



Portable External Hard Drive

Quick Start
Guide



Your new Seagate® portable hard drive enables you to easily add disc space to your laptop or desktop system, and the convenient size enables you to take the drive with you. Plus, connecting it couldn't be easier—in most cases, you can just plug it in. You will be ready to go within seconds!

Contents

- Seagate external hard drive with a USB 2.0 interface
- USB 2.0 'Y' cable
- Quick Start Guide
- Seagate Extra Value CD

Requirements

Windows

- Windows XP
- Windows 2000 Pro
- Windows Me
- Windows 98SE

Macintosh

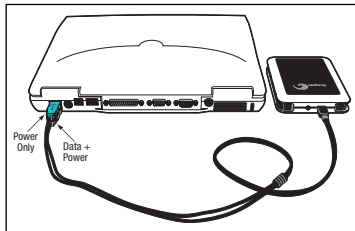
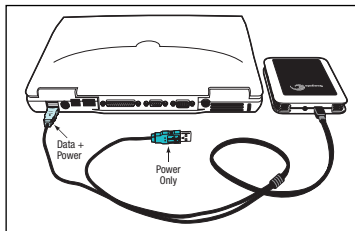
- Macintosh System 9.2.2 (or later) or Mac OS X

Setup

Your Portable External Hard Drive comes with a special USB cable. This cable is shaped like the letter ‘Y’ with one USB connector on one end of the cable and two connectors at the other end of the cable. This cable supplies power to the drive and handles the data going between the drive and your computer—this means you don’t have any other cables to connect.

1. Connect one end of the USB ‘Y’ cable to your Portable drive and the connector end labelled “Data + Power” to any one of the USB ports on your computer. The drive does not have a power switch, so if your computer is powered on, the drive will begin spinning as soon as you connect it to your computer.

Note: If your computer does not supply enough power to the drive through the one USB “Data + Power” connector, plug in the unused connector on the ‘Y’ cable to another USB port on your computer (or a powered USB hub). This additional connection may be needed to provide additional power to the drive and is only required if connecting the “Data + Power” connector alone does not power up the drive.



USB 1.1 connectors only support transfer rates of 12 Mbits/sec. This is not ideal for disc drives. To take advantage of the speed of this disc drive, connect it to a computer that supports high-speed USB 2.0. High-speed USB 2.0 supports transfer rates up to 480 Mbits/sec (40 times faster than USB 1.1).

Note. A DC receptacle is available near the USB connector on the portable hard drive to enable the use of an external DC power supply. This power supply may be used to provide necessary power to the portable hard drive in the event an extra USB port is not available or the USB port(s) don’t provide enough power. See page 22 for specifications.

2. See below for Windows OS information, or page 7 for Macintosh OS information.

These sections provide instructions about how to:

- Install drivers
- Reformat and partition the drive
- Dismount the drive

Installing drivers and reformatting are steps you only need to do one time. After that, you can use the drive by just connecting the USB cable.

Windows OS

Installing drivers for your operating system (OS)

Windows XP/2000 Pro/Me operating systems have built-in, up-to-date drivers for a USB interface. 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.

Note. Certain OEM installations of Windows Me call for a file named USBNTMAP.SYS while attempting to load drivers for the portable drive. This file can be located on the Windows Me installation or recovery CD in the WIN9x\BASE2.CAB folder.

Windows 98SE: When you connect the drive to your computer, Windows 98SE displays the *Add New Hardware* wizard. This means the wizard needs to find the USB drivers included on the Seagate *Utility Toolkit CD*. Follow these steps to install the drivers:

1. Insert the Seagate *Utility Toolkit 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. Your new drive is ready to use.

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 *Extra Value CD*.

Caution. Reformatting destroys all data on the drive. Back up any data that you want to keep before you reformat the drive.

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 *Extra Value 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.

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.

Dismounting your drive with Windows OS

Caution. Never physically disconnect any cable attached to the drive when the drive LED indicates disc activity—doing so will probably result in data loss.

How to dismount and disconnect 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 USB cable.

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.

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.

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.

3. Click **Partition** if you want to partition your drive into multiple volumes, 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.

Sharing data 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.

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 a USB interface. You don't need to install any drivers if you are using a Macintosh OS.

Dismounting and disconnecting your drive with Mac OS

Caution. Dismount the drive before disconnecting the USB cable from the drive. The drive will spin down when you dismount the drive. You can then disconnect the USB cable and move the drive.

How to dismount and disconnect 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 your hard drive when the drive icon disappears from your desktop and the drive LED is not lit.

Note. Included with capacities of 100GB and above.

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

Note: *BounceBack Express* software does not support Mac OS.

BounceBack Express

BounceBack Express allows you to automatically copy files from your hard drive to your external drive. It supports Windows 2000 Pro.

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.
- 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**.

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.

BounceBack QuickRestore for Windows 2000 Pro and XP

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

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.

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: My operating system reports the capacity as much less than the capacity indicated on the drive I purchased.

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, for example, even though a 40-Gbyte drive stores 40 Gbytes of data when you think in terms of 1 Gbyte equals 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 40-Gbyte drive has a capacity of approximately 37 Gbytes, the binary equivalent of 40,000,000,000 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 drive LED flickers on and off when you plug in the drive. If the light does not flicker on and

off, check to ensure that the USB cable is plugged in firmly.

Confirm that the USB cable is plugged in to the computer and the drive. 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.

If, after following the steps above, you still have a problem, contact Seagate support.

Problem: Drive clicks or beeps when I plug it in and does not show up in **My Computer**.

Resolution: This error commonly occurs with the Portable drive if it is plugged into a USB 1.x port or into a un-powered USB hub. The portable drive comes with a special USB cord that allows the drive to pull additional power from another USB connector. If your drive clicks when you plug it in then first plug in the Power cable then plug in the “Data + Power” cable.

If you are using the drive with a Powered hub or with a USB 2.0 port this should not be necessary.

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

Note. A DC receptacle is available near the USB connector on the portable hard drive to enable the use of an external DC power supply. This power supply may be used to provide necessary power to the portable hard drive in the event an extra USB port is not available or the USB port(s) don't provide enough power. See page 22 for specifications.

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 www.seagate.com/support/kb/disc/faq/external_usb_drivers.html).

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.

Appendix

If you should need an external DC power supply, please ensure it meets the following specifications:

AC input voltage:

90VAC to 264VAC

AC input frequency:

47Hz to 63Hz

Over-Voltage protection:

Yes

**Short Circuit Protection
(current limiting):**

Yes

Nominal DC voltage:

5.4 VDC

Max DC voltage variation from nominal under all conditions including temperature range, min to max current, and step load variations):

+/- 4%

Note. The max voltage at 0.0A shall be less than or equal to 5.62Vdc. Min voltage at 1.3A shall be greater than or equal to 5.18Vdc

Step load variation:

0 to 90%

Max current:

1.3A

Power:

7W typical

Ripple:

50mVp-p max from
10Hz to 100Mhz

Efficiency:

Better than 75% typical

Temperature range:

0°C to 45°C

Humidity:

20% to 90%

Emissions:

FCC class B, EN 55022 B

Agency approvals:

CSA, UL, CE, FCC



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