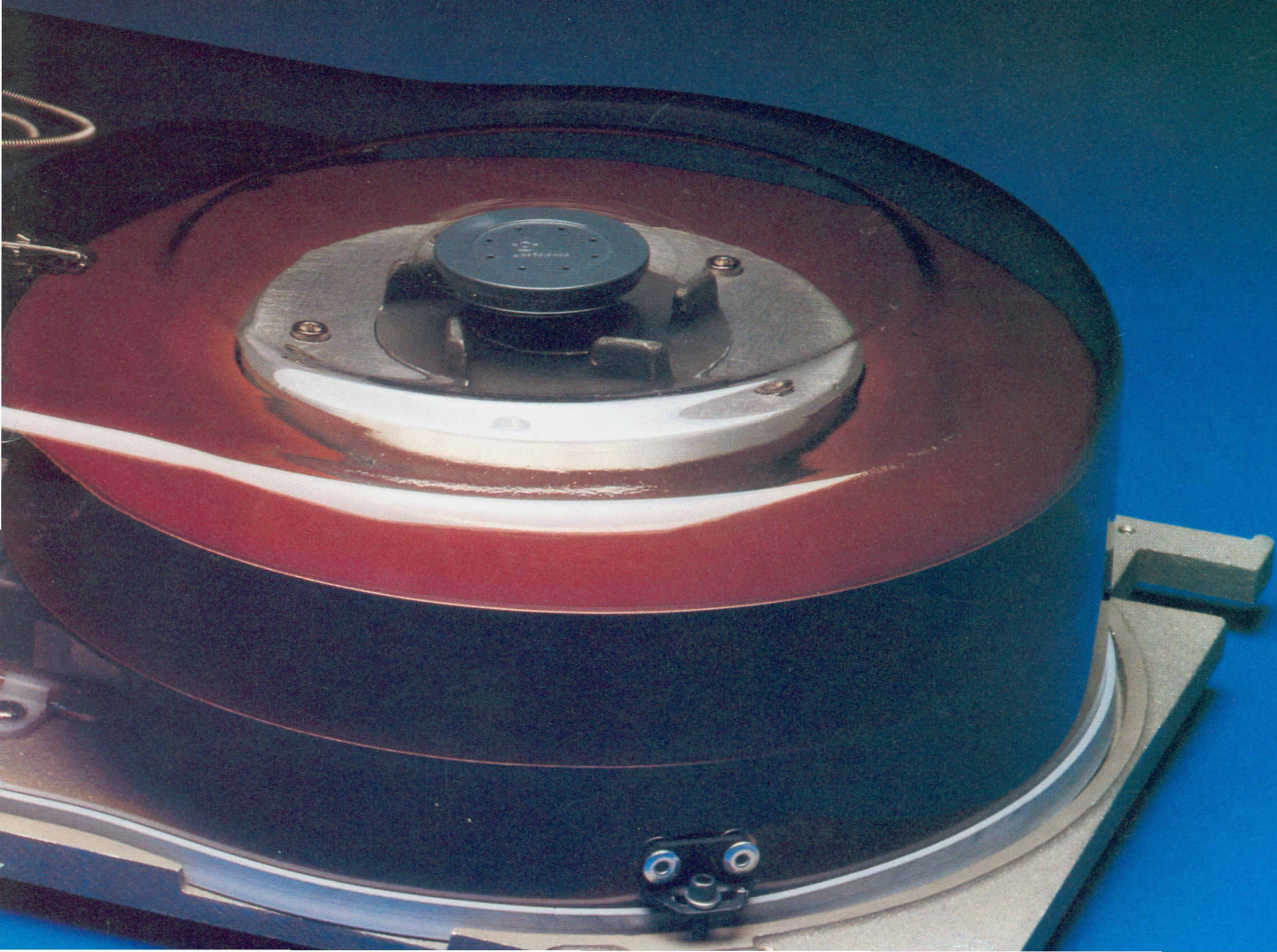


MEMOREX

**101 OEM
Disc Storage Drive**



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THE COMPUTER HISTORY MUSEUM



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"The 101 8-inch rigid It's a better product in a bewildering mar

The 101 8-inch rigid disc drive from Memorex is the first in an entire family of 8-inch drives, each of which will offer OEMs the quality, reliability, availability and value you expect from one of the largest independent suppliers of rigid disc drives in the industry.

The 101 makes use of the most advanced Winchester-type technology, an outgrowth of Memorex's many years of experience in building sealed-environment disc drives which provide total protection against contamination of heads or discs.

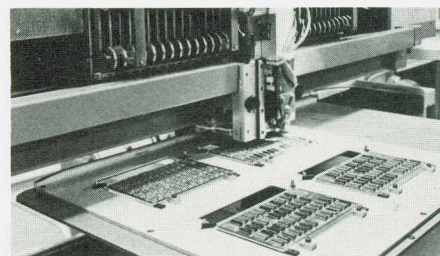
On any level of comparison—capacity, weight, access time, energy savings, compatibility and ease of interfacing, expandability, and overall reliability—the Memorex 101 makes sorting through the often confusing marketplace of 8-inch rigid disc drives a much easier task.

Meeting And Beating The Flexible Disc Drive.

The small computer systems marketplace is the most rapidly growing segment of the computer industry. Demand for small business and office systems, personal and hobbyist computers, inventory and process control systems, word-processing, graphics and intelligent terminals, is increasing by more than 30 percent per year. To date, most small computer systems have relied on the flexible disc drive for data storage. But requirements for increased capacity in many small systems applications have led to the development of the 8-inch rigid disc drive. Utilizing proven Winchester technology as the design approach, the Memorex 101 offers a level of reliability not previously available in floppy disc-based systems.

The Memorex 101 has been specially designed to be size-compatible with flexible disc drives. And since a single controller can be used for both the 101 and floppy disc-based systems, interfacing is greatly facilitated.

Suitable for desk-top applications because of its small size, compatible with systems now using flexible disc drives, providing often dramatic weight and energy savings over other rigid disc drives, the Memorex 101 is the easy answer to your search for an 8-inch rigid disc drive.



disc drive. marketplace."

High Capacity. More Expandability.

The Memorex 101 provides the user with 11.7 megabytes of data availability. That is about one million bytes more than competitive products in the same performance range. And capacity is based on a two-disc design, featuring 6100 bpi and 195 tpi—which means there's plenty of room for expandability.

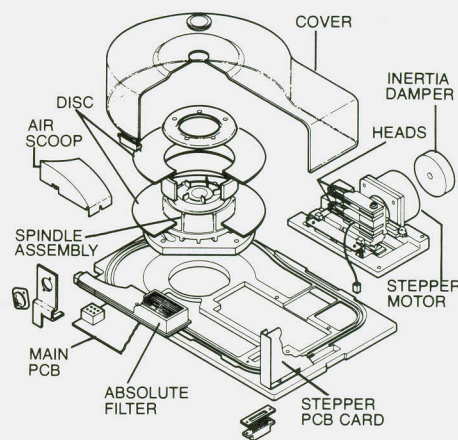
A second version of the Memorex 101, the 102, will offer two times the storage in the same small space by adding two more discs and bringing the capacity up to 23.4 MB. With the Memorex 8-inch family, you can be assured of increased storage capacity, without worrying about product obsolescence.

Innovations for High Performance.

Memorex has done more than simply shrink a larger size drive down to flexible disc drive size. Our engineers designed the new 8-inch 101 with increased reliability, lower costs, and better value firmly in mind. To meet these criteria, the Memorex 8-inch drive features some unique high-performance innovations:

- A new low-wear, high-speed band actuator that doesn't require field adjustment and provides fast, accurate data availability.
- A proprietary imbedded, direct drive, DC spindle motor that eliminates belts, brackets and side-loading bearing wear. The reduced parts count increases the Memorex 101's reliability.
- A specially-designed enclosure that reduces thermal effects on the discs, increases product life, provides for absolute filtration, and reduces shock and vibration.

Memorex knows that OEM customer satisfaction and confidence are based not only on our superb track record in disc drive production, but are also based on customer expectations of practical innovation. Experience. Foresight. They come together in the 101 8-inch disc drive from Memorex.



"The Memorex 101. A product. A better sup And it's here. Now."

The Memorex 101 8-inch rigid disc drive is a product of Memorex's superior technology and full manufacturing resources. The 101 is a new product with a proud heritage—the proven excellence of Memorex information storage equipment and media.

Memorex is one of the world's largest independent suppliers of disc drives. It is also a leader in the manufacture and supply of magnetic recording media. Millions of Memorex heads and discs are in use throughout the world. It is this kind of experience that makes the decision to purchase 101 8-inch disc drives one that can be made with the utmost confidence.

Not only are OEMs buying several generations of engineering and production experience in Winchester products, they are also benefitting from Memorex's commitment of resources—financial, production, and human resources—to ensure that the 101, like all our products, meets

our high quality standards. So that when we advertise an 8000-hour MTBF for the 101, it is a good deal more than idle speculation.

Product Availability: The Key To Customer Satisfaction.

Memorex is committed to providing you with the 101 8-inch disc drive when you want it, in the volume you need. We are meeting our U.S. production capacity requirements in two facilities, dedicated totally to 8-inch disc drive manufacturing, which means that if we run into an unanticipated production bottleneck in one plant, we can supply you with the 101 drives you want from another. Our international affiliates will be supplementing 101 production.

OEMs know that Memorex has one of the best records of product availability in the industry, and we are planning to uphold that record with the 101 8-inch drive. We have the resources to expand production

quickly to meet demand. We've got the experience to plan and manage production in the most efficient way. You can count on Memorex to deliver. And you'll be counting up profits on your own deliveries as well.

Product Testing: From Concept to Application.

Memorex product testing, quality control and quality assurance procedures are in place at every step of the way in the development and production process.

We carefully study the initial concept for a new product. We test design alternatives and specifications with the help of our state-of-the-art computer-aided design and graphics systems. We can simulate field conditions with our advanced environmental chamber. We build much of our own test equipment, for use in the laboratory and on the production line. We fully test each and every one of our drives, not just a random sample. We test them at

more reliable supported product.

the component level and every succeeding level of assembly. Heads are tested separately. And discs. Then the heads and discs are tested together. And on and on. This rigorous multi-level testing procedure ensures the 101 8-inch rigid disc drive is the Standard of Value for this class of product.

Product Support: Comprehensive OEM Services.

Memorex's worldwide Service Support System provides customer assistance in maintenance, training, advertising and marketing, technical support and design, and a number of other areas.

Memorex can provide your sales and service representatives with all the back-up they need to keep your customers happy with the systems you supply. We can also arrange for third-party maintenance, based on our own

network of service centers. We maintain fast and accurate order tracking systems, computerized parts inventories, and detailed documentation support. Our advertising and marketing teams, by providing sales and technical literature, international and national advertising and public relations, participation in the industry trade shows, and other means of communication, help your business by making the Memorex reputation for product excellence visible in the marketplace. The OEM benefits directly from its relationship with Memorex.

Memorex engineers are available to assist with interface and back-up design and technical support for the 101 8-inch drive. These experts in rigid disc drive devices can provide you with the information and data you will need to design the 101 into your system.

Research and Development: Anticipating the Future.

Memorex has also made a substantial investment in the future of recording technology. Both our Recording Technology Center and Magnetic and Chemical Technology Center are dedicated to bringing the latest innovations to practical application. Thin film head development, new recording surfaces for magnetic media, the latest in mechanical, chemical and electronic processes are all under development by Memorex engineers and scientists, with many nearing the point of introduction into Memorex products.

Not innovation for the sake of innovation, however. Rather, Memorex is committed to enhancing our products and extending our customers' investment in them.

"Memorex. A company with the credentials. And the commitment."

The Model 101 8-inch disc drive has been introduced to meet a growing need for a reliable high-quality storage device for the small computer system configuration. It's the first in a line of 8-inch products that will provide expandability without sacrificing your investment. Compare the 8-inch drives now being offered by other manufacturers. Compare the proven experience in development and manufacturing of rigid disc drives and media. Compare the commitment to product availability, to reliability, to value—to the continued protection of your investment. Memorex is, point for point, the best choice you can make.



Memorex Corporation: Setting Industry Standards.

Founded in 1961, Memorex employs thousands of highly-skilled and dedicated people in more than 100 locations around the world. With modern headquarters in Santa Clara, California, Memorex also has production facilities in Belgium, Mexico, Ireland, Wisconsin, and Southern California. Memorex also maintains a network of regional warehousing, distribution and service centers.

Memorex is a worldwide supplier of high-technology equipment and magnetic recording media used in data storage, retrieval and communications. The growing line of Memorex products today includes high-quality disc and tape data storage systems; telecommunications processors and terminals; computer tape, disc packs, cartridges and data modules; audio and video tapes; and word processing supplies.

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Features:

- Integral data separator
- Imbedded DC drive spindle motor
- Low heat dissipation
- Light weight
- Flexible disc size
- Low power requirements
- Sealed media environment
- Absolute filter

101 OEM Disc Storage Drive 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: 120 MS
Average Latency: 10.1 MS
Transfer Rate: 592.8 K bytes/sec.

Densities

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

Dimensions

Width: 8.55 inches
Height: 4.38 inches
Depth: 14.0 inches
Weight: 12 lbs.

Power Requirements

Voltage: +24 VDC $\pm 10\%$ @ 3.5 A
+ 5 VDC $\pm 5\%$ @ 2.5 A
- 5 VDC $\pm 5\%$ @ 250 MA

Environment

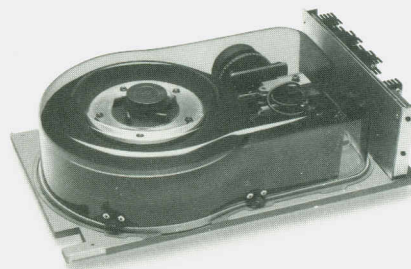
Ambient Temperature: 50° to 110°F
Relative Humidity: 10% to 90%

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 Specifications

Fixed Disc
MTBF: 8000 hrs.
MTTR: 30 min.
Error Rate
Soft Read Error: 1 per 10^{10}
Hard Read Error: 1 per 10^{12}
Seek Error: 1 per 10^6



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