

601 OEM Disc Storage Drive Description

The Memorex® 601 Disc Storage Drive provides storage capacities ranging from 25 MB to 75 MB for your systems applications. By combining Winchester-type technology with proven design techniques, the 601 offers enhanced price/performance. And since today's computer applications call for high reliability, low maintenance, and protection from adverse environments, the Memorex 601 is designed with sealed media and ceramic I.C.s, providing the highest data integrity in the industry.

The modular construction of the Memorex 601 consists of two basic assemblies: deck plate and frame. The factory-sealed deck plate assembly (DPA) contains recording heads, actuator, spindle, and absolute filter, as well as Winchester-type heads and media. This airtight module, together with the closed loop, recirculating air system, significantly reduces the potential for contamination, thus allowing for an MTBF of up to 25,000 hours. The frame assembly provides a rigid mounting structure for the DPA and also contains the power distribution unit and spindle drive motor.

A rotary actuator contained within the DPA provides fast random access positioning for the low mass, read/write heads. Its unique rotary action design "balances" the actuator elements around a pivot point, thereby reducing system inertia. So while this actuator assures fast positioning, it requires 40% less power than a linear actuator. Read/write head positioning is accomplished through a closed loop servo system coupled directly to track location. Precision servo tracks are factory written on each drive.

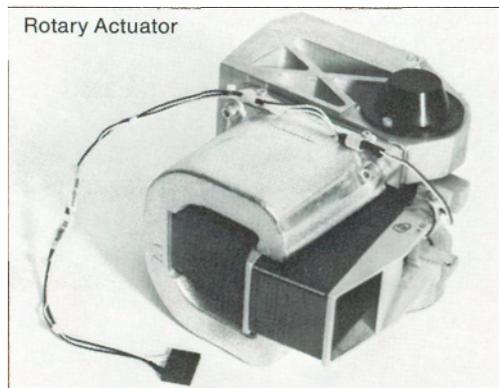
Ceramic I.C.s and metal can transistors provide the Memorex 601 Disc Storage Drive with the highest possible electronics reliability. A specially designed, highly reliable VFO Data Separator/MFM Data Encoder guarantees correct storage and retrieval of standardized data between the drive and host controller.

Optional fixed head storage of either 500 or 1,000K bytes is available for rapid data access, making up to 56 data tracks directly accessible and providing an average data access time of 10.1 MS. Data integrity is inherent in the Memorex 601 design. Since data storage and retrieval is all-important, our 25,000-hour MTBF DPA forms the heart of the maintenance-free disc drive.

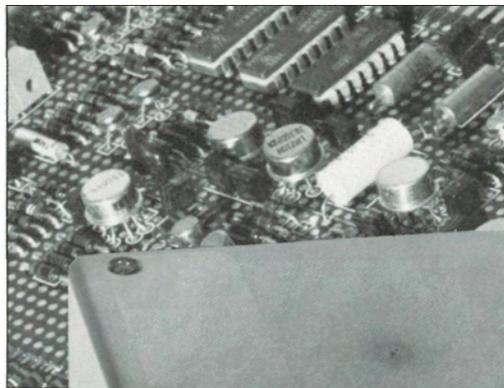
Winchester-type heads and media provide an uncomplicated disc storage mechanism that ensures the ultimate in on-line reliability. Low mass head technology is far less sensitive to shock and vibration, and since each data head writes and reads the same data that it stores, fixed media offers greater reliability than removable discs; there are no interchangeability or misalignment problems to cause mistracking or data errors.

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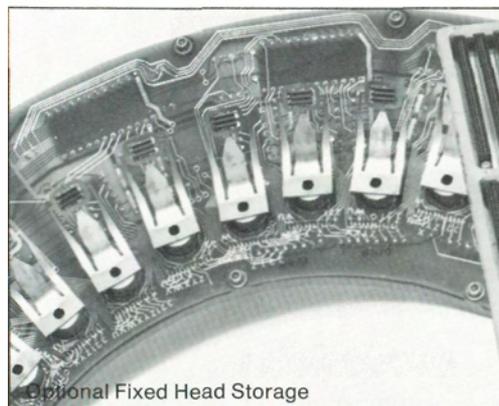
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Rotary Actuator



Ceramic I.C.s and
Metal Can Transistors



Optional Fixed Head Storage



Deck Plate and Frame

MEMOREX

601 OEM Disc Storage Drive

601 Features

A Sealed Environment encloses heads, discs, and actuator so that air inside the enclosure is continuously recirculated through absolute filters while the drive is in operation.

A Rotary Actuator positions heads; it requires 40% less power than a linear actuator performing the same function and eliminates the need for a complex loading/unloading mechanism.

Superior Head Design allows 601 heads to fly extremely low, providing greater bit densities and improved recording performance.

A VFO Data Separator/MFM Data Encoder provides for the transfer of standardized data between the drive and controller.

Detailed Product Documentation supports the 601.

Hermetic I.C.s and metal can transistors provide Memorex 601 disc drives with electronics reliability.

Maintenance-Free Operation results from such standard features as sealed media and hermetic I.C.s.

601 Options

Fixed Head Storage (28 or 56 fixed heads) may be included in the drive to provide 500 or 1,000 kilobytes of fast access storage.

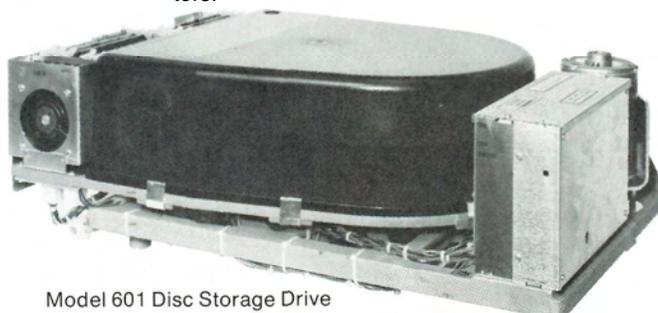
The Dual Port option provides a means for sharing the drive between two controllers on the data channels of one or two computers.

A Power Supply to provide all necessary DC power mounts directly under the disc drive frame assembly or remotely in another part of the disc cabinet.

A Control Panel with switches and indicators for control and monitoring disc drive operations may be mounted on a standard 48.26-cm (19-inch) enclosure.

A Rack Mount Kit allows for mounting on extender slides to provide easy access to the complete unit.

Adapters, for applications where ribbon connectors are not currently in use, adapt amp block connectors to 3M ribbon connectors.



Model 601 Disc Storage Drive

Memorex Corporation

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Specifications

	Megabytes 25, 50, 75
Capacity (unformatted)	
Track Capacity	17,920 bytes
Cylinder Capacity	72K/143K/ <u>215Kbyt.es</u>
Drive Capacity	25/50/75 MB
Data Retrieval Times	
Average Latency	10.1 msec.
Access Time	
Minimum	7 msec
Average	32 msec
Maximum	65 msec
Data Transfer Rate	885 K bytes/sec

Recording Characteristics

	Megabytes		
	25	50	75
Data Surfaces	2	4	6
Data Heads	4	8	12
Heads per Surface	2	2	2
Tracks per Cylinder	4	8	12
Servo Surfaces	1	1	1

	Megabytes 25, 50, 75
Data Tracks per Head	350
Tracks per Inch	300
Bits per Inch	5,636
Head Load	10 grams
Head Mass	0.25 grams
Head Flying Height	25u in.
Fixed Head Option	500/1000K bytes

Dimensions

Width	44.5 cm (17.5 in)
Height	25.4cm (10.0 in)*
Depth	72.4 cm (28.5 in)
Weight	40.4 kg (89.0 lbs)**
	*38.1 cm (15.0 in) with power supply
	**55.4kg (122.0 lbs) with power supply

Environmental Conditions (All Models)

Operational	Non-operational
Temperature	
+ 10°/+43°C	-40°/+60°C
(+ 50°/+110°F)	(-40°/+140°F)
Relative Humidity	
10%/90%	10%/90%

Power Requirements

100/117/208/230 VAC ± 10%, 60 Hz
100/110/125/200/220/230/240 VAC ± 10%, 50 Hz