Seagate

External Hard Drive
Quick Start
Guide

Multi-function push button operations:

- Press and hold button until LED comes on – 1st Power On occurs.
- After Power On, press button – Initiates backup.
- Press and hold button until LED shuts off – Power Down occurs.

Note. *BounceBack Express* does not support the pushbutton backup feature for a Mac OS that is using a USB interface.

Your new Seagate® external hard drive is a state-of-the-art unit: solid, safe, quiet, cool, versatile and portable, ready to go from one location to another—an ideal backup device for multiple systems, or simply a safe and dependable place to store your important files.

Your new Seagate hard-drive kit also includes award-winning *BounceBack Express* backup software for both Windows and Mac operating systems. See page 12 for more information about *BounceBack Express*.

Dual-interface and USB-only kits

Seagate ships two external hard drive kits:

- A **dual-interface** kit, with a USB 2.0 interface, a FireWire (also known as IEEE 1394a and iLink) interface and full backup capability that includes a pushbutton backup feature
- A **USB-only** kit, with a USB 2.0 interface and full backup capability that includes a pushbutton backup feature.

Note. *BounceBack Express* does not support the pushbutton backup feature for a Mac OS that is using a USB interface.

This guide uses the terms "dual-interface" and "USB-only" to differentiate between these two kits wherever something applies to one kit but not the other.

Dual-interface external hard drive

Multi-function push button

FireWire (IEEE 1394a) ports

USB 2.0 port

Power connector

Front **Back**

USB-only external hard drive kit

Multi-function push button

USB 2.0 port

Power connector

Front **Back**

Contents

The dual-interface external hard-drive kit includes

- A Seagate external hard drive with a USB 2.0 interface, a FireWire (IEEE 1394a) interface, plus a pushbutton backup feature
- A pedestal for vertical drive-orientation
- USB 2.0 and FireWire (IEEE 1394a) cables
- An AC-to-DC converter
- A country-specific power cord
- This guide
- The Seagate *Disc Utility CD*

The USB-only external hard-drive kit includes

- Seagate external hard drive with a USB 2.0 interface, plus a pushbutton backup feature.

Note. *BounceBack Express* does not support the pushbutton backup feature for a Mac OS that is using a USB interface.

- A pedestal for vertical drive-orientation
- A USB 2.0 cable
- An AC-to-DC converter
- A country-specific power cord
- This guide
- The Seagate *Disc Utility CD*

Requirements

Windows 98SE or later operating system with:

• a USB connector

   or

• for a dual-interface kit, a Windows-certified, OHCI-compliant FireWire (IEEE 1394a) controller

Microsoft maintains a list of Windows-certified FireWire (IEEE 1394a) controller suppliers at http://www.microsoft.com/windows/catalog/. Click the **Hardware** tab, and then select **Other Hardware/1394 controller** for the complete list.

Macintosh System 9.2.2 (or higher) or Mac OS X with:

• a USB connector

   or

• for a dual-interface kit, an OHCI-compliant FireWire connector

• Macintosh format (initialization) required. See Mac format section on page 9

Note. *BounceBack Express* does not support the pushbutton backup feature for a Mac OS that is using a USB interface.

Cautions

If your drive is turned on, don't move it.

You can safely move your drive when the power LED is OFF. If the power LED is lit when you move your drive, you risk excessive wear, reduced reliability, and possible data loss.

Dual-interface kit: Use only one interface at a time.

Do not simultaneously connect USB and the FireWire (IEEE 1394a) cables to your drive. However, you can connect two FireWire cables to your drive at the same time to daisy-chain FireWire devices.

Note. When using the FireWire (IEEE 1394a) connectors in a daisy chain configuration, the drive must be powered on for the pass through connection to function.

Multi-function push button operations.

• Press and hold button until LED comes on— 1st Power On occurs.

• After Power On, press button—initiates backup.

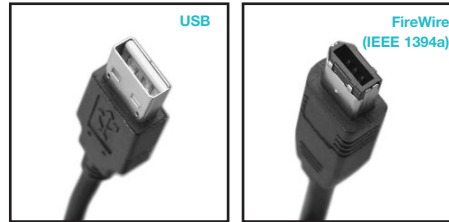• Press and hold button until LED shuts off— Power Down occurs.

Hardware setup

For a dual-interface kit

1. Plug the AC-power adapter into the hard drive and the wall outlet.

2. Refer to the table below to select the fastest interface that is supported by your computer, and use that cable to connect the drive to your computer. USB and FireWire (IEEE 1394a) connectors have unique shapes, and each connector is shaped to allow only one way to connect.

Interface	Transfer rate
USB 1.1	12 Mbits/sec
USB 2.0	480 Mbits/sec
FireWire (IEEE 1394a)	400 Mbits/sec

Note. When using the FireWire (IEEE 1394a) connectors in a daisy chain configuration, the drive must be powered on for the pass through connection to function.

Caution. Use only one interface at a time. If you connect both the USB and the FireWire (IEEE 1394a) cables to the same external drive at the same time, you could damage the drive. However, it is OK to connect two FireWire cables to the same drive at the same time to daisy chain devices.

If you are a Macintosh user and you intend to use the pushbutton-backup feature, you must use the FireWire interface. *BounceBack Express* does not support a Mac OS that is using a USB interface.

For a USB-only kit

1. Plug the AC power adapter into the hard drive and the wall outlet.

2. Use the USB cable to connect the drive to your computer.

For both dual-interface and USB-only kits

3. Press and hold the button on the front of the drive until LED lights, to turn on power to the drive.

4. Turn on the power to your computer.

5. See page 7 for **Windows OS** information, or page 9 for **Macintosh OS** information, including installing drivers, reformatting and partitioning, and dismounting your drive.

6. See page 12 to install and configure *BounceBack Express* software to allow backups.

Note. For dual-interface kits, you must install and configure *BounceBack Express* software to enable the pushbutton-backup feature on your drive.

You don't need to follow this hardware setup sequence. Hardware setup steps 1 through 4 are a good way to connect your new drive to your computer, but you don't always need to follow this sequence. For example, if you want to attach your drive after your computer has already booted, you can simply connect the interface cable, turn on power to the drive, and your OS automatically detects and mounts the drive. This is known as hot-plugging.

In a hot-plug situation, it's a good idea to connect all power and interface cables to your drive, and to place the drive where you want it to remain, before you turn it on. This helps ensure that you won't need to move your drive after it's running.

Windows OS

Installing drivers for your operating system (OS)

Windows XP/Me/2000 Pro operating systems have built-in, up-to-date drivers for both USB and FireWire (IEEE 1394a) interfaces. You don't need to install any drivers if you are using one of these operating systems, but make sure you have downloaded and installed the latest service packs from Microsoft to ensure that you have the latest drivers available for your OS.

Windows 98SE using a USB interface: When you connect the drive to your computer and turn it on, Windows 98SE displays the *Add New Hardware* wizard. This means the wizard needs to find USB drivers, which are included on the Seagate *Disc Utility CD*.

Follow these steps to install the drivers:

1. Insert the Seagate *Disc Utility CD* in your computer's CD-ROM drive.
2. Click the Next button. The wizard displays a screen with two options.
3. Select the Search for the best driver for your device option. The wizard displays four check boxes.
4. Select the CD-ROM and Specify location options. Locate the drivers in the Drivers USB Win98 directory.

5. Click the Next button. The wizard installs the appropriate drivers on your computer and tells you when it has finished.
6. Click the Finish button to complete the installation.
7. Restart your computer, and your new drive is ready to use.

Windows 98SE using a FireWire (IEEE 1394a) interface (dual-interface kit only): To use the FireWire interface, you must download the Microsoft Windows 98SE system update from Microsoft.

How to reformat and/or partition your drive

Your drive is factory-formatted for a FAT32 file system and no further formatting is needed for Windows operating systems. However, if you are using Windows 2000 Pro or Windows XP and you prefer to use an NTFS file system, you can reformat with either the built-in *Disk Management* application provided by Microsoft, or the Seagate *DiscWizard™ for Windows* application located in the Files directory of the Seagate *Disc Utility CD*.

Caution. Reformatting destroys all data on the drive. Back up any data that you want to keep before you reformat the drive. Also, if you reformat to NTFS, you must always log in to *BounceBack Express* (see page 12) as an Administrator to ensure access to your backup files.

What is partitioning? Partitioning divides the disc into separate volumes. It does not increase the capacity of the drive. Creating more than one partition can be helpful in organizing your information. For example, you might want one volume (partition) to store your backups and one volume for applications or other information. Each volume receives its own drive letter, so each volume appears to be a separate disc drive in Windows Explorer.

To use the Disk Management application

1. Click **Start**, click **Run**, type **compmgmt.msc**, and then click **OK**.
2. In the console tree, click **Disk Management**. The *Disk Management* window appears. Your discs and volumes are displayed.
3. Right-click on the drive you want to reformat (or partition) and use the options provided to reformat or partition the drive.

To use the DiscWizard for Windows application

Launch the *DiscWizard for Windows* application in the Files directory on the Seagate *Disc Utility CD*, and follow the easy-to-use, on-screen instructions.

Data-sharing between Windows and Macintosh systems

Seagate does not recommend that you use your external hard drive to share data between Windows and Macintosh operating systems. This is primarily due to all of the variables in OS types and versions, formats and partitions, interfaces, and third-party connectivity software packages. If you absolutely must use your external hard drive to share data between Windows and Macintosh systems, initialize your drive (before you use it!) for a Macintosh OS, as described below, and then purchase and install—on your Windows system—available third-party software that allows your Windows system to read from and write to a drive that is formatted for a Mac OS.

Also, for dual-interface kits, the two FireWire (IEEE 1394a) ports are designed for daisy chaining FireWire devices, not for connecting two computers to the drive at the same time.

Caution. Do not leave your drive in its pre-formatted FAT32, single-partition condition if you intend to transfer data between Mac and Windows systems. Doing so will result in data loss.

Note. When using the FireWire (IEEE 1394a) connectors in a daisy chain configuration, the drive must be powered on for the pass through connection to function.

Dismounting your drive with Windows OS

Mounting is the beginning and dismounting is the end of the conversation between your computer and your external hard drive. Mounting occurs automatically when you connect and turn on your drive, but you must initiate the dismounting action yourself. If you disconnect or turn off the drive before you dismount it, neither your drive nor your OS understands that the conversation is finished. It's like hanging up without saying goodbye.

Caution. Never turn off power to the drive or physically disconnect any cable attached to the drive when the disc activity LED indicates disc activity. That's like hanging up in mid-sentence, and it will probably result in data loss.

How to dismount the drive

1. Close all windows and quit all running applications that are stored on the drive or that are using data stored on the drive.
2. Click the icon in your system tray that represents the *Safely Remove Hardware* function, and then select the Seagate external drive.

Note. The system tray is the area in the lower right portion of your desktop near the clock.

Windows OS displays a message when it is safe to disconnect the interface cable or turn off the drive.

Macintosh OS

Format (initialize) for Macintosh OS

Your new Seagate external hard drive is factory-formatted with a FAT32 file format. Although your Macintosh operating system may recognize and mount your new drive with this format, FAT32 is not recommended for use with a Macintosh OS. **You must format your drive using one of the Mac OS format types before you use it with your Macintosh operating system.** Reformatting takes only a few seconds using Apple's *Disk Utility*, which comes with your Mac OS.

Caution. Formatting destroys all data on the drive. If you have data that you want to keep, back up the data before formatting the drive. Seagate is not responsible for lost data.

Multi-function push button operations.

- Press and hold button until LED comes on—1st Power On occurs.
- After Power On, press button—initiates backup (FireWire only).
- Press and hold button until LED shuts off—Power Down occurs.

How to reformat and/or partition your drive

1. Open *Disk Utility*, which is located in Applications/Utilities. In Mac OS 9, this utility is named *Drive Setup*.

2. Select the disc that you want to reformat and/or partition in the left column. Be sure to select the new drive, and not an existing drive that may contain data, because reformatting and/or partitioning erases all data on the selected drive.

3. Click **Partition** if you want to partition your drive, or click **Erase** to reformat the drive as one volume. Partitioning is not required; if you select **Partition,** continue to the next step. For **Erase,** you're done!

4. Choose the number of partitions from the Volume Scheme pop-up menu. Click each partition and enter a name, select a format, and enter a size for each partition. (You can also drag the partitions to change the size.) Select the Mac OS Extended format for each partition unless you have a specific need to select any other available Volume Format option.

5. Click **Partition**, and then click **Partition** again. Your drive appears on your desktop with the volume label(s) you entered in the steps above. If you elected to partition the drive to create two or more volumes, each volume will have a drive icon and label.

Data-sharing between Windows and Macintosh systems

Seagate does not recommend that you use your external hard drive to share data between Windows and Macintosh operating systems. This is primarily due to all of the variables in OS types and versions, formats and partitions, interfaces, and third-party connectivity software packages. If you absolutely must use your external hard drive to share data between Windows and Macintosh systems, initialize your drive (before you use it!) for a Macintosh OS, as described above, and then purchase and install—on your Windows system—available third-party software that allows your Windows system to read from and write to a drive that is formatted for a Mac OS.

Also, for dual-interface kits, the two FireWire (IEEE 1394a) ports are designed for daisy chaining FireWire devices, not for connecting two computers to the drive at the same time.

Caution. Do not leave your drive in its pre-formatted FAT32, single-partition condition if you intend to transfer data between Mac and Windows systems. Doing so will result in data loss.

Macintosh OS interface drivers

Macintosh OS X and OS 9 have built-in, up-to-date drivers for both USB and FireWire interfaces. You don't need to install any drivers if you are using a Macintosh OS.

Dismounting your drive with Mac OS

Mounting is the beginning and dismounting is the end of the conversation between your computer and your external hard drive. Mounting occurs automatically when you connect and turn on your drive, but you must initiate the dismounting action yourself. If you disconnect or turn off the drive before you dismount it, neither your drive nor your OS understands that the conversation is finished. It's like hanging up without saying goodbye.

Caution. Never turn off power to the drive or physically disconnect any cable attached to the drive when the disc activity LED indicates disc activity. That's like hanging up in mid-sentence, and it will probably result in data loss.

How to dismount the drive in Mac OS X and Mac OS 9

1. Close all windows and quit all running applications that are stored on the drive or that are using data that is stored on the drive.
2. In Mac OS X, drag the Seagate external-drive icon to the trash icon in your Dock area.
   In Mac OS 9, drag the Seagate external-drive icon to the trash icon.
3. You can safely disconnect or turn off your hard drive when the drive icon disappears from your desktop and the disc-activity LED is not lit.
4. To turn off the drive, press and hold the push button until the LED shuts off.

BounceBack Express

BounceBack Express allows you to automatically copy files from your hard drive to your external drive. It supports Windows 2000 Pro and Macintosh OS X (or higher).

Before you install BounceBack Express

• Disable all virus-protection programs.

• For Windows 2000 Pro or XP users in a corporate environment, log on as a local administrator. Check with your system administrator for details.

• For Macintosh OS X (or higher) users in a corporate environment, log on as a user who has administrative rights to all drives that are involved in the backup process (which, in this case, means your internal drive and your new external Seagate drive). You must do this because *BounceBack Express* for Mac OS X copies only those files that a logged-in user can access.

• If you are backing up to an external device, make sure the external device is connected to and working properly with your operating system.

• Disconnect all other external storage devices (for example, hard disc drives, DVD, CDR, MP3 players, memory card readers, and so forth) that are not involved in the backup.

Note. For detailed *BounceBack Express* installation and usage, click the ? button on the BounceBack ControlCenter main menu, or launch the BBHelp.chm file in the CMS folder on the CD.

Installing BounceBack Express software

1. Insert the Seagate *Disc Utility CD*.
   Install BounceBack Express from the menu.

Note. If the BounceBack ControlCenter fails to appear:

Windows OS users: Double-click the CD icon, open the CMS folder, and then click **BBSetup.exe**.

Mac OS users: Double-click the CD icon, open the Mac folder, then open the **BBEMac.dmg** file. That file will self-extract to a **.dmg** file to your desktop. Double-click the **BlueBB** icon to launch the installation menu.

2. Click **Install** on the BounceBack Express menu.

3. Follow the on-screen instructions to install the software. Several applications are installed.

4. Once the InstallShield Wizard has started the installation process, several screens will be displayed in quick succession.

5. On the License Agreement screen, click **I accept the terms of the license agreement** to indicate that you agree to the terms of the License and to continue the installation.

6. On the Choose Destination Location screen, click **Next** to accept the default location for installing BounceBack or use the **Browse** button to select another location.

7. Click **Yes** to create the default folder or your own folder name. On the Choose Destination Location screen, click **Next** to continue. This displays a screen showing the installation's Setup Status.

8. Registering your product enables CMS to provide you with more effective technical support.

   Upgrade Info takes you to the CMS web site and provides the latest information on *BounceBack* software.

   Register Now takes you to the CMS web site to register your copy of *BounceBack Express*.

   Register Later continues with the installation.

   After returning from the CMS Products registration website, click OK to continue the installation process.

   A splash screen will be displayed for a few seconds while the BounceBack Control Center is loaded.

Configuring your first backup

9. When the BounceBack Control Center displays, you are offered 3 choices for your first backup **Full System, My Documents,** and **Let Me Choose**.

   Full System will setup a backup set that includes all files and folders on your computer. This setting requires a backup device be connected to the computer.

   Backup Device List identifies available hard drives for backup use and allows you to select an available device for the full system backup.

Backup Set Schedule allows you to manually launch a backup operation or to schedule backups to be launched.

Backup Sizing scans the folders and files on the system drive and determines the total size of the files to be backed up.

Note. The size shown will start at 0 and increment, as the size of each file in the backup set is determined.

10. The BounceBack Installation screen will then show the estimated time it will take for your first backup to run completely. Click **Backup Now** to continue with the next step.

    Clicking **Backup Later** halts the installation process with a data set created but no backup having taken place. If you want to make use of any of the advanced settings features for the backup, select **Backup Later**, and then select **Settings** from the **BounceBack Control Center**.

Note. The sooner you run your first backup, the sooner your data is protected!

11. After clicking **Backup Now**, the Backup Scan and Backup in Progress screens display the progress of the initial backup.

Note. An option exists on this screen to allow you to view a detailed file by file progress as the backup process is running. If the View Detailed Progress option is clicked, the speed of the backup process will be slowed down substantially.

12. Click **OK** to use other *BounceBack* functions—such as associating a password with a backup device or creating Backup Sets—or close the application.

Subsequent backups

After the initial system backup, you have a number of backup options including:

- **Manual Backups.** To run a manual backup using the default Backup Set, click the *BounceBack* icon in the system tray and select **BounceBack ControlCenter** and click the **Backup** button on the **BounceBack Control Center**.

- **Auto Launch.** Any time you connect a configured and supported external backup device to your computer, this feature scans your system disk for new or modified files and automatically backs them up to the backup device.

To temporarily turn off the Auto Launch feature, click on the BounceBack icon in the system tray, and select **Disable BounceBack Launcher**.

- **Scheduled Backups.** Use the **Settings** function from the **BounceBack ControlCenter** to create or modify Backup Sets and schedule their run times.

File restore

BounceBack Express backs up data in the operating system's native file format and uses the same directory structure (folders and files) as the original data. This makes it easy to find and restore files from the backup drive using *Windows Explorer* in Windows OS or *Finder* in Mac OS.

To restore data using Mac OS

1. Double-click the system drive, or the drive to which you want to restore files.
2. Double-click the backup drive.
3. Drag and drop the files and/or folders from the backup drive to the system drive or the drive of your choice.

BounceBack QuickRestore for Windows 2000 Pro and XP

BounceBack QuickRestore can restore files and folders from the backup drive quickly and easily.

Note: The *BounceBack QuickRestore* feature does not function with Mac OS.

The steps to restore data are as follows:

1. Start BounceBack ControlCenter and select *Restore*.
2. In the left side of the BounceBack QuickRestore box, navigate to the backup that contains the file(s) you want to restore. You will see the file details on the right side of the screen.
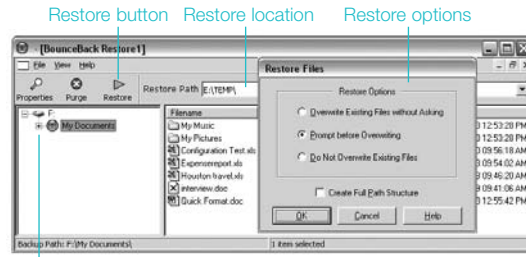3. Note the **Status** information for the files.

   Unchanged—the file on the backup drive unit is the same as the file on your hard drive.

   Older—the file on the backup drive unit is older than the file on your hard drive.

   Newer—the file on the backup drive unit is newer than file on your hard drive.

   Deleted—the file on the backup drive unit represents a file that has been deleted on your hard drive.

4. Click on the file(s) you want to restore.

Restore button   Restore location   Restore options

Folder to restore

5. Select the **Restore Path**:
   • Select **Restore to original location**.
6. Click the **Restore** button.
7. Select the **Restore Option** you want and click **OK**:
   • Overwrite Existing Files without Asking
   • Prompt before Overwriting
   • Do Not Overwrite Existing Files
8. *BounceBack QuickRestore* scans and verifies that the hard drive has enough space to accept the restore. Click **Continue** on the Statistics screen.
9. *BounceBack* restores the file(s) and reports under Restore Totals. Click **OK** to return to *BounceBack*.

Additional documentation

A detailed *BounceBack Express* user's manual is included on the Seagate *Disc Utility CD*. Click **(?) icon on BounceBack ControlCenter menu** to access it. You can also find it online at www.cmsproducts.com/support. Help documentation is also integrated within the *BounceBack Express* software.

Want advanced features?

As a *BounceBack Express* user, you can upgrade to *BounceBack Professional*, an extended version of *BounceBack Express*, with advanced features that provide an all-inclusive disaster-recovery and backup solution.

Special features include **bootability, advanced restore, synchronization,** and **versioning.**

• The **bootability** feature creates a bootable drive image that enables users to instantly recover from a disaster by either using the rescue CD or by exchanging the internal PC hard drive with the backup drive.

• The **advanced restore** function provides a graphical user interface to compare and manage information on the source drive and backup drive, allowing users to restore lost or corrupted data.

• The **synchronization** feature automatically scans both the computer and the backup drive for changed files, and synchronizes out-of-date versions with updated versions of the files.

• The **versioning** feature provides users an innovative backup process that allows access to older versions of files from any date a backup was performed.

For more information about the *BounceBack Professional* software upgrade, contact CMS or, to purchase *BounceBack Professional,* visit the CMS website at www.cmsproducts.com/seagate/upgrade, or call CMS Products Sales at 714-424-5520 or 800-327-5773.

Troubleshooting

PROBLEM

I purchased a 160-Gbyte drive and my operating system reports the capacity as much less than that.

RESOLUTION

Disc drive manufacturers consider 1 Gbyte to equal 1,000,000,000 bytes. However, your computer operates at a binary level, which considers 1 Gbyte to equal 2^{30}, which equals 1,073,741,824 bytes. So, even though a 160-Gbyte drive stores 160 Gbytes of data, when you think in terms of 1 Gbyte = 1,000,000,000 bytes, your system will report a lower capacity due to the operating system's method of calculating the value of each gigabyte. This means your operating system may report that your 160-Gbyte drive has a capacity of approximately 149 Gbytes, the binary equivalent of 160,000,000,000 bytes.

Windows-specific problems

First, make sure you have the latest Microsoft operating system service packs and other Windows updates installed on your system before you spend time looking for a drive problem. These service packs are issued to fix bugs, add drivers, and enhance the security features of your system. See http://support.microsoft.com for details about how to install service packs and Windows updates in your system. Contact Microsoft Customer Service for information about obtaining these system enhancements if you don't have Internet access.

PROBLEM

The drive is connected to the USB port, but the computer does not recognize the drive.

RESOLUTION

Check power. Confirm the drive has power and that the power LED is glowing on the drive and power converter. If the light is not lit, press the push button on the front of the drive to power the drive on. Then check to ensure that all the connections are tight (power cable to wall, power cable to power supply, power supply to drive). If it still does not light up, temporarily remove any surge protectors and plug the drive into the wall outlet.

Confirm that the USB cable is plugged in to the computer and the drive. For dual-interface kits, the USB port and FireWire (IEEE 1394a) port on the hard drive cannot be plugged in at the same time. Remove any hubs and plug the drive directly into the USB port on the computer.

Check Device Manager to confirm the USB host controller is properly configured. To open *Device Manager* (Windows XP/Windows 2000 Pro), right-click My Computer, choose Manage, and then choose the *Device Manager* icon from the tree.

If the host controller is in "Other Devices," then additional drivers are required for the host. Check with the PCI card vendor or motherboard vendor for the appropriate drivers. USB 2.0 controllers usually require a service pack to operate properly. Windows XP added support for USB 2.0 in Service Pack 1; Windows 2000 Pro added support for USB 2.0 in Service Pack 3 and improved the support in Service Pack 4. Windows Me does not include native support for USB 2.0, so you should use the latest drivers provided by the USB host adapter manufacturer. If the USB port is on the motherboard, you should use the latest drivers provided by the motherboard manufacturer.

If the host controller is not seen in *Device Manager*, it is probably disabled in the computer BIOS.

Check *Device Manager* to confirm the USB hard drive is detected and configured properly. If not, disconnect and reconnect the drive using a different USB port.

Try another cable and host adapter. If, after following the steps above, you still have a problem, try another cable and another USB port.

PROBLEM

The drive doesn't operate in high-speed mode when connected with the USB cable.

RESOLUTION

Windows XP added USB 2.0 support with Service Pack 1 or higher installed. For information on obtaining the latest Service Pack, visit Microsoft's support web site.

Windows 2000 Pro has a patch to support USB 2.0. Download this patch through the Windows Update feature in the operating system. Service Pack 4 for Windows 2000 pro also addresses several issues that you might experience with USB 2.0, so applying the service pack may be the best way to gain the maximum performance from your USB 2.0 drive. Microsoft document number 319973 (http://support.microsoft.com) describes how to apply the updates. Also see *Microsoft Knowledgebase Article 260910* for more information.

Windows Me does not have native support for USB 2.0, so you should use the latest drivers for your USB host adapter. These drivers must be provided by your host adapter manufacturer (or motherboard manufacturer if the USB ports are on the motherboard).

Windows 98SE does not have native support for USB 2.0, so you should use the latest drivers for your USB host adapter. These drivers must be provided by your host adapter manufacturer (or motherboard manufacturer if the USB ports are on the motherboard). You will also need drivers for your Seagate hard drive if you are using the USB port in Windows 98SE (see http://www.seagate.com/support/kb/disc/faq/external_usb_drivers.html).

PROBLEM

Dual-interface kits only: The drive is connected using the FireWire (IEEE 1394a) cable and the system is running Windows 98SE, but Windows 98SE fails to detect it.

RESOLUTION

From *Device Manager*, click 1394 Bus Controller, and then click Settings. Select the Support Non-Compliant Devices check box, and then reboot your computer. See *Microsoft Knowledgebase Article 221823* for more information (http://support.microsoft.com).

Macintosh-specific problems

First make sure you have the latest Apple operating system software updates installed on your computer before you spend time looking for a drive problem. These updates are issued to fix bugs, add drivers, and enhance the security features of your computer. To check for software updates using Mac OS X, open the Software Update system-preference panel and click the Check Now button. You must be connected to the Internet to check for and download a software update.

PROBLEM

The drive does not mount at all, and no error message appears on my screen when I connect the drive.

RESOLUTION

Use Apple's *Disk Utility* to locate, initialize, and mount the drive.

PROBLEM

The Macintosh OS displays the following message when I connect the drive to my system: "Unable to read volume—must initialize."

RESOLUTION

Your Mac OS does not recognize the drive format. Use Apple's *Disk Utility* to initialize the drive with a Mac OS Extended format.

PROBLEM

For dual-interface kits only: My system doesn't have a 6-pin FireWire (IEEE 1394a) connector. It has a 4-pin FireWire connector, so the cables don't match the connector.

RESOLUTION

Purchase a 4-pin to 6-pin FireWire (IEEE 1394a) cable to connect the drive to your system.

Note. A 4-pin to 6-pin FireWire (IEEE 1394a) cable is not included with the drive because 4-pin FireWire connectors are not provided on most systems.

PROBLEM

Daisy-chained device does not work when plugged into second FireWire (IEEE 1394a) port on my External Hard Drive.

RESOLUTION

Make sure FireWire (IEEE 1394a) cables are used throughout the entire daisy-chain connection to the computer. Make sure all External drives are powered on. Power is required on all units that the data passes through.

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