

# **DISK SUBSYSTEM**

## **MODEL 6621/6622/6624/6631/6632/6634 SERIES**

### **and MODEL 80062/80064/80072/80074 SERIES**

---

**WARNING:** This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for Class A computing devices pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference.

**NOTICE:** DATA GENERAL CORPORATION (DGC) HAS PREPARED THIS DOCUMENT FOR USE BY DGC PERSONNEL, CUSTOMERS AND PROSPECTIVE CUSTOMERS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT DGC'S PRIOR WRITTEN APPROVAL.

DGC reserves the right to make changes in specifications and other information contained in this document without prior notice, and the reader should in all cases consult DGC to determine whether any such changes have been made.

THE TERMS AND CONDITIONS GOVERNING THE SALE OF DGC HARDWARE PRODUCTS AND THE LICENSING OF DGC SOFTWARE CONSIST SOLELY OF THOSE SET FORTH IN THE WRITTEN CONTRACTS BETWEEN DGC AND ITS CUSTOMERS. NO REPRESENTATION OR OTHER AFFIRMATION OF FACT CONTAINED IN THIS DOCUMENT, INCLUDING BUT NOT LIMITED TO STATEMENTS REGARDING CAPACITY, RESPONSE-TIME PERFORMANCE, SUITABILITY FOR USE OR PERFORMANCE OF PRODUCTS DESCRIBED HEREIN SHALL BE DEEMED TO BE A WARRANTY BY DGC FOR ANY PURPOSE, OR GIVE RISE TO ANY LIABILITY OF DGC WHATSOEVER.

IN NO EVENT SHALL DGC BE LIABLE FOR ANY INCIDENTAL, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES WHATSOEVER (INCLUDING BUT NOT LIMITED TO LOST PROFITS) ARISING OUT OF OR RELATED TO THIS DOCUMENT OR THE INFORMATION CONTAINED IN IT, EVEN IF DGC HAS BEEN ADVISED, KNEW, OR SHOULD HAVE KNOWN OF THE POSSIBILITY OF SUCH DAMAGES.

CEO, DASHER, DATAPREP, DESKTOP GENERATION, ECLIPSE, ECLIPSE MV/4000, ECLIPSE MV/6000, ECLIPSE MV/8000, GENAP, INFOS, MANAP, microNOVA, NOVA, PRESENT, PROXI, SWAT, TRENDVIEW, and AViiON are U.S. registered trademarks of Data General Corporation.

Ordering No. 014-001761  
Copyright © Data General Corporation, 1990  
All Rights Reserved  
Printed in the United States of America  
Rev. 01, February 1990

To order this or other Data General publications, contact your local Data General sales representative or Data General's Technical Information and Publications Service (TIPS) at:

Data General Corporation  
4400 Computer Drive  
Westboro, MA 01581  
Attn: Educational Services, MS G214  
(617) 870-1600

# DISK SUBSYSTEM

## MODEL 6621/6622/6624/6631/6632/6634 SERIES and MODEL 80062/80064/80072/80074 SERIES

### PRODUCT SPECIFICATION

#### Mechanical

##### Drive Dimensions

Height	6.85 inches
Width	8.82 inches
Depth	29.68 inches
Weight	43.0 lbs (1.2GB) 35.0 lbs (.6GB)

##### Controller

Single 15 in. square board

##### AC Power

AC Volts (RMS)	Voltage Tolerance (%)	Frequency
100	+10 / -10	50 Hz
100	+10 / -10	60 Hz
120	+10 / -15	60 Hz
200	+10 / -15	50 Hz
200	+10 / -15	60 Hz
220	+10 / -15	50 Hz
240	+10 / -15	50 Hz

#### Environmental

##### Temperature Range

Maximum Internal Cabinet Air  
104° F (40° C)

##### Maximum Change Rate

Operating 18° F/hour (10° C)  
Stored 45° F/hour (25° C)

##### Relative Humidity, Noncondensing

Operating 20% to 80%  
Stored 10% to 90%

##### Maximum Change Rate

10% per hour

##### Altitude

Operating -1000 to 8000 feet  
(-305 to 2438 meters)  
Stored -1000 to 25000 feet  
(-305 to 7620 meters)

##### Vibration, Operating, 3 axis

5-10 Hz .1 inches DA  
10-2000 Hz .25 G-pk

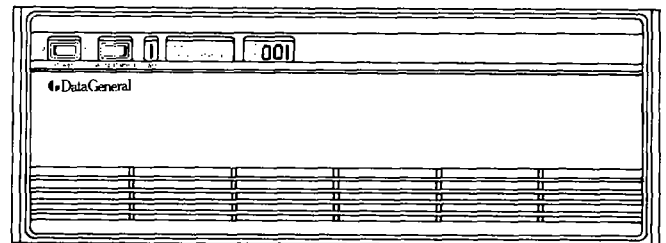
##### Shock, Operating, 3 axis

3.0 gs 11 ms.

### OPERATING PROCEDURES

#### Control Panel

The control panel consists of the switches, indicators, and digital displays located on the front panel of the rack-mounted drive. The figure shows you a control panel with the front dress panel (cover) on, and Tables 1 and 2 explain the switches and indicators.



**Table 1 Control Panel Switches**

<b>POWER</b>	Turns the AC power on or off.
<b>WRITE-PROTECT</b>	Enables write protection so disk surfaces cannot be written on.
<b>UNIT SELECTOR</b>	Selects the unit number (address) for a particular drive.

**Table 2 Control Panel Indicators and Displays**

<b>UNIT</b>	Shows the unit number selected for a particular drive.
<b>READY</b>	Lit: The drive has AC power, is powered up, is within operating temperature range, within operating temperature range, has completed power-up self tests, and the drive spindle is up to speed. The drive can accept commands from the controller.
<b>CHECK</b>	Lit: The drive has AC power, but either the POWER switch is turned to OFF, or the drive has powered down due to a DC power fault or a spindle fault.
<b>PROTECT</b>	Lit: The drive is write protected.
<b>STANDBY</b>	Lit: The drive is performing internal diagnostics.
<b>CYL/STAT</b>	Displays either the current cylinder number or an error code.

## Powering Up the Drive

Plug the drive into an AC power source; then turn on the drive's AC breaker (at the bottom left of the rear of the drive). The CHECK indicator will glow, indicating that the drive has power available to it. The POWER switch, located on the upper left of the control panel, should be in the off (0) position.

To turn the power on and make the drive ready for operations, toggle the POWER switch to the on (1) position. The CHECK indicator will go off when the power comes on. The drive will then cycle through its power-up diagnostics, evidenced by the indicator sequencing on the front display panel. The READY indicator will glow when the drive can accept commands from the host CPU. If the STATUS light is glowing, report the error code to Data General service personnel. A power-up error automatically inhibits normal operations.

## Powering Down the Drive

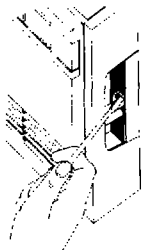
**NOTE:** Before removing power, make sure that the disk drive is released from the operating system. The procedure depends upon your particular system. If you do not release the drive, you may lose data.

To power down the drive, toggle the POWER switch to off (0). The READY indicator goes out and the CHECK indicator begins to glow. Set the AC circuit breaker (located at the bottom left of the rear of the drive) in the off position.

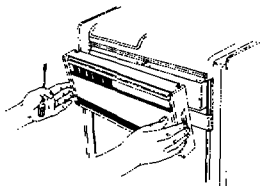
## Selecting a Unit Number

The UNIT display switch panel indicates the current unit number assigned to the drive. This number identifies the drive for operations with the computer. No two units connected on the same daisy chain cable must ever have the same unit number.

To change the unit number assigned to the drive, you must first remove the front dress panel. Push gently in on the right release latch and pull the right side of the panel toward you slightly.



Repeat on the left side to release; then pull the panel straight out toward you.



Use a small screwdriver to turn the UNIT SELECT switch until the desired number, from 0 to 7, appears in the UNIT display. Positions 8 and 9 are reserved and must not be used for number assignment.



## Write Protecting Disks

If you have information that you want to save on a disk, toggle the PROTECT switch to ON. The PROTECT indicator will glow when the disks are write protected.

## Using the Status Display

The Status Display displays either the cylinder number or status/error information, depending upon the drive state. If an error occurs during normal operations, the STATUS indicator glows and the error code is displayed in the Status Display. When the host has handled the error, the STATUS indicator goes out and the CYL indicator returns.

## Reading Display Digits

The UNIT and STATUS displays are formed from a combination of seven LED segments. Possible hexadecimal digits displayed include 0 through 9, plus A, b, C, d, E, and F. The following figure illustrates the difference between 6 and b.



## Air Filter Maintenance

**CAUTION:** Do not run the drive if the air filter is not in place.

The air filter should be cleaned regularly. To clean the air filter, remove the front dress panel. The filter is attached to the unit by adhesive strips located on the chassis panel. Pull the air filter off, being careful not to tear it; then run the filter under water and shake it dry. Put the filter back on the drive, lining it up with the adhesive strips on the unit. Replace the front dress panel. If the air filter (Data General part number 002-032898) needs to be replaced, contact your nearest Data General Sales Representative or call 1-800-DG-HELPS.