Original document scanned at 300bpi, first and last pages with 16M colors and other pages with 256 gray shades.

Using ABBYY Finereader v8, images *were* OCR'ed, *u*ncertain characters and words not in dictionary were checked and this PDF was generated. OCR accuracy cannot be certified. Original document donated to Computer History Museum

T. Gardner Apr 2006

601 OEM Disc Drive

"Memorex is the industry to the keeping its

The Memorex 601 OEM Disc Drive

The Memorex® 601 OEM disc drive is a 25/50/75 megabyte single spindle, Winchestertype disc storage drive. A product of superior technology and manufacturing resources, it enjoys a heritage of customer preference in all performance categories.

The full range of products and services assures your customers' satisfaction. It's the security of having the hardware backed up with customer service support, engineering support, maintenance services, technical training, full documentation, and longterm spares availability.

Memorex is committed to the industry, to the marketplace, and to keeping its commitments. Ultimately our customers' confidence is based on the results we produce. Past records on our products have shown that confidence, on all sides, has been well placed. Given this product and its performance record, we are confident we can demonstrate conclusively its superiority by any product definitions.

Data Storage

We build reliability in your system's disc storage by protecting the head and media in a sealed environment. It's sealed away from operators, dust, and contamination. A unique closed loop recirculating air filtration system and positive internal pressure maintain a clean-room environment for head and media.

The rotary actuator simply pivots into position. It uses 40 percent less power and generates 40 percent less heat than a linear actuator. Fewer mechanical parts and less heat lengthen machine life.

In addition, Memorex's implementation of Winchestertype technology provides an uncomplicated disc storage mechanism. The resident disc offers greater reliability than removable discs. Since the same head that wrote the information also reads the information, there are no interchangeability or misalignment

committed to marketplace, and to commitments."

problems to cause mistracking and data checks.

The 601 uses low load/low mass Winchester-type heads. The Winchester-type technology is far less sensitive to shock, vibration, and orientation than earlier removable disc techniques. Heads such as those used in 2314 and 3330 apply 35 times the load force of the 601 heads. Their suspended mass of 3.25 grams is more than 13 times that of the 601 heads at 0.25 grams.

Media

While Memorex is the world's largest independent supplier of disc drives, it is also the number one manufacturer and supplier of magnetic media, and the technological leader in that field.



Memorex coats every disc with an "armor-tough" surface that extends durability and withstands loading stress. Within this coating, encapsulated oxide particles are circumferentially aligned. This proprietary process maximizes head-to-track stability, assures cleaner rewriting, and reduces residual noise. Memorex discs also have the "100X" surface shield which complements the "armortough" coating. This results in an extension of the useful disc life by one hundred times that of a conventional disc without the coating.

The sealed-environment head, media, and actuator package has an MTBF of 25,000 hours which gives you unmatched reliability and protection for the media.

An advantage of the 601 is that you can match a wide range of

"Compare and you"ll for yourself that the more for your invest

system requirements and customer applications. Two disc surfaces offer 25-megabyte capacity. Two additional surfaces double the capacity. All four discs for six data surfaces offer a full 75-megabyte capacity.

You can reduce your customers' entry costs by starting them with (25MB) storage. This protects their investments as you trade them up to (50MB) or (75MB) discs. You then have the option of offering larger capacities now or later as systems enhancements-without changing your system's dimension or structure and at an upgrade cost far less than purchasing another byte capacity disc drive.



Performance

Data Density

Each 601 read/write head has access to 350 tracks. Our Winchester-type technology allows packing each inch with 300 tracks, and each track carries 17,920 bytes. The data transfer rate is 885K bytes per second.

Access Time

Access time is as short as 7 milliseconds, averages 32 milliseconds, and is never longer than 65 milliseconds. Average access for a typical removable disc is 53 milliseconds.

A fixed-head option allows you to use the disc for 500,000 or 1,000,000 bytes of quick memory. Up to fifty-six heads offer immediate track access. Rotational delay and data access averages only 10.1 milliseconds. That means your customer can use this quick memory to replace or extend core memory, store programs, or as a convenient scratch pad.

Adaptable Configuration

The 601 can be mounted vertically or horizontally in a standard EIA rack. Its small size and light weight can be accommodated by a lightweight enclosure without special framing.

discover 601 offers you ment."

The 601 is compact. Two units can be mounted in a single lo-boy style cabinet. That gives you up to 150 megabytes of storage in two units tor excellent cost effectiveness.

With the 601, you can interface with any computer. Memorex supplies local electronics with an industry standard interface. It offers economical "upgradability"— start with 25MB of high performance storage and expand to 50 or 75 MBs as the need develops in less than one hour.

Back-Up Storage

While your end-users can use other media for back-up (diskette, tape, etc.), the extreme reliability of the resident media offers three in-system alternatives. To protect key data, your customer can transfer to dedicated tracks on any one disc, a second disc, or an additional drive.

Cost-Effectiveness

The total cost of ownership involves several factors: Initial investment

Cost per byte

Cost of maintenance and service

Interface engineering costs

Cost of future upgrades

Compare the entire 601 product line. Compare the 601 quality. Compare the 601 on a cost-per-byte basis. Compare and you'll discover for yourself that the 601 offers you more for your investment.

- The 601 series offers a radical decrease in cost-per-byte as capacity increases.
- With the 601, your system uses less power and the user has no removable packs to replace.

High MTBF protects your investment in equipment and data base.

The documentation and engineering support available makes interface both easy and economical.

To upgrade the capacity of a 601 from 25 megabytes to 50 or 75 megabytes requires no change in equipment structure and only one hour up-grade time.

Service Support System

Our worldwide Service Support System of over 1,400 employees provides assistance to all our customers in these key areas:

Field Services: with training and documentation for your service technicians and a Third-Party Maintenance program.

We pride ourselve excellence, in our ability to serve you."

Customer Service: with computerized spares inventory, order tracking system, and order entry, and a Customer Service Department staffed with interested professionals committed to you and your product.

Product Management: with a team of highly skilled product managers who can supply your sales representatives with detailed data and assistance.

Advertising: with the image of Memorex, an industry leader with a reputation for quality excellence, with advertising support, and with a complete series of publications and documentation on the 601 disc drives.

Engineering: with a team of skilled, high-technology engineers to assist you in interfacing and with technical support. Manufacturing: with Memorex's unique "Total Quality System", including production of our own media and heads.

In all, you'll find the Memorex OEM Service Support System to be the most comprehensive in the industry. All of these support functions are staffed with dedicated Memorex employees who are committed to making you a success.

Memorex also supplies a complete line of computer media OEM products—disc packs, computer tape, and flexible discs.

At Memorex we pride ourselves on quality excellence, in our products and our ability to serve you.

Memorex Corporation— Quality, Value, Service.

Founded in 1961, Memorex employs nearly 12,000 highly skilled people in more than 100 locations throughout the world. With modern headquarters and major manufacturing facilities in Santa Clara, California, Memorex also has production facilities in Liege, Belgium; Nogales, Mexico; Eau Claire, Wisconsin; and Irvine, Santa Ana, and Anaheim, California plus a network of regional warehousing and distribution 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 products today includes high quality disc tape and semiconductor data storage systems; telecommunications processors and terminals; computer tape, disc packs and data modules; audio and video tapes: word processing supplies; and field engineering and facilities management services.

onquality products and our

Specifications

| | Megabytes 25, 50, 75 |
|-----------------------|-------------------------|
| Capacity (unformatted |) |
| Track Capacity | 17,920 bytes |
| Cylinder Capacity | 72K/143K/ |
| | 215K bytes |
| 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 | 885K bytes/sec |

Recording Characteristics

| - | M | egabytes | S |
|----------------|----|----------|----|
| | 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 | 25.4 cm (10.0 in)* |
| Depth | 72.4 cm (28.5 in) |
| Weight | 40.4 kg (89.0 lbs)** |
| | cm (15.0 in) with power supply |
| **55.4 | kg (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

100/11 7/208/230 VAC ± 10%, 60 Hz 100/110/125/200/220/230/240 VAC ± 10%, 50 Hz

© Memorex Corporation 1979



Memorex Corporation

San Tomas at Central Expressway Santa Clara, CA 95052 Phone (408) 987-1000 Telex 346-442

220 V

3

0