IBM

Quick installation guide
Ultrastar 2XP
SCSI

Models: DCHS-04F, DCHS-04W, DCHS-04E,
DCHS-04S, DCHS-04U, DCHS-04X, DCHS-04Y,
DCHS-09F, DCHS-09W, DCHS-09E, DCHS-09S,
DCHS-09U, DCHS-09X, DCHS-09Y

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. Remove cover.
6. When installing the drive, touch a grounded, unpainted metal surface with the static-protective package containing the drive 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 the drive packaging material 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.
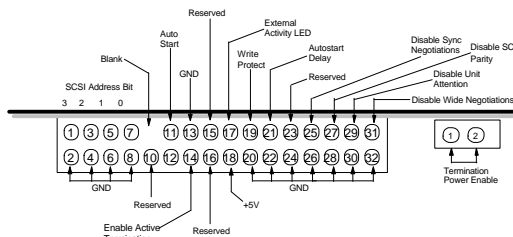
Quick installation procedure

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

This procedure may require 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. Fifty-pin (Narrow SCSI) devices have eight possible addresses (0-7) with address 7 (highest priority) normally reserved for the controller. Sixty- eight pin (Wide SCSI) devices have 16 possible addresses.
2. SCSI address bits 3 (68- & 80-pin models only), 2, 1, and 0 of the 32-pin Option Jumper Block are used to select the SCSI device ID.
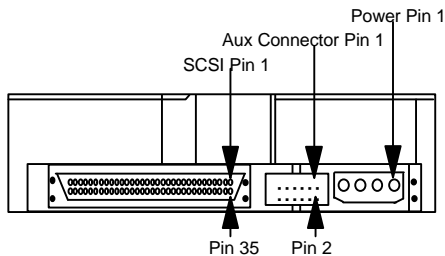

Note: For attachment to a Macintosh, place jumpers on pins 29 & 30 to Disable Unit Attention and pins 11 & 12 for Auto Start.

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

*Shipping default ID
Bit 3 does not exist on 50-pin models.
In the table above, "off" means a jumper is not in place and "on" means a jumper is in place.

Power Pin 1
Aux Connector Pin 1
SCSI Pin 1
Pin 35   Pin 2

Attaching the drive
1. Turn off the computer, unplug the power cord and open the case.
2. The DCHS drive requires Active Termination on both ends of the SCSI cable (the SCSI controller normally provides internal termination for one end of the cable). If the DCHS drive is the only device on the SCSI cable, attach it to the end of the cable furthest from the controller and enable termination by placing a jumper across pins 13 and 14 of the Option Jumper Block. If the drive is attached to a cable that contains other devices and the new drive is not attached to the end of the cable, the jumper across pins 13 and 14 must be removed and Active Termination must be supplied by the device at the end 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 3.8 mm (.15 in).

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 re-configuration, enter your computer's Setup, typically by key selection or keyboard combinations during power-on or during a reboot. 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 (using 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.