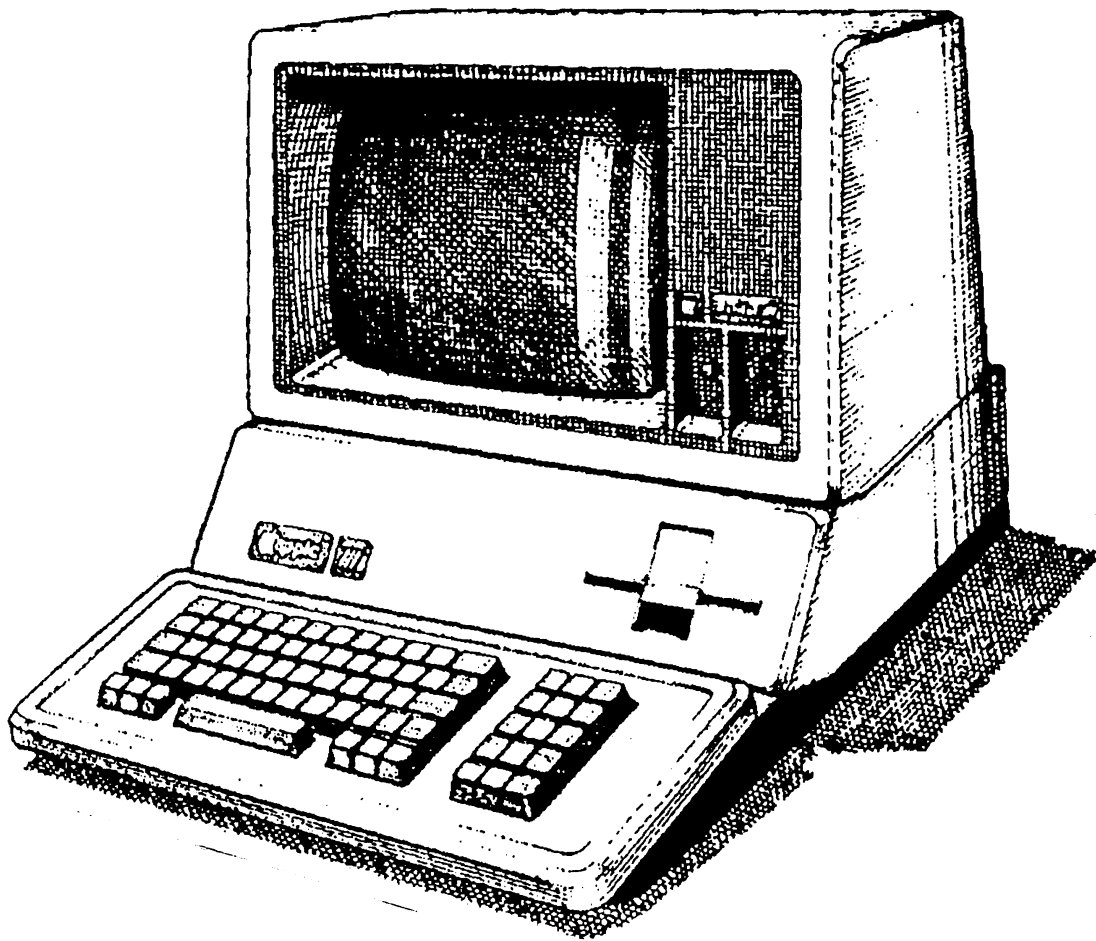




Apple /// Computer Information



DOCUMENT NAME	#
<i>SPECIFICATION: PROFILE HARD DISK APPLE</i>	10

Ex Libris David T. Craig

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ProFile™

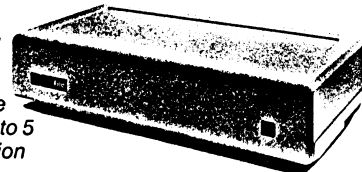
The Apple III Personal Mass Storage System

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ProFile is the new Personal Mass Storage System for Apple III computers. ProFile is a complete storage system: it includes a 5¼-inch, Winchester technology hard disk housed in a compact, sealed environment; device driver software; and the ProFile interface card.

The Personal Mass Storage System dramatically increases the Apple III's maximum on-line storage capacity from 560 kilobytes to 5 million bytes, allowing you to safely store in one location information that would fill 35 floppy diskettes.

Designed for professionals with large-scale, low-cost-per-byte data storage and programming needs, the ProFile is an ideal tool for software and computer graphic developers, accountants, financial planners, doctors, educators, and engineers. Its Winchester technology provides rapid data access (approximately 10 times faster than the conventional floppy disk drive), letting you tackle complex projects on the Apple III more efficiently than ever before.



Benefits

ProFile

- *simplifies large data processing and programming tasks by allowing you to centralize 5 megabytes of storage in a single, compact unit...*
- *increases productivity, because it accesses data 10 times faster than the conventional floppy disk drive...*
- *assures data integrity, because its intelligent controller automatically scans for error conditions, and relocates marginal data blocks elsewhere on the disk, if necessary...*
- *is usable in any work environment because it is compact, light, simple to install, and extremely quiet...*
- *offers cost-effective data storage—less than one-tenth of a cent per byte...*
- *is highly reliable, designed to offer better than 10,000 in-use hours of mean time between failures.*

ProFile— A Closer Look

The ProFile Personal Mass Storage System is styled to be placed between the Apple III and Monitor III. It can also be conveniently located next to the computer, occupying little desktop space. (It should never be placed, however, on thick carpeting or any other surface that might obstruct its ventilation.)

ProFile is a Winchester-technology device, and its four disk surfaces, two read/write heads, and actuator mechanism are integrated in a sealed, protected unit. Unlike the floppy disk drive, it relies on rigid, non-removable ("fixed-media") disks for data storage, rather than flexible, manually inserted diskettes.

The ProFile system is easy to install. Simply insert the ProFile interface card, supplied with the drive, into one of the four Apple III slots. Two cables are packaged with the hard disk: a power cable, which supplies ProFile with AC power; and a shielded interface cable (with identical 25-pin, D-type connectors on each end) for transferring control signals between the computer and the drive. Attach one end of this cable to the D-type mating connector on the edge of the interface card; the other end, similarly, fits in the connector on the back of the ProFile cabinet.

Connect the mating plug on the power cord into the recessed, 3-pin AC power connector, also located on the back of the cabinet. Now just plug ProFile into any electrical outlet and your Personal Mass Storage System is completely installed and ready to operate.

The compact ProFile unit houses the power supply, head-disk assembly, an analog-to-digital card, and intelligent controller card. The analog card serves as the interface between the controller and head-disk assembly, and is primarily dedicated to read/write functions.

During the first 60 seconds after "powering up" ProFile, the controller analyzes all disk surfaces, checking the data integrity of each sector. If a head positioning error is detected, the controller will instantly attempt to reposition the head to the proper track location. Should a read error be discovered, the controller analyzes the error, retries the data, and attempts to recover from the error. And, in the event a given sector's error rate is too high, the controller will automatically relocate data to another area of the disk. The ready light indicates the drive is ready for use.

System Configuration To use ProFile, you will need:

- an Apple III, with a recommended minimum of 128K bytes RAM;
- SOS operating system with ProFile driver.

Technical Specifications

Storage Characteristics:

Data Surfaces:	4
Heads per Surface:	1
Tracks per Surface:	153
Track Spacing:	254 tracks per inch
Block Size:	512 bytes
Data Capacity (formatted):	5 megabytes
Sectors per Track:	16
Sectors per Surface:	2448
Bytes per Sector:	512

Drive Characteristics:

Seek Time Distribution:	1300 tracks per second
Average Seek Time:	95 milliseconds
Data Transfer Rate:	5 megabits/second
Rotational Speed:	3600 RPM
Rotational Start-Up Time:	20 seconds
Drive Ready to Operate:	60 seconds

Power Requirements: 110 VAC (U.S.);
35 watts

Environmental Characteristics:

Operating Temperature:	50°F (10°C) to 104°F (40°C)
Storage Temperature:	- 7.6°F (- 22°C) to 176°F (80°C)
Operating Humidity:	20% to 80% (no condensation)
Storage Humidity:	1% to 95%

Packaging:

Interface:	PC board that plugs into one of the Apple III's four expansion slots
Drives per Interface:	one
Drive Dimensions (H x W x D):	4.39 in. (1.15 cm.) x 17.28 in. (43.89 cm.) x 8.81 in. (22.38 cm.)
Drive Weight:	11 lb. (5 kg.)
Power Source For Drive:	internal to the ProFile Drive

The Profile Package Order No. A3M0305 With your ProFile order, you will receive:

- Apple III ProFile hard disk drive;
- ProFile interface card;
- interface cable;
- AC power supply cable;
- ProFile driver diskette;
- ProFile demonstration diskette;
- ProFile Owner's Manual.