

## Technical Reference - Q&A

### 1. Q: Why can't I boot up my system with one hard drive on primary IDE and an optical device (CD-ROM, DVD-ROM, CD-RW, etc...) on secondary IDE If connecting the hard drive/optical device as the secondary drive?

**A:** For best compatibility and stability, please make sure your stand alone hard drive on primary IDE has jumper setting to master, and your stand alone optical device on secondary IDE has jumper setting to master, too. Also if you only have one hard drive without any other optical device, please connect the hard drive to primary IDE with its jumper setting to master.

Furthermore, for optimizing the transfer rate for the hard drive, we recommend you to connect your hard drive(s) to the primary IDE channel and optical device(s) to the secondary IDE channel. (Detailed descriptions of the jumper setting for HDD are in the Appendix)

### 2.Q:What's the meaning of AMI BIOS Beep Codes?

**A:** The following are AMI BIOS Beep Codes that can occur.

Beep Code	Descriptions
1 short	Memory refresh timer error.
2 short	Parity error.
3 short	Main memory read / write test error.
4 short	System timer failure
5 short	Process error.
6 short	Keyboard controller BAT test error.
7 short	General exception error
8 short	Display memory error.
9 short	ROM BIOS checksum error
10 short	CMOS shutdown Read/Write error
11 short	Cache Memory bad

### 3. Q: Can I install both DDR and SD RAM at the same time?

**A:** No! Please do not install DDR and SD RAM simultaneously.

### 4.Q: If I use 1 GB or more memory on the M/B, Windows 98/ME O.S. shows "Error Message: Insufficient Memory to Initialize Windows". What's wrong?

**A:** It's a limitation of Win9x/ME. Windows NT 4.0 / 2000 / XP has no problem, please check detailed information from Microsoft Web Site:

<http://support.microsoft.com/default.aspx?scid=kb;EN-US;Q184447>.

**5. Q: I have a drive that is larger than 137 GB but the operating system only recognizes 128 GB or 137 GB. How can I fix this?**

**A: First**, The OS (for example Windows series) should be able to support 48-bit LBA mode that enables the system to run and manipulate big drive, namely, only Windows 2000 and Windows XP could achieve this goal.

**Secondary**, install Service Pack to let OS support large than 137GB HDD.

1. **Windows XP**, please download and installed the latest Service Pack 1, this can support big drive directly. For further information, please refer to Microsoft's Product Support Site:

<http://support.microsoft.com/default.aspx?scid=kb;en-us;Q303013>

2. **Windows 2000**, please download and installed the latest Service Pack 3. For further information, please refer to Microsoft's Product Support Site:

<http://support.microsoft.com/default.aspx?scid=kb;en-us;Q305098>

**6. Q: Does Intel 845 series chipset support 3.3V AGP card?**

**A:** [Intel 845 chipset](#) supports 1.5V signaling AGP cards only and the AGP slot on motherboard got 1.5V key in it following the AGP specification in order to prevent a 3.3V AGP card from being plugged in. However, it turned out some AGP adapters operate at only 3.3V signaling level, were notched at the 1.5V key on the golden-finger interface. When using these cards, if the Vddq and VCC3.3 signals are shorted on them, will break up the north bridge as the Vddq is raised from 1.5V to 3.3V instead. In other words, the motherboard will be permanently damaged as a result as soon as the system is powered up with such an AGP card. According to AGP specification, AGP4X mode will work at 1.5V signaling level only. If your AGP card has the 1.5V notch as illustrated in the user's manual but it cannot support AGP4X, please check with your card provider or manufacturer whether it can operate at 1.5V signaling level.

## **Appendix:**

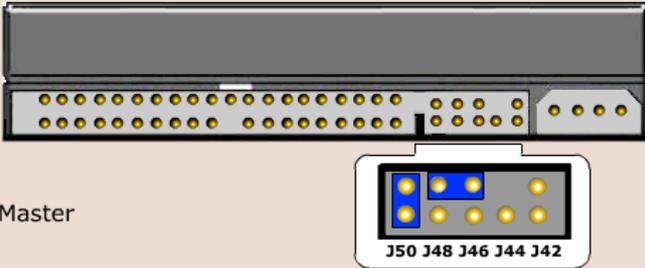
### **The Jumper Setting for Maxtor/ Quantum:**

The Jumper Setting for Maxtor has three styles: style A,B,C:

## Style A Master

ATA\_IG\_rev3 - Microsoft Internet Explorer

### Maxtor® Maxtor Style A Jumper Configuration



Master

Master     Master w/ CLJ Set

Slave     Slave w/ CLJ Set

Cable Select     Cable Select w/ CLJ Set

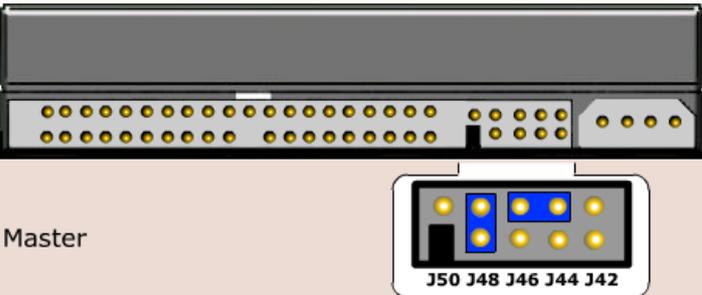
The vertical jumper over the J50 pins is configuring the drive as a Master. The horizontal jumper over the J48 and J46 pins is in the Storage position

← Back

## Style B Master

ATA\_IG\_rev3 - Microsoft Internet Explorer

### Maxtor® Maxtor Style B Jumper Configuration



Master

Master     Master w/ CLJ Set

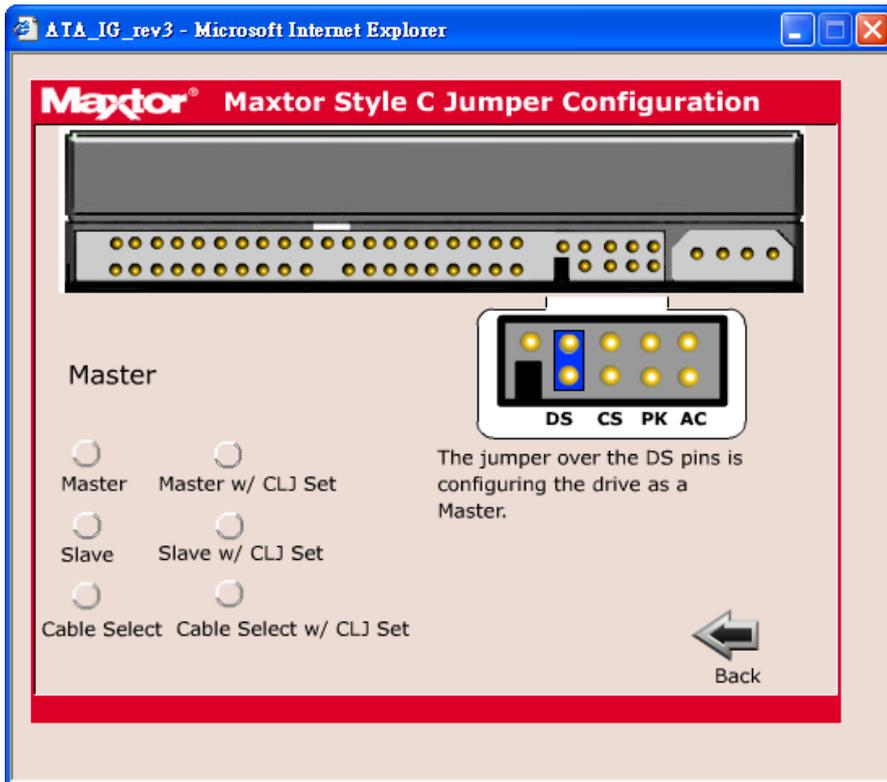
Slave     Slave w/ CLJ Set

Cable Select     Cable Select w/ CLJ Set

The vertical jumper over the J48 pins is configuring the drive as a Master. The horizontal jumper over the J46 and J44 pins is in the Storage position

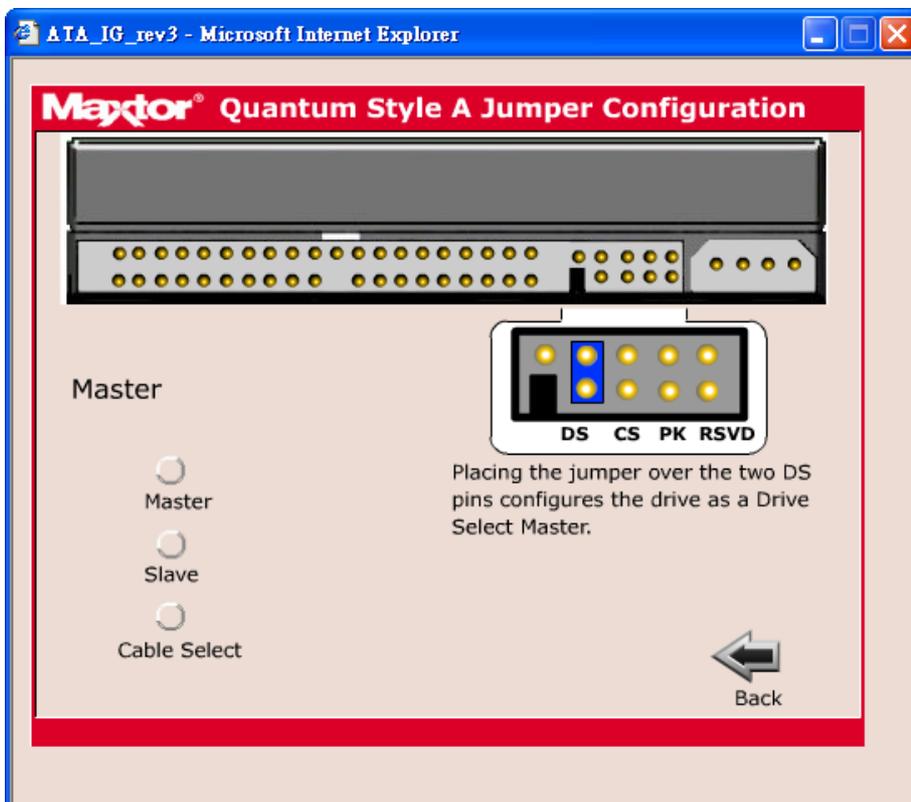
← Back

## Style C Master

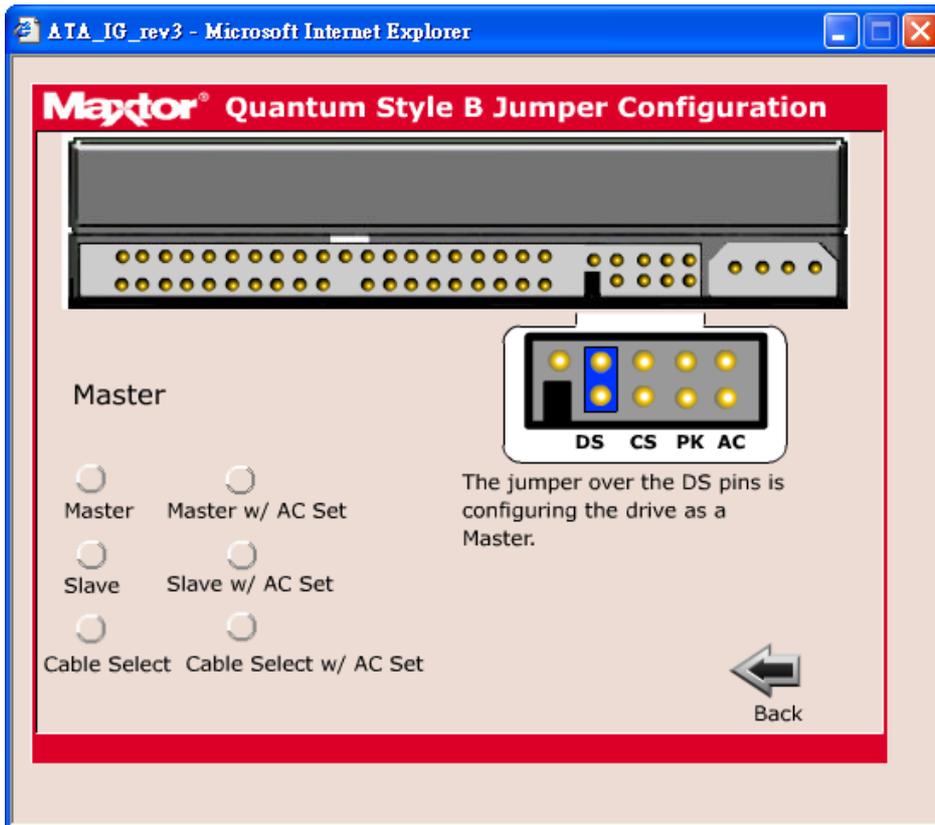


The jumper setting for Quantum has two styles: style A,B:

## Style A Master

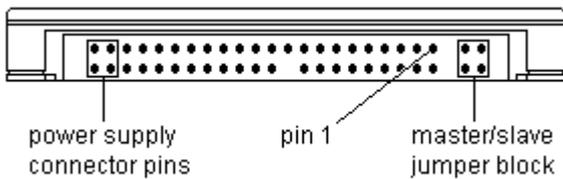


## Style B Master

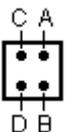


## The Jumper Setting for Fujitsu:

### Jumper Locations



### Master/Slave Jumper Block



 = jumpered

 = unjumpered

## Jumper Settings

### Jumper Setting

### Description



Master (default)

Drive is set as the master.



Slave

Drive is set as the slave.



Cable select

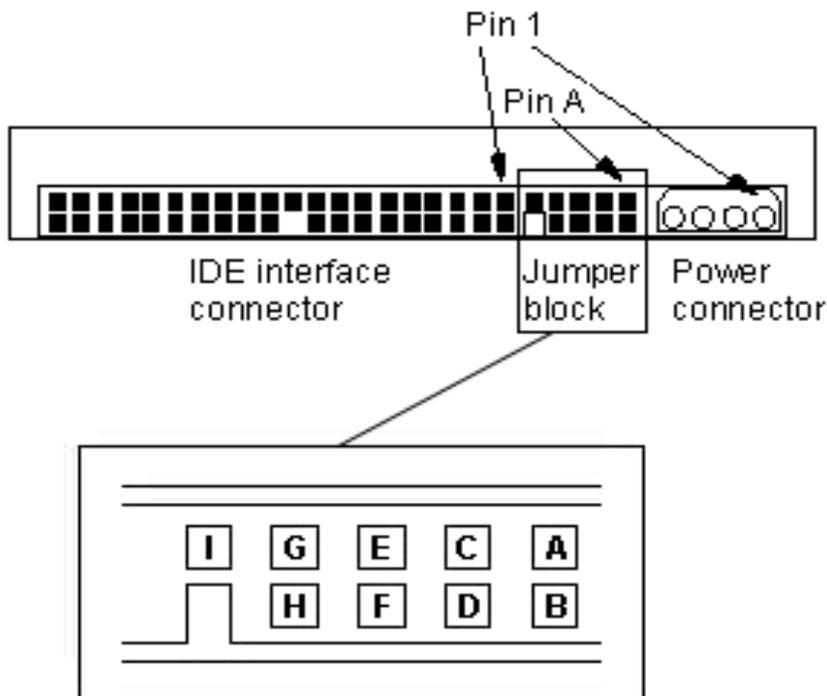
Differentiate master and slave drives using the signal on the cable select (CSEL) pin. If CSEL is ground or low, the drive is set as the master. If CSEL is open or high, the drive is set as the slave.



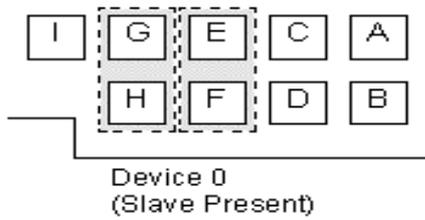
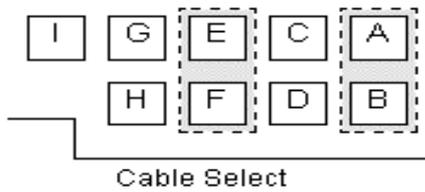
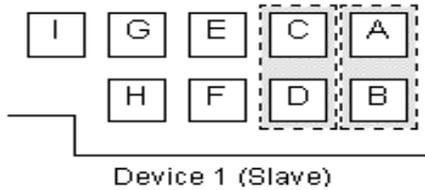
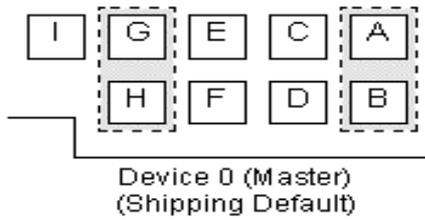
*NOTE: Do not place a jumper plug in any position other than those shown.*

## IBM

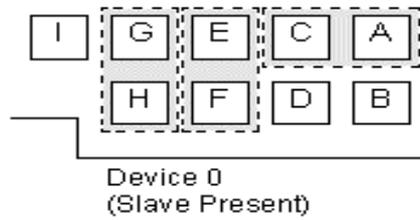
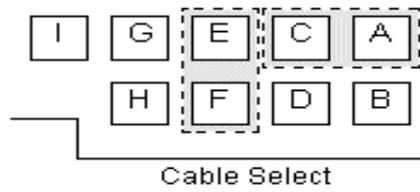
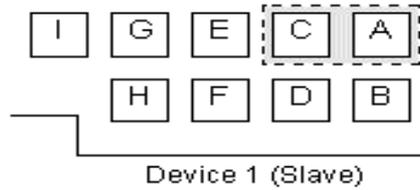
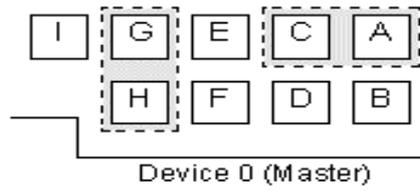
### Deskstar 40GV and 75GXP hard drivers



## 16 Logical Head



## 15 Logical Head

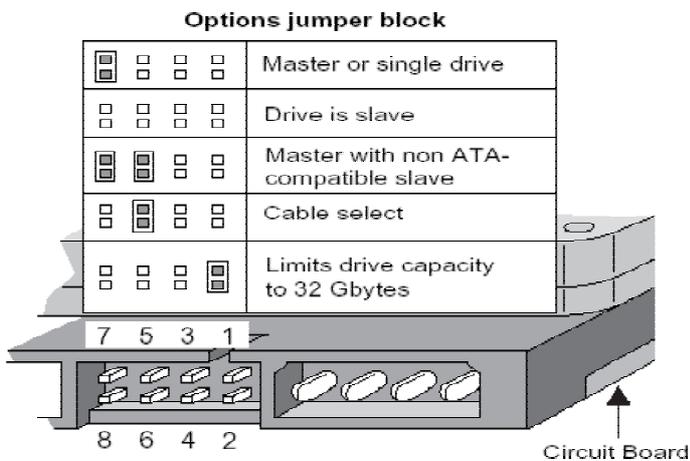


### Please also refer to:

<http://www.storage.ibm.com/hdd/support/dtla/dtlajum.htm>

## Seagate

Barracuda ATA III, ATA IV, ATA V, and U Series.

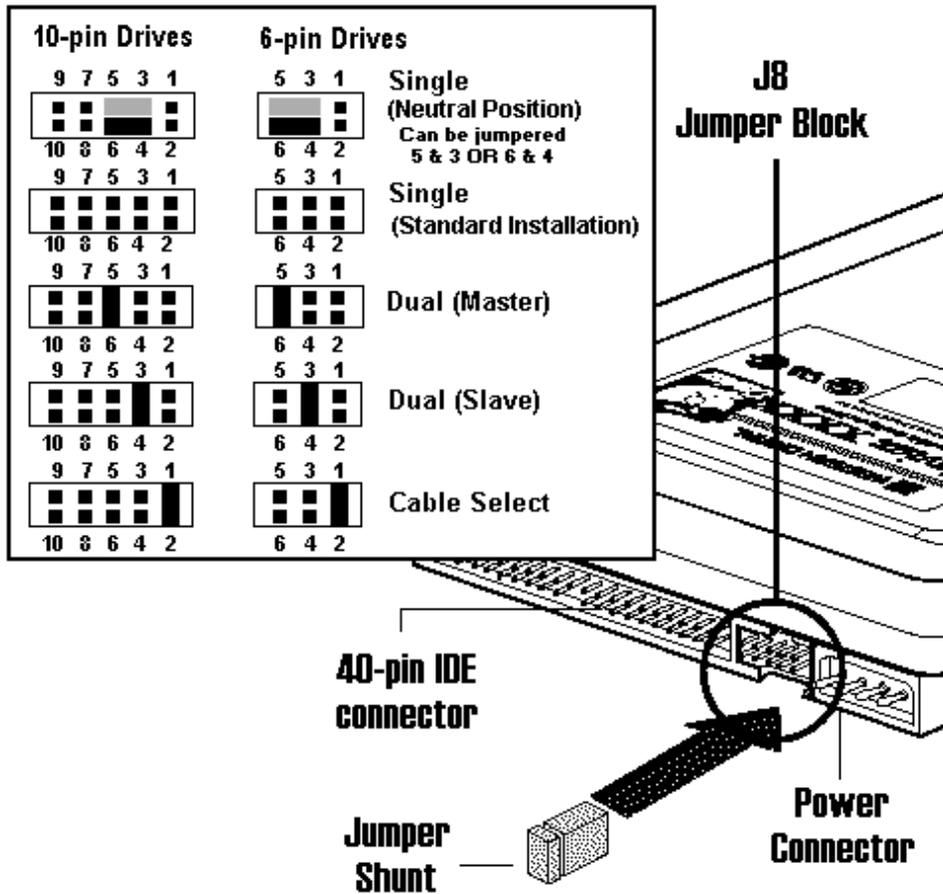


### Please also refer to:

<http://www.seagate.com/cda/products/discsales/marketing/detail/0,1081,271,00.html>

# Western Digital

WD Caviar® 7200(8MB), Caviar® 7200, Caviar® 5400, and Protégé 5400 hard drives



Please also refer to:

<http://support.wdc.com/techinfo/general/jumpers.asp>