



Quick installation guide

Ultrastar 18ES

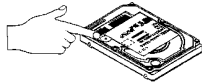
Single-ended/multi-mode SE/LVD



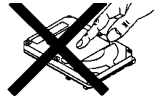
Models: DNES-318350
DNES-309170

Handling precautions

1. Do not cover the breather hole! Covering the breather hole may result in loss of data.



2. Do not press on the drive! Do not apply any force to the drive during handling or installation.



3. Always handle the drive with care to prevent damage from shock, vibration, or electrostatic discharge (ESD).
4. Do not open the static-protective bag containing the drive until required. Static electricity can damage the drive.
5. Turn off and unplug your computer before removing the case.
6. When you are installing the drive, touch the static-protective package containing the drive to a grounded, unpainted metal surface for at least two seconds. (This drains static electricity from the package and from your body.)
7. Handle the drive carefully by the edges. Do not touch any exposed printed circuit board.
8. Save your drive packaging materials including the ESD bag in the event that the drive must be returned. Place the drive in an anti-static bag before placing it in the shipping container. The warranty will be void if the drive is not returned in IBM approved packaging.

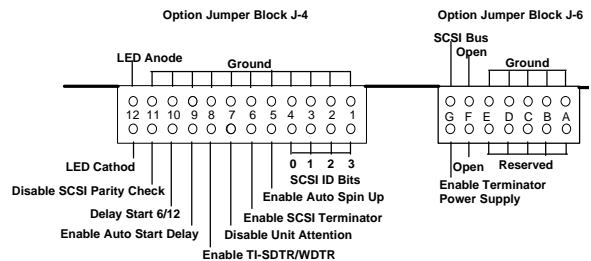
Installation procedure

Note: It is advisable to backup all data before proceeding with the installation.

This procedure may require the use of a bootable System Diskette containing FDISK.COM and FORMAT.COM.

Setting the address

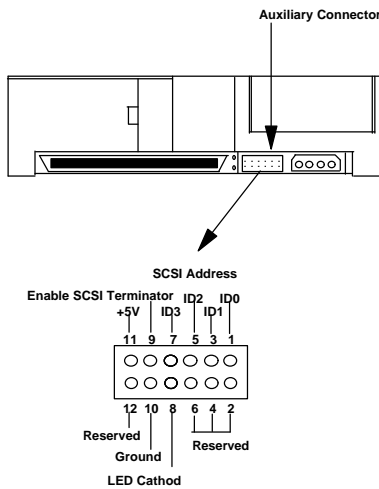
1. Each drive on the SCSI bus must have a unique address. Sixty eight and eighty pin (Wide SCSI) devices have 16 possible addresses.
2. SCSI address bits 3,2,1, and 0 of the 32 pin Option Jumper Block are used to select the SCSI device ID.



*80 pin models do not have Option Jumper Block J-6
*Position #6 is "Force Single-ended Mode" on multi-mode SE/LVD models.

Note: In the table below, "off" means a jumper is not in place and "on" means a jumper is in place.

Bit 3	Bit 2	Bit 1	Bit 0	Address
off	off	off	off	0
off	off	off	on	1
off	off	on	off	2
off	off	on	on	3
off	on	off	off	4
off	on	off	on	5
off	on	on	off	6
off	on	on	on	7
on	off	off	off	8
on	off	off	on	9
on	off	on	off	10
on	off	on	on	11
on	on	off	off	12
on	on	off	on	13
on	on	on	off	14
on	on	on	on	15



Note: Pin #9 is valid only for single-ended model. LVD/SE multi-mode model has no terminator.

Attaching the drive

1. Turn off the computer, unplug the power cord, and open the case.
2. If the DRVS drive is the only device on the SCSI cable, attach it to the end of the cable furthest from the controller. (Note that the using system is responsible for making sure that all required signals are terminated at both ends of the cable.)
3. Select the other option jumpers as required by your computer.
4. Attach the power connector.

Mounting the drive

1. Mount the drive securely, using the appropriate brackets or rails, in any axes, using four 6-32 UNC metric screws in the bottom or side mounting holes.
2. The maximum screw insertion depth for mounting is 4.0mm.

Configuring your computer

1. Plug in the power cord, insert the System Diskette and power on your computer. Your computer may detect a configuration change and prompt you to proceed to the Setup screen. If so, proceed to step 3.

2. If your computer does not prompt you to enter reconfiguration, refer to your computer's documentation for the proper key sequence.
3. Follow the Setup menu to configure your computer with your new SCSI drive. It may be necessary to restart your computer for the changes to take effect.

Partitioning and formatting (with DOS 5.0 or later)

Caution: Be sure that you select the correct hard drive. Partitioning and formatting will erase all data.

1. At the DOS prompt type FDISK, press [ENTER], and follow the instructions on the screen.
2. To format the primary system drive, type FORMAT C:/S at the DOS command prompt and press [ENTER]. The /S parameter makes C: the operating system startup drive.
3. To format a second drive (not C:), type FORMAT X: (where X is the drive letter assigned by FDISK) at the DOS prompt and press [ENTER].
4. Remove the diskette and restart your computer. The installation is complete.

If your system will not boot up after complete installation, recheck all settings. If the system still fails to boot up, remove the new drive to return the system to its original configuration and call the IBM Hard Disk Drive Technical Support Center.



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Printed in the United States of America
01-99

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Produced by the IBM Hard Disk Drive Technical Support Center.

OEM Hard Disk Drive Specifications for DNES-318350/DNES-309170 SE model and LVD/SE multi-mode model, rev. 1.0

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Date: 11 January 1999