

3670 Disc Storage Subsystem General

The Memorex 3670 Disc Storage Subsystem is a plug-compatible replacement for the IBM 3330 Disc Storage Facility on the IBM System/370. With the optional 2860 Selector Channel Attachment feature (available on the 3671 Storage Control Unit only) all of the performance and functional capability of the 3670 become available to large IBM System/360 systems running under OS MFT/MVT. Significant features, standard on the 3670, include Rotational Position Sensing, Multiple Requesting, and Command Retry.

The Memorex 3670 Disc Storage Subsystem may be comprised of a 3671 Storage Control Unit and from one to four 3670 Disc Drive Modules. In this configuration, the 3670 subsystem is the equivalent of the IBM 3830 Model 1/3330 Storage Facility.

In larger configurations, the Memorex 3670 Disc Storage Subsystem may be comprised of a 3672 Storage Control Unit, from one to four 3673 Disc Controllers, and from one to sixteen 3670 and/or 3675 Disc Drive Modules. Using the 3672 Storage Control Unit, a maximum subsystem capacity of over 6.4 billion bytes may be achieved.

Additionally, the Memorex 3673 Disc Controller allows the attachment of 3670 and/or 3675 Disc Drive Modules to the IBM integrated 3330 attachments on the System/370 Models 125, 135, 145, 158, and 168.

With the optional Multiple Channel Switching and String Switching features, the 3670 Disc Storage Subsystem may be accessed by alternate channels and/or control units from a single processor or shared by multiple processors.

3673 Disc Controller Description

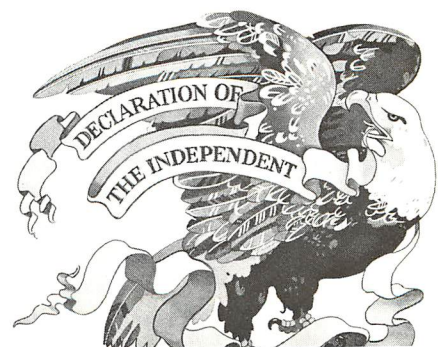
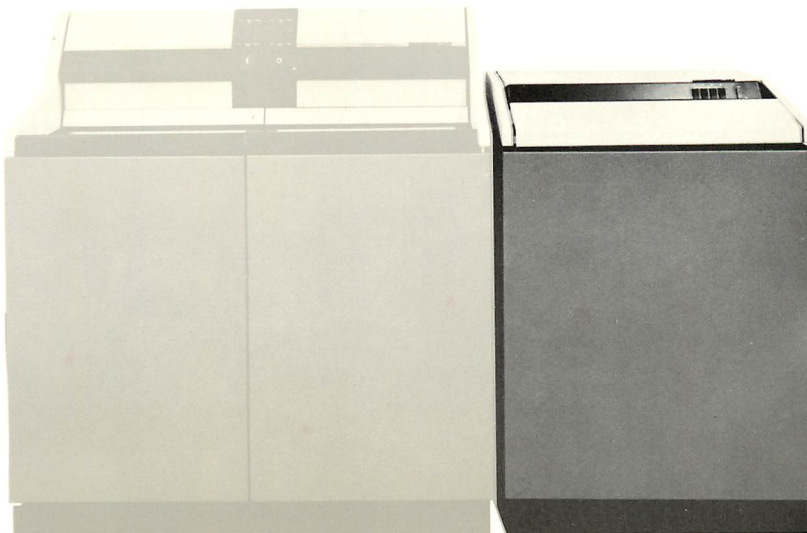
The 3673 Disc Controller is an electronic interface unit designed to provide drive-related control functions for 3670 and/or 3675 Disc Drive Modules, and to work in conjunction with the 3672 Storage Control Unit, or with an IBM integrated control unit (available on the System/370 Models 125, 135, 145, 158, and 168) to provide primary on-line direct access storage. Fully automatic operation requires a minimum of operator intervention.

Optional 2, 3, and 4 String Switch features allow the 3673 to interface with multiple storage control units, under program or manual control, for critical applications requiring the ultimate in availability and performance.

When combined with a 3670 Model 1 or 3675 Disc Drive Module, the 3673 is plug-compatible with and functionally equivalent to the IBM 3333 Disc Storage and Control Models 1 and 11, respectively, when attached as specified above.

MEMOREX

3673 Disc Controller



THE COMPUTER HISTORY MUSEUM



**3673 Disc Controller
Features**

Up to four 3670 or 3675 Disc Drive Modules in any combination may be attached to a 3673, for a maximum of eight spindles per 3673, although IBM integrated attachment constraints may limit attachment to a smaller number.

Up to four 3673 Disc Controllers may be attached to a Memorex 3672 Storage Control Unit with 32 drive addressing capability.

Fully compatible in operation with the 3672 and System/370 integrated control units, the 3673/3670/3675 supports the same operational commands as the IBM 3333/3330 enabling efficient processing of all sequential and randomly organized files.

Full support of Command Retry, Rotational Position Sensing (RPS), Multiple Requesting, Command Chaining (including Disconnected Command Chaining), Record Overflow, and Write Format Release (3675 only), permits improved performance through those features supported by the IBM software.

Dynamic sharing of the 3673 between any combination of up to four 3672(s) and/or System/370 integrated control units is possible with the optional String Switch features (String Switching is not supported by the 370/125 DDA).

The 3673 may be attached to the same 370/135 IFA or 370/145, 158, 168 ISC as an IBM 3333 Model 1 or 11, or an IBM 3340 Model A2, and operated concurrently, as long as configuration limitations are honored and appropriate features are installed.

**3673 Disc Controller
Optional Features****Multiple String Switching**

Two, three, and four string switching permit alternate storage control units from the same or multiple processors to share the 3673/3670/3675 subsystem.

**3673 Disc Controller
Highlights****System Interface**

System/370 Models 135, through 195, and System/360 Model 195: Attaches via Memorex 3672 Storage Control Unit to Block Multiplexer Channel.

System/370 Model 125:

Attaches to 3333/3330 Direct Disc Attachment

System/370 Model 135:

Attaches to 3330/3340 Integrated File Adapter

System/370 Models 145, 158, and 168:

Attaches to Integrated Storage Control

Data Transfer Rate

806,000 bytes/second

System Limitation

Operates with System/370 or any other system compatible with the IBM 3333/3330 with configuration limitations equivalent to the IBM 3333.

Power Requirements

208/230 VAC, 60 \pm 1.0 Hz, 3 Phase, 60 AMP

220/380 VAC, 50 \pm 1.0 Hz, 3 Phase, 60 AMP

(modules powered from 3673)

Physical Dimensions

28" wide x 40" high x 32" deep

Weight

360 pounds

Operating Environment

60°-90° F, 20%-80% Relative Humidity

BTU Output

2,950 BTU/hour

Memorex Corporation

Equipment Group
San Tomas at Central Expressway
Santa Clara, California 95052