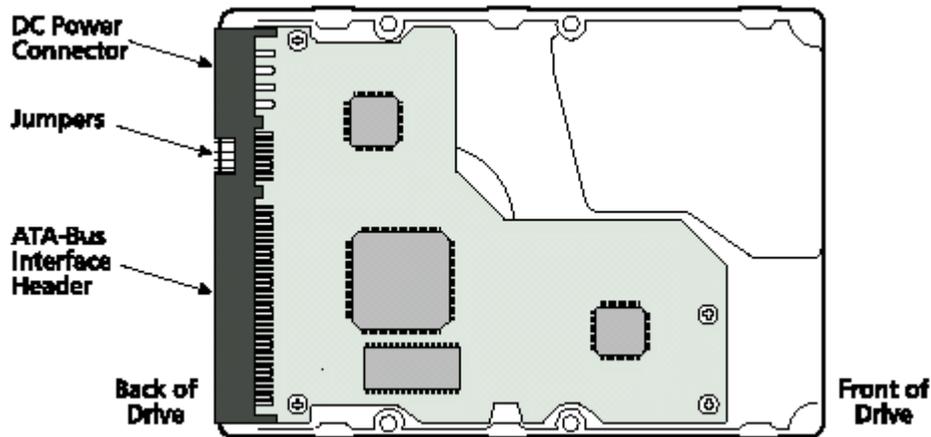


Fireball.lct10



Jumper Settings

	DS	CS	PK	Rsvd
Stand Alone (Default)	ON	OFF	X	OFF
Master with Slave Present	ON	OFF	X	OFF
Slave to Master	OFF	OFF	X	OFF
Cable Select *	OFF	ON	X	OFF

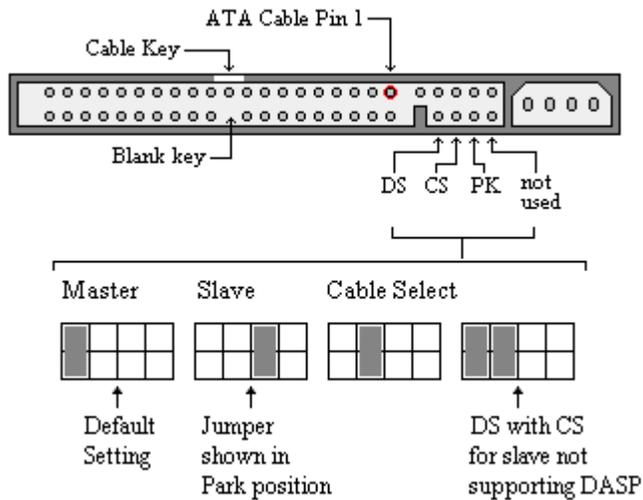
X= PK is a Parking position. The presence or absence of this jumper has no effect on the drive. Labeling may indicate to place this jumper when configuring as a slave. This is to provide for retention of the jumper in the event that it is needed later.

*Note: Cable Select (CS) utilizes a special cable configuration where the drive setting (Master or Slave) is determined by its position on the 40-pin ATA cable. In this type of configuration both drives will have their jumper set to CS. Cable Select is utilized on some OEM systems and is typically required for systems utilizing Ultra ATA/66. For Ultra ATA/66 compliant cables, the master drive is placed on the outside (end) cable connector and the slave drive is placed on the intermediate cable connector.

Jumper Locations

The Maxtor® Fireball™ lct10 disk drive has only one location where user configurable jumpers are found. The jumper block is incorporated into the ATA / IDE cable connector. Using the jumper pins you can establish the drive Master/Slave configuration.

The Maxtor Fireball lct10 was developed by Quantum Corporation prior to its merger with Maxtor.



BIOS Settings

The following BIOS parameters are provided for customers to manually configure the Fireball lct10 disk drive. Both base 2 and base 10 capacity values are displayed.

	5.1 GB	10.2 GB	15.0 GB	20.4 GB	30.0 GB
Logical Cylinders	10,585	16,383 *	16,383 *	16,383 *	16,383 *
Logical Heads	15	16	16	16	16
Logical Sectors/Track	63	63	63	63	63
Total Logical Sectors	10,002,825	20,044,080	29,336,832	39,876,480	58,633,344
Base 10 Capacity	5,121 MB	10,262 MB	15,020 MB	20,416 MB	30,020 MB
Base 2 Capacity	4,884 MB	9,787 MB	14,324 MB	19,470 MB	28,629 MB

*Note: ATA (IDE) drives with a physical capacity greater than 8.4GB have their default logical C/H/S values limited to 16,383/16/63 as per the ATA-4 specification. Drives greater than 8.4GB in capacity require LBA support. Capacity could be restricted to 8.4GB (or less) due to system BIOS limitations. Check with your system or motherboard manufacturer to determine if your BIOS supports LBA mode for ATA hard drives greater than 8.4GB.

Special Considerations

BIOS/Operating System Limitations

Hard drives greater than 2.1GB may need to be divided into multiple partitions / logical drives. MS-DOS versions 4.0 through 6.22 allow a maximum primary partition / logical drive size of 2.1GB and are limited to 8.4GB in physical drive capacity. The file systems supported by Windows 95, Windows 98 and Windows NT are not restricted to the 8.4GB physical drive limit, but LBA support in the system BIOS is required.

Hard drives greater than 8.4GB in capacity may be restricted to 8.4GB (or less) due to system BIOS limitations, operating system limitations, or both. Check with your system manufacturer to determine if your BIOS supports the correct LBA extensions for hard drives greater than 8.4GB.

Ultra ATA/66 Operation

In order to achieve the Ultra ATA/66 transfer speed, you must have a system and a BIOS that will support Ultra ATA/66. The correct drivers must be loaded, and an Ultra ATA specific data cable must be used. The Ultra ATA cables use the Cable Select (CS) method rather than the Drive Select (DS) master/slave scheme, so the drive must be jumpered to enable Cable Select. Please review our application note entitled [Ultra ATA System Requirements](#) for further details.

Drive Mounting/Handling Precautions

It is highly recommended that the hard drive be mounted on to the chassis of the system being used for general operation as well as for test purposes. Failure to hard mount the drive can result in erroneous errors during testing or normal operation. Please review our [ATA Configuration Card](#) for specifications on drive mounting.

Warning: Never allow objects to come into direct contact with the hard drive's printed circuit board (PCB) during operation. This could result in an electrical short and cause irreparable damage to the hard drive as well as loss of all data. Please observe proper mounting guidelines and specifications as described above when power is applied to the hard drive.

For Further Review:

- [ATA Configuration Card \(Includes Drive Mounting\)](#)
- [ATA Installation Flowchart](#)
- [ATA Installation Guide for Windows NT](#)
- [ATA Installation Guide for Windows95/98](#)
- [BIOS Support for logical cylinder values > 4095](#)
- [DOS/Windows 95 logical drive limitations](#)
- [Knowledge Base](#)
- [Windows NT 4.0 Capacity Issue](#)
- [The Ultra ATA/66 bus interface](#)
- [Ultra ATA/66 Compatibility with Award BIOS](#)