



External SATA Hard Drive

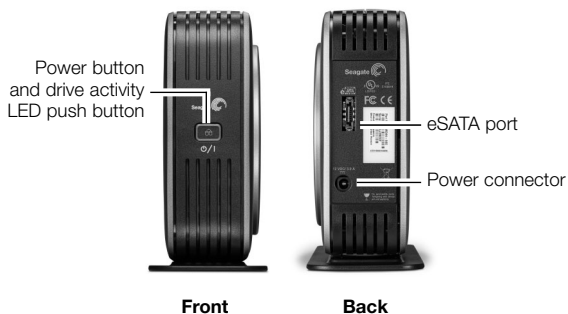
Quick Start
Guide

Power button operations:

- Press button—LED comes on
– Power On occurs.
- Press button—LED shuts off
– Power Down occurs.

Your new Seagate® external SATA hard drive is a state-of-the-art unit: solid, safe, quiet, cool, versatile and portable, ready to go from one location to another. It is 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 the Microsoft Windows and the Mac operating system. See page 10 for more information about BounceBack Express.



Contents

The external SATA hard drive kit includes

- Seagate external hard drive with an eSATA interface
- A pedestal for vertical drive orientation
- An eSATA cable
- An eSATA PCI card
- An AC-to-DC converter
- A country-specific power cord
- Quick start guide
- The Seagate Disc Utility CD



Requirements

Windows 2000 Pro or later operating system with:

- An eSATA connector

Macintosh System Mac OS X (or higher) with:

- An eSATA connector

Caution

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

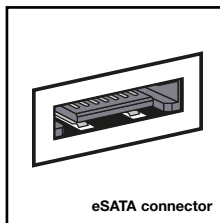
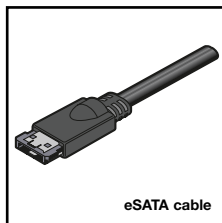
You can move your drive safely when the power LED is OFF. If the power LED is lit when you move your drive, you risk excessive wear, reduced reliability, and possible data loss.

Power button operations

- Press the button—LED comes on—
Power On occurs.
- Press the button—LED shuts off—
Power Down occurs.

Hardware setup

Note: You may need to install a PCI eSATA host adapter, if your system does not have one. Follow the instructions included with your host adapter before connecting the external SATA drive to your computer.



For an External SATA kit

1. Plug the AC power adapter into the hard drive and the wall outlet.
2. Use the eSATA cable to connect the drive to your computer.
3. Turn on the power to your computer.
4. Press the button on the front of the drive to turn on the power.
5. See page 5 for Windows OS information, or page 7 for Macintosh OS information, including installing drivers, reformatting and partitioning, and dismounting your drive.
6. See page 10 to install and configure BounceBack Express software to utilise the backup feature of 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, in Windows XP only, 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 will detect and mount the drive automatically. 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. You should not move your drive once it's running.

Caution: Windows 2000 Pro does not support "hot remove." You must use the "Safely Remove Hardware" utility prior to disconnecting the drive.

Windows OS

Windows XP or 2000 Pro eSATA host bus adapter (card) installation

Turn off the power to your computer. Open the computer case. Install the PCI eSATA card in an available PCI slot on your computer's motherboard. Make sure the card is seated firmly in the slot, install the mounting screw, and tighten down firmly. Close the computer. Turn on the power to the computer. The "Found New Hardware Wizard" (or similar utility) will be displayed.

Follow these steps to install the drivers for the new PCI card:

1. Insert the Seagate Disc Utility CD in CD drive.
2. The Seagate eSATA drive menu will appear: click on **eSATA PCI Card Menu** button. If the main menu does not automatically launch, you can manually open it by clicking welcome.htm on the CD.
3. Click the **Windows drivers/utility** button.
4. The eSATA300 TX2 Install Wizard will open. Click **Next**.
5. The License Agreement displays. Click the **Accept** button, then click **Next**.
6. Click **Install** to begin installing the Windows drivers.

Note: Some versions of Windows will display a window warning that this software has not passed **Windows Logo Testing**. If this window appears, click **Continue Anyway**.

7. When the installation wizard completes installation, click **Finish**.
8. Follow the **Install Host Adapter Card** instructions on the Quick Installation Guide for eSATA PCI Card included in this kit.

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 10) as an Administrator to ensure access to your backup files.

Use caution when backing up or copying files protected by NTFS file permissions. If you are considering reformatting your external drive to NTFS, any NTFS security measures normally will be retained. NTFS security can prevent you from accessing your backups later when you need to restore. Be sure you can access your files from other computers before deleting them from their current location; otherwise, your backup may be unusable in the event of a system failure.

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 organising your information. For example, you might use 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.

Sharing data between Windows and Macintosh systems

Seagate does not recommend that you use your external hard drive to share data between the Windows and Macintosh operating systems. This is due primarily 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, initialise 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.

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

Dismounting your drive with the 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 the telephone without saying goodbye.

Caution: Never turn off power to the drive or physically disconnect any cable attached to the drive when the 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

Mac OS 10.4 (or higher) eSATA host bus adapter (card) installation

Turn the power off to your computer. Open the computer case. Install the PCI eSATA card in an available PCI slot on your computer's motherboard. Make sure the card is seated firmly in the slot, install the mounting screw, and tighten down firmly. Close the computer. Turn on the power to the computer. After installing the eSATA300 TX2 Serial ATA Controller card and rebooting your system, Mac OS X will not recognise or report the presence of the eSATA300 TX2 Controller.

Follow these steps to install the drivers in order for the system to recognise the PCI card:

1. Insert the CD into the CD-ROM drive.
2. The Seagate eSATA drive menu will appear: click on **eSATA PCI Card Menu** button. If the main menu does not automatically launch, you can manually open it by clicking welcome.htm on the CD.
3. Click the **MacOS PCI Installer** button.
4. The installer launches and the Introduction window displays. Click **Continue**.
5. The Read Me window displays. Click **Continue**.
6. The License Agreement displays. Click **Continue**, then click the **Agree** button.
7. The Select Destination window displays. Click on the icon of the drive where your operating system is installed.
8. The Easy Install window displays. Click **Update**.

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 organising your information. For example, you might use one volume (partition) to store your backups and one volume for applications or other information. Each volume receives its own volume icon, so each volume appears to be a separate disc drive on your Macintosh desktop. Partitioning is not required if you use the Apple-provided Disk Utility to create a Mac OS Extended format volume..

9. The Authentication window displays. Type your user name and password in the fields provided and click **OK**.
10. A note appears asking you to restart your computer after installation. Click **Restart**. Once the computer restarts, attach the data cable from your external SATA drive to one of the available eSATA ports on the PCI card. Turn on the drive: an icon representing the SATA drive will appear on the Mac OS X desktop.

Format (initialise) for Macintosh OS

Your new Seagate external hard drive is factory formatted with a FAT32 file format. Although your Macintosh operating system may recognise 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.

How to reformat and/or partition your drive

1. Open **Disk Utility**, which is located in Applications/Utilities.
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 need do no more.
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.

Sharing data between Windows and Macintosh systems

Seagate does not recommend that you use your external hard drive to share data between the Windows and Macintosh operating systems. This is due primarily 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, initialise 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.

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

Dismounting your drive with the 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 the telephone without saying goodbye.

Caution: Never turn off power to the drive or physically disconnect any cable attached to the drive when the 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

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.
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 the Power button.

BounceBack Express

Note: BounceBack Express software (version 7.0 or higher) is not backward compatible with earlier Seagate External Hard Drive models. You should only use the software on the CD that is provided with the drive.

BounceBack Express allows you to copy files automatically from your hard drive to your external drive. It supports Windows 2000 Pro, XP and Mac OS 10.4 (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 Mac 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 (?) icon on the BounceBack Control Center 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 Control Center 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 Express or use the **Browse** button to select another location.
7. Click **Yes** to create the default folder or to give it 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 website and provides the latest information on BounceBack Express software.

Register Now takes you to the CMS website 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 is displayed, you are offered 3 choices for your first backup: **Full System, My Documents** and **Let Me Choose**.

Full System will set up a backup set that includes all files and folders on your computer. This setting requires that 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 launch a backup operation manually 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 increase incrementally, 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. A data set will have been created but no backup has been performed. If you want to make use of any of the advanced setting 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 detailed file-by-file progress as the backup process is running. However, if you click the **View Detailed Progress** option, the speed of the backup process will be slowed down substantially.

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

Note: When using BounceBack Express with Mac OS system software, it is recommended that you reformat your hard drive to a Mac OS extended format. Using BounceBack Express and a drive formatted in FAT32 with a Mac system may interrupt your first backup. You will have to re-set your backup from the BounceBack Express menu.

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. Select **BounceBack Control Center** and click the **Backup** button.
- **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 turn off the Auto Launch feature temporarily, click on the BounceBack icon in the system tray, and select **Disable BounceBack Launcher**.
- **Scheduled Backups.** Use the **Settings** function from the BounceBack Control Center 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 the 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

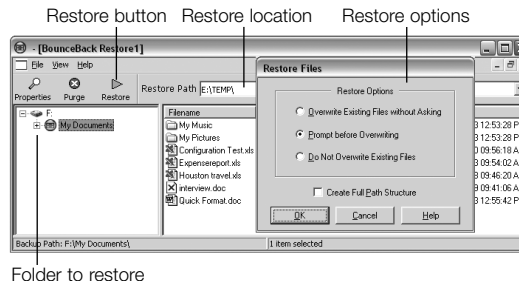
BounceBack QuickRestore can restore files and folders from the backup drive quickly and easily.

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

Follow these steps to restore data:

1. Start BounceBack Control Center 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 the 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.



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 QuickRestore 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 the BounceBack Control Center 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, synchronisation, and versioning.

- The bootability feature creates a bootable drive image that enables users to recover instantly 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 synchronisation feature automatically scans both the computer and the backup drive for changed files, and synchronises 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 +1-714-424-5520.

Troubleshooting

PROBLEM

I purchased a 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 2³⁰, 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 eSATA port, but the computer does not recognise 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 Power 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 eSATA cable is plugged in to the computer and the drive. For external SATA kits, plug the drive directly into the eSATA port on the computer.

Note: When installing a PCI eSATA host adapter, driver installation may be required for optimal performance. Drivers are provided with most host adapters or may be found on the Disc Utility CD in this kit. For the most up-to-date drivers for your PCI eSATA host adapter, see the card manufacturer's website.

Check Device Manager to confirm the eSATA host controller is properly configured.

To open Device Manager (in Windows XP and Windows 2000 Pro), right-click **My Computer**, choose **Manage**, and then choose the **Device Manager** icon from the tree.

If properly installed, your eSATA controller will be listed under the “SCSI and RAID controllers”; if the controller is listed in the “Other Devices”, then additional drivers are required for your host. Check with the PCI card vendor or motherboard vendor for the appropriate drivers. PCI card drivers for Windows 2000 Pro and XP may be included on the Seagate Disc Utility CD.

If the host controller is not seen in Device Manager, it may mean the PCI card is not properly seated.

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

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

Macintosh-specific problems

First, be 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 **Check Now**. 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, initialise 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 initialise.”

RESOLUTION

Your Mac OS does not recognise the drive format. Use Apple’s Disk Utility to initialise the drive with a Mac OS Extended format.

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