

Memorex 101 OEM Disc Storage Drive Product Description

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The Memorex 101 is an 8-inch, rigid disc, data storage module that fits into a flexible disc drive envelope providing 11.7 MB of storage capacity. Features and benefits include:

- Integral data separator
- High-speed band actuator
- Imbedded drive spindle motor
- Sealed media environment
- Low heat dissipation
- Low power requirements
- Light weight

By combining Winchester-type technology with proven design techniques, the original equipment manufacturer is ensured of the ultimate in reliability and quality from Memorex. Because Memorex is an independent manufacturer of the complete 8-inch drive, the OEM customer is assured that complete technological control of manufacturing occurs in all drive components—head disc assembly, electronics, and media.

The OEM customer is further supported by the finest field organization in the industry.

101 Disc Storage Drive Advantages

Sealed Environment

A carefully designed sealed environment protects the head, media, actuator, and spindle from contamination and utilizes an absolute filtration system inside the enclosure.

Disc Coating Characteristics

Oxide particles in the coating are circumferentially aligned to provide high signal output and high resolution. Memorex 100X coating surface shield extends the useful disc life over 100 times the life of discs not coated.

Easy Serviceability

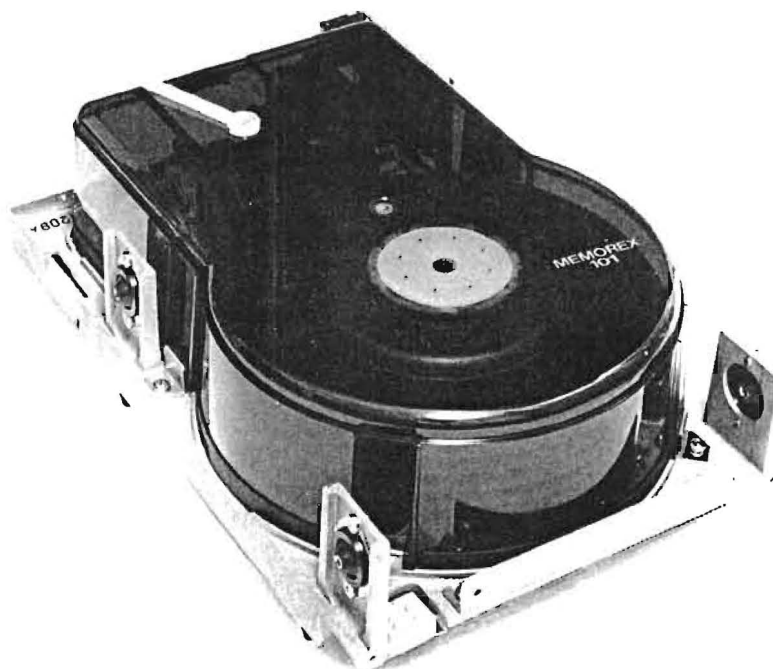
By integrating the drive motor with the hub, we have eliminated belts and lowered parts count which increases reliability and saves valuable space. The electronics package mounts to the bottom of the head/disc assembly (HDA) for easy field service access even while the drive is running.

Data Separator

The 101 disc drive receives write data in NRZ code and also transmits read data in NRZ code. NRZ data is MFM encoded and decoded to and from the media by a phase locked data separator in the drive.

Low Power Consumption

Less than 100 watts of power are required to operate the Memorex 101 which lowers system costs. What's more, only DC power is necessary allowing for international versatility.



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Product Specifications

Capacity (unformatted)

Drive: 11.7 MB
Per Surface: 2.9 MB
Per Track: 12,000 Bytes

Data Retrieval Times

Track-to-Track Access Time: 19 ms
Average Access Time: 70 ms
Maximum Access Time: 140 ms
Average Latency: 10.06 ms
Transfer Rate: 596.6 Kbytes/sec.

Densities

Recording: 6100 bits per inch
Track: 195 tracks per inch

Dimensions

Width: 8.55 inches (217 mm)
Height: 4.38 inches (111 mm)
Depth: 14.05 inches (356 mm)
Weight: 12 pounds (54 kg)

Power Requirements

Voltage:
+ 24 VDC \pm 10% 1.6A (6A peak)
+ 5 VDC \pm 5% 4.1A (6A peak)
- 5 VDC \pm 5% 500 mA

Environment

Ambient Temperature: 50° to 110°F
Relative Humidity: 10% to 90%

Specifications

Rotational Speed: 2964 RPM
Cylinders: 244
Heads: 4

Physical Sectors

Encoding Method: MFM
Index: 1

Sectors: Selectable up to maximum
of 4096 bytes/sector

Interface: Low cost, small system
compatible

Reliability Specification

Fixed Disc

MTBF: 10,000 hours

MTTR: 30 minutes

Error Rate

Soft Read Error: 1 per 10¹⁰

Hard Read Error: 1 per 10¹²

Seek Error: 1 per 10⁶

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