# 8.4 GB Deskstar Hard Disk Drive User's Guide Supplement

This supplement contains jumper setting, specification, and warranty information for your hard disk drive.



**IMPORTANT:** Read this entire section before returning to the User's Guide.

IBM's 8.4 GB Deskstar offers a choice of two sets of jumper configurations so that the drive will function properly on the widest range of systems. In some systems, the drive's maximum usable capacity will not exceed 7.9 GB. The following instructions will enable you to determine if your system has this limitation and will show you how to provide the best configuration for many systems not designed to use a drive larger than 2 or 4 GB.

- 1. Choose your jumper setting from the configurations in the set labeled **16 Logical Heads**. This allows the drive to tell your system that its capacity is 8.4 GB.
- 2. Return to the *User's Guide* and follow instructions beginning with Step 4 on page 1-3 in the Quick Installation Guide (Part 1) or beginning with "What to Do Next" on page 2-9 in the detailed Installation Guide (Part 2).
- 3. If you follow the steps in the *User's Guide*, and your drive *IS* recognized by the configuration-setup program, complete the installation using the steps in the *User's Guide*. If a lesser capacity is reported, you will need to use *Disk Manager* to access the drive's full capacity.
- 4. If your drive seems to lockup or hang after you restart your system, check your interface and power supply connections. Next, attempt to disable the autodetection facility of your setup software as described on page 2-20 of the *User's Guide*. If your drive is still not working correctly, return to step 5 here.
- 5. Your system may be unable to start because the setup program in your BIOS is unable to operate correctly with a drive that identifies itself as 8.4 GB. You must therefore switch the configuration jumpers on the drive to the appropriate choice in the set titled **15 Logical Heads**. (Your option includes a small bag with a third jumper if you need it.) The 15 Logical Heads jumper setting allows the BIOS to treat your drive as a 7.9 GB drive. Return to the *User's Guide* as directed in step 2 above and attempt to complete the installation again. You will need to use *Disk Manager* to access your drive's full capacity. If your system still locks up or hangs, refer to "Step 2. Placing the Call to IBM" on page 3-11 of the *User's Guide*.

# **ATTENTION: OS/2 Users**

This hard drive requires the latest OS/2 driver enhancements to utilize its full capacity. Go to the OS/2 Device Driver Web page (**OS/2 Device Driver Pak**) located at http://service.software.ibm.com/os2ddpak/html/index.htm to obtain the OS/2 hardfile updates. Select "OS/2 Component Updates." Select "Installation Diskette Updates." Then select "Greater than 4.3 GB IDE Hardfile Support." Next, download the "idedasd.exe" file. (Read "helpful instructions" for download instructions.) Follow all the instructions in the "readme" included in the "idedasd.exe" file to install the hardfile updates. Use the diskettes to install the driver enhancements that allow OS/2 to utilize the full capacity of the 8.4 GB hard disk drive.

Operating Environment:	Operating / Not Operating		
Shock (11ms)	10 G/75 G		
Temperature	5°–55°C/0°–65°C		
Relative humidity	8%-90% / 5%-95%		
Vibration	1.0 G/2.0 G		
Power Requirements (all values typical averages):			
+5 V dc idle amps	0.32		
+12 V dc idle amps	0.26		
+5 V dc startup amps	0.60		
+12 V dc startup amps	2.0		
Idle power watts	4.7		
Performance (all values typical averages):			
Read - seek time	9.5 ms		
Write - seek time		10.5 ms	
Rotational speed	5400 RPM		
Buffer size	512 KB		
Part Numbers:			
Commercial option part number		01K1316	
Retail option part number		01K1318	
Drive part number	00K0393		
Logical Parameters (may be either 8.4 GB or 7.9 GB):	8.4 GB capacity	7.9 GB capacity	
Number of heads	16	15	
Number of cylinders	16351	16383	
Number of sectors per track	63	63	
Disk Drive Configuration:			
Formatted capacity	8400 MB		
Track density - (TPI)	10700		
Areal density (average) (Mbits / sq. inch)	1493		
Disk Transfer (Buffer to Host):			
Burst (MB/sec) (max) (Ultra ATA/Ultra DMA Mode-2)	33		
Burst (MB/sec) (max) (DMA Mode-2)	16.6		
Burst (MB/sec) (max) (PIO Mode-4)	-	16.6	
Sustained (MB/sec)	5.7–	5.7–10.2	

Actual performance varies based upon many factors and is frequently less than the maximum possible. Up to 50 KB reserved for drive firmware.

The following warranty information applies to products purchased in the United States, Canada, and Puerto Rico. For warranty terms and conditions for products purchased in other countries, see the enclosed Warranty insert, or contact your IBM reseller or IBM marketing representative.

International Business Machines Armonk, New York, Corporation 10504

Machine: 8.4 GB Deskstar Hard Disk Drive P/N: 01K1316, 01K1318

Warranty Period\*: Three Years

\*Contact your place of purchase for warranty service information.

#### **Production Status**

Each Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine's production status, IBM's warranty terms apply.

### The IBM Warranty for Machines

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications. The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your receipt is the Date of Installation, unless IBM or your reseller informs you otherwise.

During the warranty period IBM or your reseller, if authorized by IBM, will provide warranty service under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine.

For IBM or your reseller to provide warranty service for a feature, conversion, or upgrade, IBM or your reseller may require that the Machine on which it is installed be 1) for certain Machines, the designated, serial-numbered Machine and 2) at an engineering-change level compatible with the feature, conversion, or upgrade. Many of these transactions involve the removal of parts and their return to IBM. You represent that all removed parts are genuine and unaltered. A part that replaces a removed part will assume the warranty service status of the replaced part.

If a Machine does not function as warranted during the warranty period, IBM or your reseller will repair it or replace it with one that is at least functionally equivalent, without charge. The replacement may not be new, but will be in good working order. If IBM or your reseller is unable to repair or replace the Machine, you may return it to your place of purchase and your money will be refunded.

If you transfer a Machine to another user, warranty service is available to that user for the remainder of the warranty period. You should give your proof of purchase and this Statement to that user. However, for Machines which have a life-time warranty, this warranty is not transferable.

#### Warranty Service

To obtain warranty service for the Machine, you should contact your reseller or call IBM. In the United States, call IBM at

**1-800-772-2227**. In Canada, call IBM at **1-800-565-3344**. You may be required to present proof of purchase.

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When a type of service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours. You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item. Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service. You also agree to ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange.

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- 2. where applicable, before service is provided ----
  - a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provide,
  - b. secure all programs, data, and funds contained in a Machine, and
  - c. inform IBM or your reseller of changes in a Machine's location.

IBM is responsible for loss of, or damage to, your Machine while it is 1) in IBM's possession or 2) in transit in those cases where IBM is responsible for the transportation charges.

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2. the amount of any other actual direct damages or loss, up to the greater of U.S. \$100,000 or the charges (if recurring, 12 months' charges apply) for the Machine that is the subject of the claim.

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