IBM

Quick installation guide
Ultrastar 73LZX
Ultra 160 SCSI

Models: IC35L009UWD210 IC35L036UWD210
         IC35L009UCD210 IC35L036UCD210
         IC35L018UWD210 IC35L073UWD210
         IC35L018UCD210 IC35L073UCD210
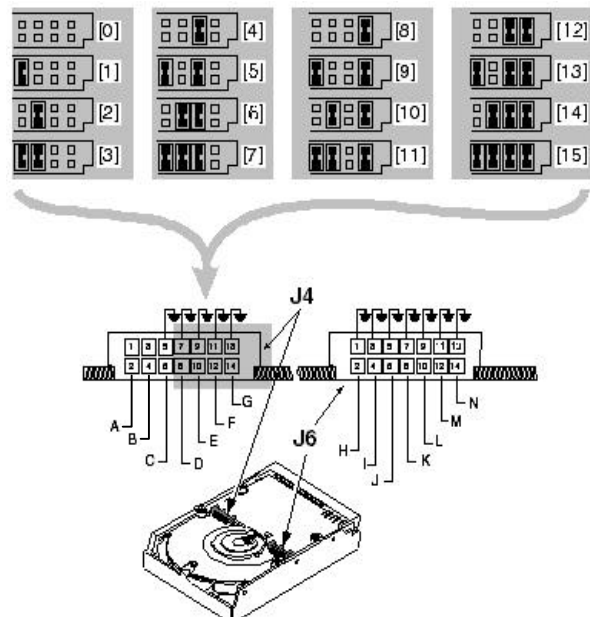
Handling precautions

- Do not open the electrostatic discharge (ESD) bag containing the drive until required.
- Do not apply pressure on the drive during handling or installation.
- To prevent damage from impact or vibration always set the drive down gently.
- Handle the drive carefully by the edges. Do not touch the exposed printed circuit board or any electronic components.
- Do not cover the breather hole! Covering the breather hole may result in loss of data.
- Save the packaging materials including the ESD bag in the event that the drive must be returned.

Installing the drive

1. Backup all data.
2. Record the serial number and part number of your hard drive for future reference.
3. Turn off the computer and remove the computer system cover.
4. Before handling the hard disk drive, discharge any static electricity from yourself and your clothing. With one hand touch an unpainted metal surface on the computer chassis, then touch the ESD bag with the other hand for a minimum of two seconds.
5. Remove the hard drive from the ESD bag.
6. Unplug the computer.
7. Assign a SCSI address (0 through 15) to the drive by installing a jumper on the appropriate ID bits (pin pairs D, E, F, and G) on jumper block J4 as shown on the shaded area in the illustration below.

   Address 6 is the shipping default for 68-pin models
   Address 7 is normally reserved for the host adapter

Address jumper and drive option blocks

8. Select the desired options by placing a jumper on the pin pair for that option. The options are listed below cross-referenced by a letter to the two jumper blocks in the above illustration. Refer to the Ultrastar 73LZX product summary for a description of the options.

   A Pin pair for LED connection
   B Termination Power (68-pin model only)
   C Force Single-ended Mode
   H Enable Auto Spin (68-pin model)
      Disable Auto Spin (80-pin model
   I Auto Start Delay
   J Delay Start 6/12
   K Disable Parity
   L Target Initiated Sync Negotiation
   M Disable Unit Attention
   N Reserved

SPECIAL NOTES:

- For this drive to operate in LVD mode all SCSI devices including the SCSI bus host adapter must be LVD devices.
- The drive is designed to detect if the SCSI bus is LVD or SE. The drive will function based upon the mode that it detects. If for some reason the drive cannot detect an SE mode bus, place a jumper on pins 5 & 6 of jumper block J-4 to force SE mode.
- On 68 pin drives termination power must be provided. In most cases it is provided by the host adapter. If it is not, install a jumper on pins 3 & 4 of jumper block J-4 to enable termination power. See the illustration above. (The 80-pin drive does not provide termination power.)

9. For a 68 pin drive attach the power cable and ensure that one end of the SCSI cable is connected to the host adapter. Attach a terminator to the end of the SCSI cable furthest from the host adapter. If the drive is the only device on the SCSI cable, attach it to the cable connector closest to the terminator. Additional drives may be attached to any unused connector. (The 80-pin drive is plugged into server backplanes and requires no cables.)
10. Using the appropriate brackets or rails, mount the drive with any of its six surfaces facing down. Retrieve any loose screws or parts from within the computer.
11. Ensure that cables are properly routed.
12. Plug in your computer. Do not turn it on.
13. Insert the operating system (OS) setup diskette into the floppy drive.
14. Turn on your computer.
    - If the system boots up, turn off your computer and replace the cover.
    - If your system does not boot up, turn off your computer and check all connections and settings. Turn on and boot the system.
    - If the system still fails to boot up, turn off your computer and remove the new drive to return the system to its original configuration. Contact the IBM Technology Group Support Center.

Partitioning and formatting (using DOS 5.0 or later)

CAUTION: Partitioning and formatting will destroy any previous data. When partitioning and formatting a drive in a system with more than one drive be sure that you select the correct hard drive.

1. With the OS setup diskette inserted in the floppy drive, turn on the computer.
2. At the DOS prompt type **FDISK**, press **ENTER**, and follow the instructions on the screen.
3. 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.
4. 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**.
5. Remove the diskette and restart your computer. The partitioning and formatting is complete.
6. Install the operating system.

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