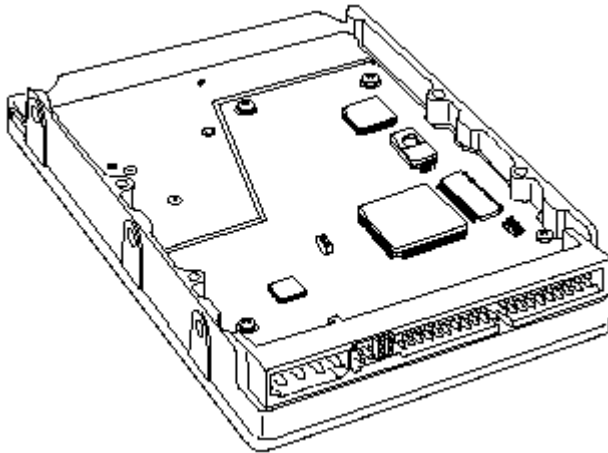


Fireball™ Plus LM



Jumper Settings

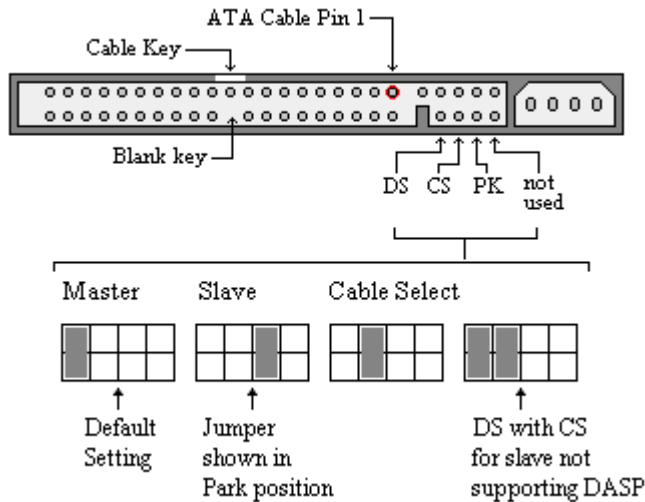
	DS	CS	PK	Rsvd
Stand Alone (Default)	ON	OFF	X	OFF
Master with Slave Present	ON	OFF	X	OFF
Slave to Master	OFF	OFF	X	OFF
Cable Select *	OFF	ON	X	OFF

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 (80 conductor), 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™ Plus LM 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.



BIOS Settings

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

	10.2 GB	15.0 GB	20.5 GB	30.0 GB
Logical Cylinders	16,383*	16,383 *	16,383 *	16,383 *
Logical Heads	16*	16*	16*	16*
Logical Sectors/Track	63*	63*	63*	63*
Total Logical Sectors	20,066,251	29,336,832	40,132,503	58,633,344
Base 10 Capacity	10,273MB	15,020MB	20,547MB	30,020MB
Base 2 Capacity	9,797MB	14,324MB	19,595MB	28,629MB

*Note: Default Logical Cylinder, Head, and Sector (CHS) values are limited to 16,383/16/63 respectively per the ATA-4 specification. ATA (IDE) disk drives with capacities greater than 8.4GB require LBA support from the system BIOS. Check with your system manufacturer to determine if your BIOS supports LBA mode for ATA hard drives greater than 8.4GB. Drive capacity may be restricted to 8.4GB (8,455MB) due to system BIOS CHS limitations.

Special Considerations

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.

In order to achieve the Ultra ATA/66 transfer speed, you must have a system and 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 a master/slave scheme, so the drive must be configured to enable Cable Select (jumper installed on CS position).

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](#)
- [Ultra ATA/66 Bus Interface](#)
- [Ultra ATA/66 Compatibility with Award BIOS](#)
- [Windows NT 4.0 Capacity Issue](#)