

137Gigabyte barrier solutions:

This information applies to the necessary steps that need to be taken to break the 137 Gigabyte barrier, whenever a Hard Disk drive larger than 137 Gigabytes is connected to the motherboard's ATA bus.

This does not apply to embedded or add-in Serial ATA, or ATA/133 hosts. The Serial ATA and ATA/133 hosts should have 48-Bit compliant BIOS and drivers. Check with the motherboard or add-in host manufacturer for the latest BIOS and driver updates, for these types of controllers.

Currently there are 3 options to remedy the 137 Gigabyte barrier. Failure to implement the solutions will result in data loss when trying to access the hard disk beyond 137 Gigabytes.

Installation Option 1: For drives attached to the primary or secondary channel on the motherboard controller, use Windows XP (service pack 1 or newer) or Windows 2000 (service pack 3 or newer), and install MaxBlast 3, or Maxtor Big Drive Enabler.

Windows XP and 2000 with the newest service packs can be used without additional hardware requirements. This option assumes you are attaching the hard drive to the primary or secondary motherboard controller. If you are attaching the hard drive to an additional controller (e.g., PCI adapter card), see option 3.

Step 1: Attach the large hard drive to the primary or secondary motherboard controller.

Step 2: Install one of the following operating systems:

- Microsoft Windows XP with Service Pack 1 or newer.
- Microsoft Windows 2000 with Service Pack 3 or newer.

Step 3: Install MaxBlast 3, or Run Maxtor Big Drive Enabler software patch.

Installation Option 2: For drives attached to the primary or secondary channel on the motherboard controller—and you don't have Windows XP (service pack 1 or newer) or Windows 2000 (service pack 3 or newer)—install a 48-Bit LBA compliant IDE ATA/ATAPI controller driver, and run the driver installation software.

If you are not using Windows XP (service pack 1 or newer) or Windows 2000 (service pack 3 or newer), you must use an IDE ATA/ATAPI controller driver supplied by the controller chipset manufacturer to provide 48-Bit LBA support. This option assumes you are attaching the hard drive to the primary or secondary motherboard controller. If you are attaching a hard drive to an additional controller (e.g., PCI adapter card), see option 3.

Step 1: Attach the large hard drive to the primary or secondary motherboard controller, and install the operating system.

Step 2: Identify the chipset used in your operating system, and load the appropriate drivers if available from the chipset manufacturer.

Currently the only chipset manufacturer offering 48-Bit compliant motherboard controller drivers is Intel.

The driver effectively replaces the Windows 98/Me, 2000 and XP, ATA controller drivers. The Intel 48-Bit LBA compliant IDE ATA/ATAPI controller drivers are limited to systems with Intel

chipsets, and support the following chipsets only: 810, 810E, 810E2, 810L, 815, 815EP, 815G, 815EG, 815P, 820, 820E, 840, 845, 845E, 845G, 845GE, 845GL, 845GV, 845PE, 850, 850E, 860. The Intel Application Accelerator can be obtained here <http://www.intel.com/support/chipsets/iaa/> Please read Intel's accompanying documentation and recommendations.

You will need to periodically check other chipset and motherboard manufacturer's web sites for 48-Bit LBA compliant IDE ATA/ATAPI controller drivers as they become available.

Installation Option 3: Attach the large hard drive to an embedded or add-in Serial ATA/ ATA133 controller with a 48-Bit LBA compliant BIOS and controller driver.

Older Microsoft Operating Systems and other Operating Systems, such as LINUX variants, can support large drives with the addition of an IDE ATA/ATAPI controller. Some of these are embedded motherboard controllers, but additional card controllers can be added to a system by inserting the controller in an open PCI bus slot. Most IDE ATA/ATAPI drive controllers capable of 48-Bit LBA support, such as those available from Promise, Highpoint, VIA, have 48-Bit LBA compliant drivers for many of these operating systems. Using an IDE ATA/ATAPI controller that has a 48-Bit LBA compatible controller driver will allow safe use of large drives beyond the previous limits of 137 GB capacity. Additional controllers that do not have 48-Bit compliant drivers cannot safely access drives larger than 137 GB.

Step 1: Attach the large hard drive to the additional controller (e.g., PCI adapter card).

Step 2: Install a 48-Bit LBA compatible controller driver.

Most IDE ATA/ATAPI drive controllers capable of 48-Bit LBA support, such as those available from Promise, Highpoint, VIA, and other manufacturers, have 48-Bit LBA compliant drivers for many operating systems. If your additional controller does not come with a 48-Bit LBA compliant controller driver, you must download one from the motherboard or chipset manufacturer's Web site.

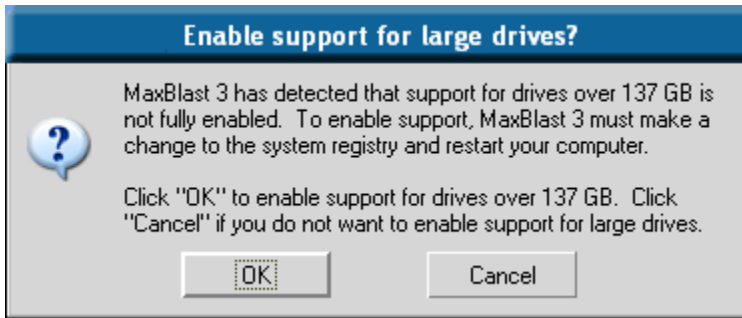
MaxBlast 3 and Maxtor Big Drive Enabler for Windows 2000 service pack 3 and Windows XP service pack 1

After connecting a large drive to the motherboard's ATA bus, and installing Windows 2000 or XP with the latest service packs. The Windows registry will need a patch to enable large drive support. You can reference Microsoft KB article # Q30313 for Windows XP, or Microsoft KB article # Q305098 for Windows 2000.

You have two options for enabling big drive support in Windows 2000, or XP after the service packs have been installed. Install MaxBlast 3 Windows version that is included in the retail kit, or download the Maxtor Big Drive Enabler.

1. After the service packs are installed, download the Maxtor Big Drive Enabler to your Windows desktop and double click the icon, or Install MaxBlast 3 to the Windows desktop, (Remove the CD it's bootable) and re-boot the system.
2. When the system is back to the Windows desktop, run MaxBlast 3 from the desktop icon.
3. MaxBlast 3, or the Big Drive Enabler will poll the Windows operating system for the existence of the service packs.

4. If Windows 2000 service pack 3 or Windows XP service pack 1 are true, a pop-up screen will display.



5. After selecting "OK" the system will re-boot to the Windows desktop.