4BIG QUADRA USER MANUAL

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INTRODUCTION

Congratulations on the purchase of your new LaCie 4big Quadra. This high-performance, extremely flexible RAID (Redundant Array of Independent/Inexpensive Disks) subsystem is ideal for integration with databases, video, and every creative system.

RAID technology is one of the best means to protect your data, while providing greater data integrity and

availability than standard hard disk storage. With the ability to provide single error detection and redundant information to recover the original if a disk fails, a RAID system is an ideal means to safe-guard valuable data while also stream-lining performance.

The LaCie 4big is the ultimate approach to a flexible RAID solution, with its ability to manage various RAID levels for a wide range of applications.

These pages will guide you through the process of connecting your LaCie product and will explain its features. If this manual doesn't answer your questions or if you are having trouble, consult the Getting Help page.

BOX CONTENT

Your box contains the following:

- LaCie 4big RAID system tower with four hot-swappable hard drives
- Hi-Speed USB 2.0 cable
- FireWire 400 cable
- FireWire 800 cable
- eSATA cable
- External power supply
- LaCie Utilities CD-ROM
- Quick Install Guide
- 2-in-1 RAID mode change and drive removal tool

Note: A PDF of this User Manual and software utilities are pre-loaded on the drive.

Important info: Please save your packaging. In the event that the drive should need to be repaired or serviced, it must be returned in its original packaging.

MINIMUM SYSTEM REQUIREMENTS

Windows Users

- Windows 2000[1], Windows XP[1], or Windows Vista
- 500MHz Pentium III or higher (or equivalent processor)
- 512MB RAM or greater
- Available USB 2.0, FireWire 400, FireWire 800 or eSATA interface port[2]

Mac Users

- Mac OS X 10.3 or later
- G4, G5, Intel Core Duo or Intel Core 2 Duo
- 512MB RAM or greater
- Available USB 2.0, FireWire 400, FireWire 800 or eSATA interface port[2]
- Compatible with Time Machine

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[1]Windows 2000 and Windows XP will not recognize logical volumes with capacity greater than 2TB. For details, see Formatting and Partitioning.

[2]Most computers do not come from the factory with FireWire 800 or eSATA ports, so you may need to purchase a PCI, PCI-X or PCI-Express card to be able to connect your LaCie 4big via FireWire 800 interface. LaCie offers a wide selection of PCI cards. Visit the LaCie website at www.lacie.com/accessories.
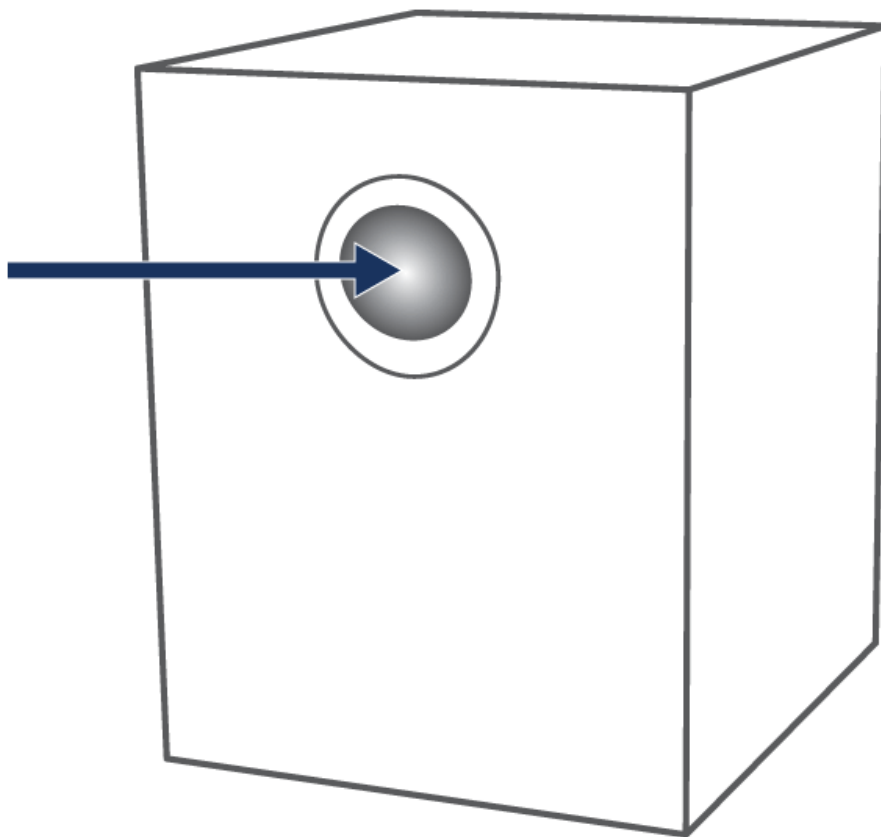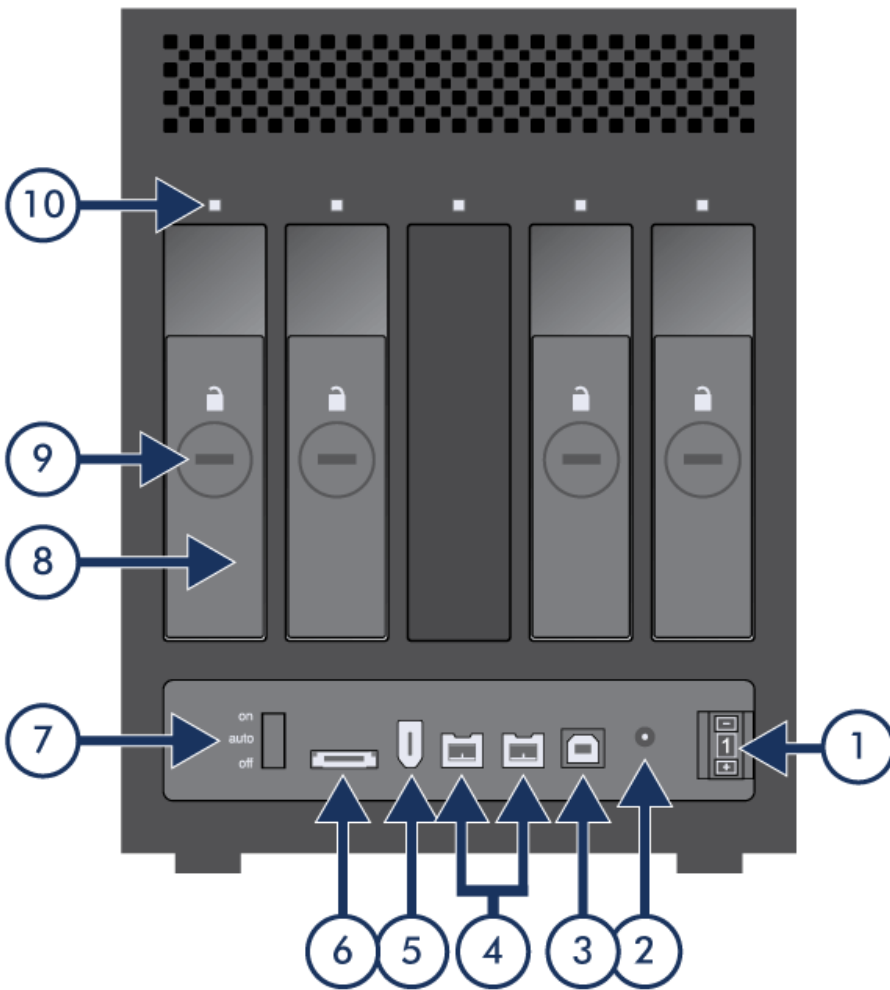
VIEWS OF THE DRIVE

Front View

The blue button on the front of the LaCie 4big serves as an LED drive status indicator and the LaCie Shortcut Button.

See the LaCie Shortcut Button User Manual on the Shortcut Button CD-ROM for more information.

See LED Status Indicators for more information.

Rear View

1. RAID selection switch
2. Power input connection
3. USB 2.0 port
4. FireWire 800 ports
5. FireWire 400 port
6. eSATA 3Gbits port
7. on/auto/off power switch
8. Drive tray handle
9. Drive lock
10. Drive status LED

LED STATUS INDICATORS

Use the 4big's front and rear LEDs and the chart below as a reference to determine the status of your 4big:

If the front LED is:	And the rear LED is:	And the RAID mode is:	Then:
Solid blue	Blinking blue	All	The 4big is working properly, only active disks' LEDs blink.
	Blinking red	All	One or more errors have been detected on the drive, but while it is still functional, replacing it is recommended.
Blinking blue	Blinking blue	All	The 4big is starting up; front LED and LEDs of functional disks become solid blue when initialized.
Dimming blue (5s)[1]	Off	All	The 4big is in standby mode. If the power switch is set to "auto" the 4big will enter standby when your computer is either off or in standby. If rebuilding has begun, the process will finish before the 4big can enter standby. After 30 minutes of standby, the LED will switch off.
Alternating long blue and short red:	Three disks are blinking blue, while one disk is blinking 3 blue, 1 red:	RAID 10, 3, 5, 3+/5+	RAID is rebuilding.
	Solid red (failed disks) and solid blue (functional disks)	RAID 10, 3, 5, 5+	One drive has failed or was improperly inserted; RAID is functional but the security of the drives has been compromised.
Solid red	Solid red (failed disks) and solid blue (functional disks)	RAID 0, concatenation	One or more drives have failed or are improperly inserted; RAID is not functional.
		10, 3, 5, 3+/5+	Two or more drives have failed or are improperly inserted; RAID is not functional.
Blinking blue/red	Normal LED activity	All	Temperature alert; allow the 4big to finish current processes and then shut it down. Make sure the ventilation holes on the back of the 4big are not obstructed and that there is ample room for airflow around the unit. Allow the 4big to cool before turning it back on.
Dimming red (5s)[1]	Off	All	During standby mode, when one or more drives have failed or are improperly inserted; RAID is not functional. Dimmed LED stays on for 30 minutes.
Dimming red (5s)[1]	Off	All	Temperature critical; LaCie recommends that following this event you leave the 4big in standby for at least an hour before restarting to prevent damage to the disks.
Off	Off	All	The 4big is either turned off, or has been in standby mode for more than 30 minutes, or system or electronic board failure; in this case, contact LaCie customer support.

[1] LED dims for 5 seconds and then remains at a low intensity.

CABLES AND CONNECTORS

USB 2.0

USB is a serial input/output technology for connecting peripheral devices to a computer or to each other. Hi-Speed USB 2.0 is the second-to-latest implementation of this standard, and it provides the necessary bandwidth and data transfer rates to support high speed devices such as hard drives, CD/DVD drives and digital cameras.

Your LaCie product is shipped with a Hi-Speed USB 2.0 cable to ensure maximum data transfer performance when connected to a Hi-Speed USB 2.0 port. The cable will also work when connected to a USB 1.1 port, but performance will be limited to USB 1.1 transfer rates.

Connector Face (to computer)	Cable End (to computer)	Cable End (to product)	Connector Face (to product)

FIREWIRE 400

FireWire 400, also known as IEEE 1394, is specifically aimed at multimedia peripherals such as digital video camcorders, CD-RW drives, DVD drives and hard drives.

FireWire is also a point-to-point interface, meaning that a FireWire device can transmit data to another FireWire device without having to go through a computer. This lets several computers share a given device, and also allows up to 63 devices to be daisy-chained to the same FireWire bus (with a max of 16 devices on one branch).

Connector Face (to computer)	Cable End (to computer)	Cable End (to product)	Connector Face (to product)

FIREWIRE 800

FireWire, also known as IEEE 1394, is a high-speed serial input/output technology for connecting peripheral devices to a computer or to each other, and FireWire 800 is the implementation of the new IEEE 1394b standard.

FireWire 800 offers increased bandwidth and extended distance between devices. FireWire 800 is ideal for bandwidth-intensive applications, such as audio, video and graphics.

Connector Face (to computer)	Cable End (to computer)	Cable End (to product)	Connector Face (to product)

Note: FireWire 800 is backwards compatible with FireWire 400, which means that if you have an adapter cable, you can connect your LaCie FireWire 800 product to a FireWire 400 port on your computer. In this case, file transfers will be limited to FireWire 400 speeds. If your product does not include an adapter cable in the package, you can purchase one from www.lacie.com/accessories/.

ESATA

Your LaCie product offers the latest in SATA technology, allowing interface (or bus) transfer rates of up to 3 Gbits/s. SATA technology was originally developed to serve as an internal interface, delivering improved performance to internal connections.

Soon after, eSATA, or external SATA was developed, allowing for the use of shielded cables outside the PC. eSATA technology was developed to be rugged and durable. eSATA connectors do not have the "L" shaped design of other SATA connectors. In addition, the guide features are vertically offset and reduced in size to prevent the use of unshielded internal cables in external applications.

Connector Face (to computer)	Cable End (to computer)	Cable End (to product)	Connector Face (to product)

GETTING CONNECTED

This section covers the installation and configuration of your LaCie 4big.

CONNECT THE INTERFACE CABLE

1. Plug one end of the interface cable (USB, FireWire or eSATA) into the corresponding port on your host computer.
2. Connect the other end of the cable to the matching port on the 4big.
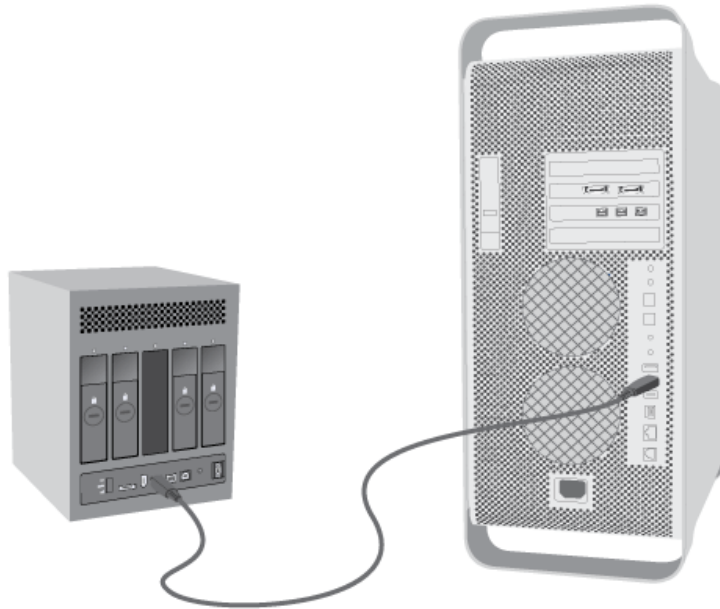
Technical note: If two interfaces are connected at the same time, the first one connected remains active and the second will not work.

TURN THE 4BIG ON

The power supply kit is composed of two cables: one cable (A) connects to the LaCie drive; and the other cable (B) connects to a power outlet, such as a wall outlet or a surge protector.

1. Connect cable A to the 4big.
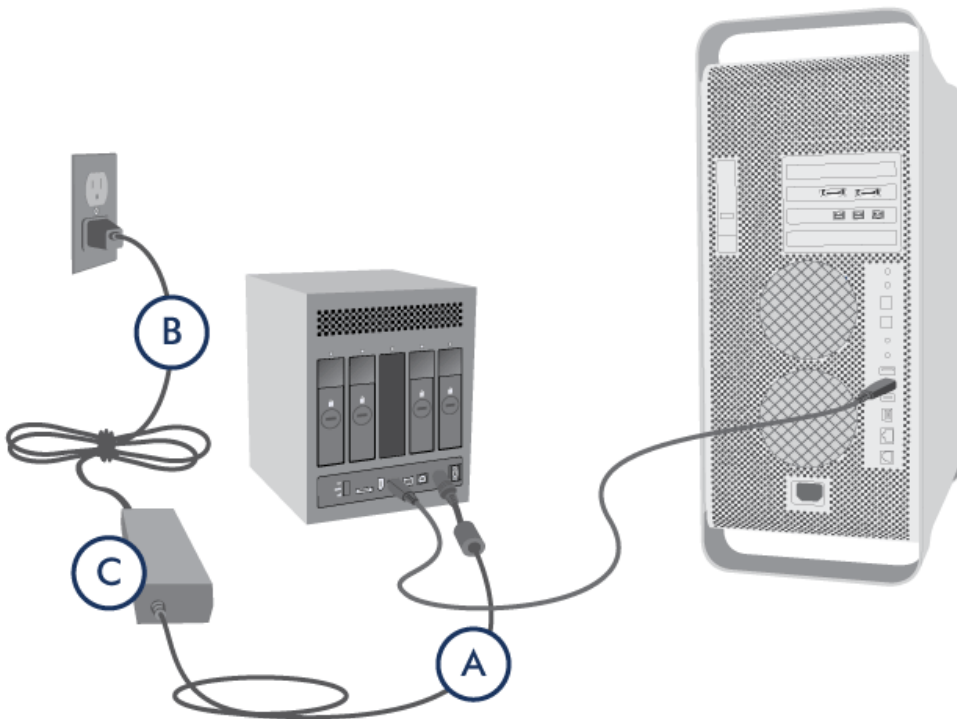
2. Connect cable B to the power supply brick (C).
3. Connect cable B to a surge protector or wall outlet.
4. Turn on the drive by moving the power switch on the back of the drive to the "on" position.
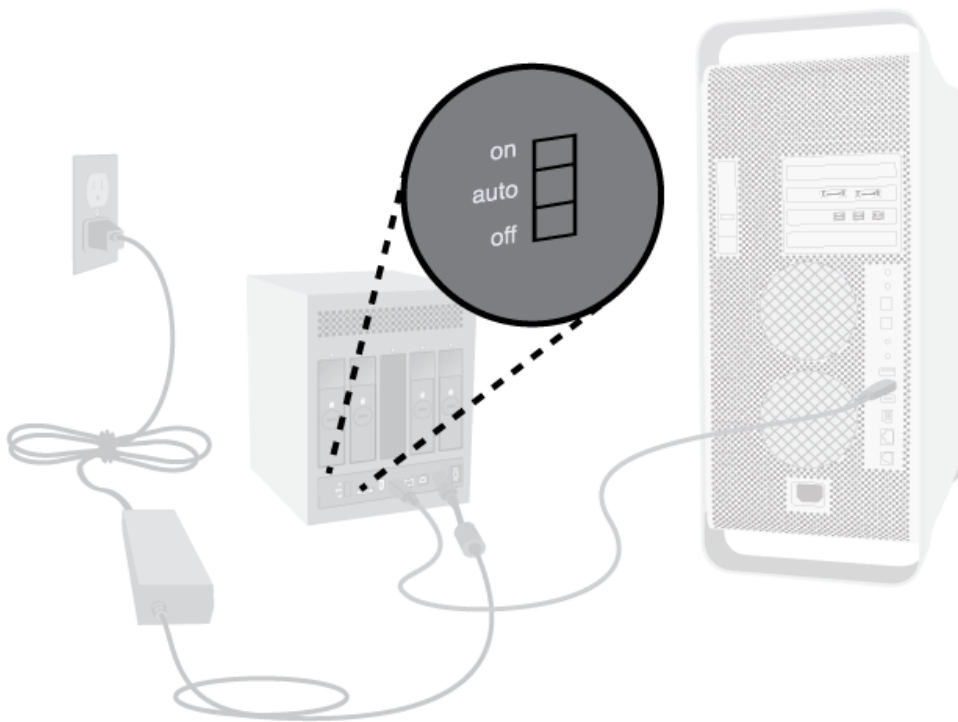
The 4big system may take up to 30 seconds to boot up.

Caution: Only use the AC adapter supplied with your specific LaCie device. Do not use a power supply from another LaCie device or another manufacturer. Using any other power cable or power supply may cause damage to the device and void your warranty.

Always remove the AC adapter before transporting your LaCie drive. Failure to remove the adapter may result in damage to your drive and will void your warranty.

Technical note: You may use your LaCie drive when in a foreign country thanks to its 100-240 Volt power supply. To be able to use this feature, you may need to purchase an appropriate adapter or cord. LaCie accepts no responsibility for any damage to the drive resulting from the use of an inappropriate adapter. Using an adapter other than one authorized by LaCie will void your warranty.

Note: Depending on your country, power outlet connections may be different from the one shown above.

RAID

ABOUT RAID MODES

This section will help you decide which RAID mode is right for your application.

RAID Number	RAID Mode	Capacity	Protection	Speed
0	RAID 0	100%	★☆☆☆☆	★★★★★
1	RAID 10	50%	★★★★⯪	★★★⯪☆
2	Concatenation	100%	★☆☆☆☆	★★☆☆☆
3	RAID 3	75%	★★★★☆	★★★★☆
4	RAID 3+Spare	50%	★★★★★	★★★⯪☆
5	RAID 5	75%	★★★★☆	★★★★☆
6	RAID 5+Spare	50%	★★★★★	★★★⯪☆
7	N/A (no RAID changes will take effect if 7 is selected)			

RAID 0

RAID 0

A1 A2 A3 A4
B1 B2 B3 B4
C1 C2 C3 C4
D1 D2 D3 D4
E1 E2 E3 E4

Disk 1   Disk 2   Disk 3   Disk 4
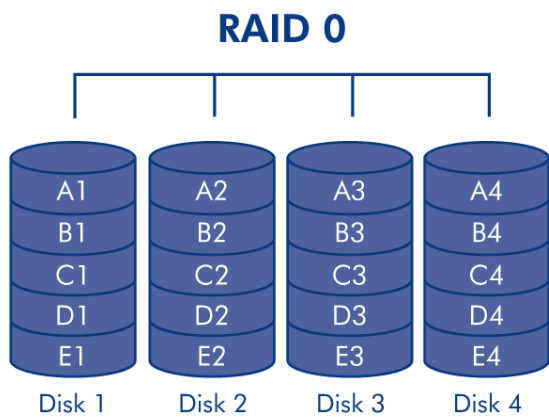
The 4big Quadra is pre-configured in RAID 0, the fastest RAID mode. Requiring at least 2 drives, RAID 0 stripes data onto each disk. The available capacities of each disk are added together so that one logical volume mounts on the computer.

If one physical disk in the array fails, the data of all disks becomes inaccessible because parts of the data have been written to all disks.

Applications

RAID 0 is ideal for users who need maximum speed and capacity. Video editors working with very large files may use RAID 0 when editing multiple streams of video for optimal playback performance. A RAID 0 array is more suited for actively working with files (editing video, for example) and should not be used as a storage backup.

RAID 10

RAID 10

A1	A1	A2	A2
A3	A3	A4	A4
A5	A5	A6	A6
A7	A7	A8	A8
A9	A9	A10	A10
Disk 1	Disk 2	Disk 3	Disk 4
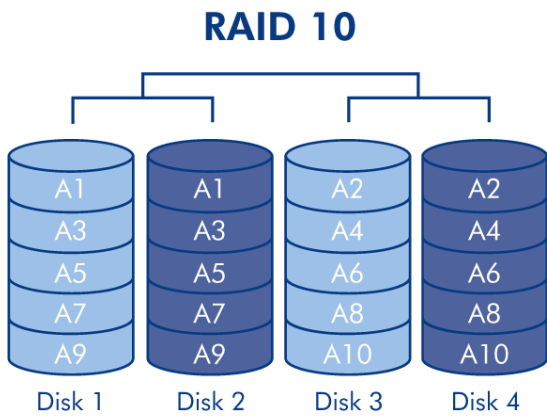
RAID 10 (also called RAID 1+0) is another RAID level that combines the attributes of other levels, specifically RAID 1 and RAID 0. It is a "mirror of stripes", meaning that data is striped across two mirrored arrays. The Striping occurs between arrays and the mirroring occurs within the same array. See the diagram, right.

In a RAID 10 array, one disk from each mirrored pair can fail with no data loss. However, the working disk in an array with a failed disk becomes a weak point for the entire array. If the second disk in a mirrored pair fails, the entire array is lost.

Applications

RAID 10 provides good speeds because of RAID 0 striping, but cuts the available capacity of a device in half (assume all disks in the array have the same capacity).

Concatenation

Concatenation

A	F	K	P
B	G	L	Q
C	H	M	R
D	I	N	S
E	J	O	T
Disk 1	Disk 2	Disk 3	Disk 4
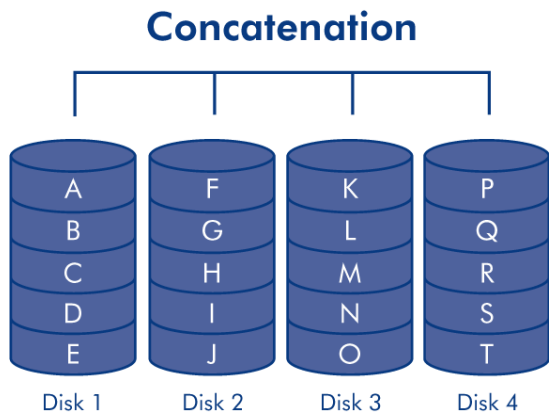
When disks are concatenated, their capacities are combined and data is written to the primary disk in the array until is it full, and then to successive disks. Concatenation provides no performance advantage or added measure of data safety. It is simply a method of combining more than one physical disk into one volume for greater overall capacity.

Concatenation allows full use of the capacity of all disks in the array and most data can survive a disk failure. Only data on the failed disk and data that is partially written on the failed disk and an operative disk is lost.

Offers the maximum possible capacity by combining the capacities of several drives into one large volume.

RAID 3 and RAID 3+Spare
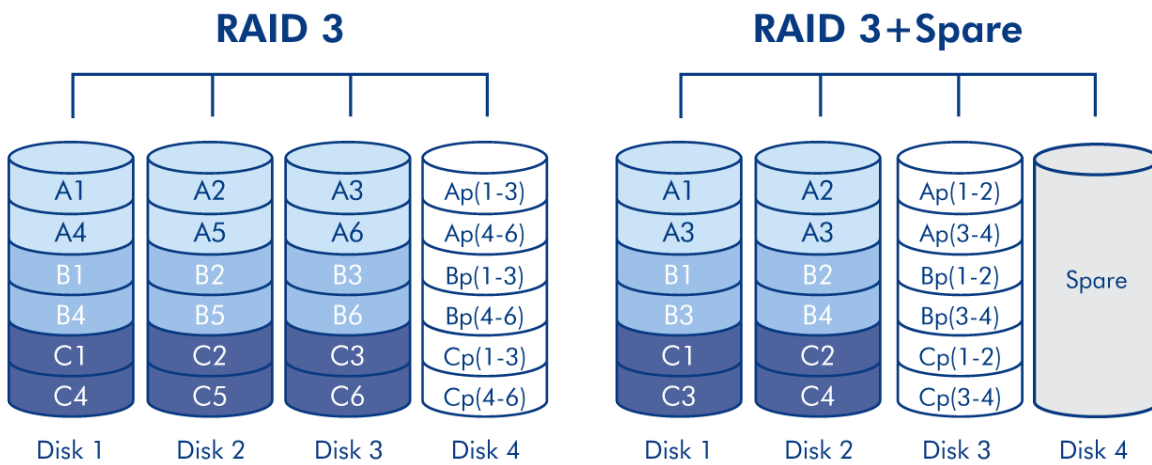
RAID 3 uses byte-level striping with a dedicated parity disk (Disk 4 in the illustrations, right) so that one volume mounts on the computer. A RAID 3 array can tolerate a single disk failure without data loss. If one physical disk fails, the data from the failed disk can be rebuilt onto a replacement disk. If a second disk fails before data can be rebuilt to a replacement drive, all data in the array will be lost.

In RAID 3+Spare, one disk in the array is left empty. If a drive in the array fails, the data from the failed disk is automatically rebuilt to the empty or "spare" disk.

Applications

RAID 3 provides good data safety for environments where long, sequential files are being read, such as video files. Disk failure does not result in a service interruption because data is read from parity blocks. RAID 3 is useful for people who need performance and constant access to their data, like video editors. RAID 3 is not recommended for intensive use with nonsequential files because random read performance is hampered by the dedicated parity disk.

In RAID 3+Spare disk failure does not require immediate attention because the system rebuilds itself using the hot spare, but the failed disk should be replaced as soon as possible.

RAID 5 and RAID 5+Spare
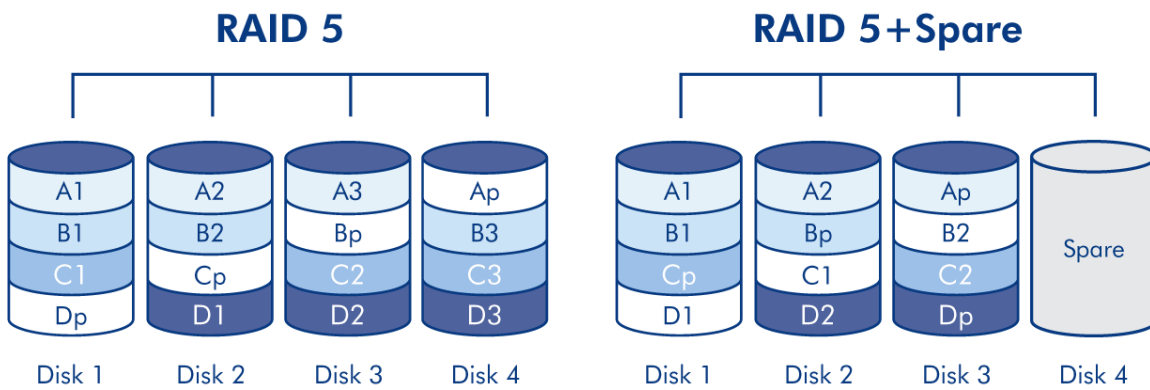
RAID 5 combines the striping of RAID 0 with data redundancy in an array with a minimum of three disks.

Data is striped across all disks and a parity block (P) for each data block is written on the same stripe. If one physical disk fails, the data from the failed disk can be rebuilt onto a replacement disk. No data is lost in the case of a single disk failure, but if a second disk fails before data can be rebuilt to a replacement drive, all data in the array will be lost.

In RAID 5+Spare, one disk in the array is left empty. If a drive in the array fails, the data from the failed disk is automatically rebuilt to the empty or "spare" disk.

Applications

RAID 5 combines data safety with efficient use of disk space. Disk failure does not result in a service interruption because data is read from parity blocks. RAID 5 is useful for people who need performance and constant access to their data, like video editors.

In RAID 5+Spare disk failure does not require immediate attention because the system rebuilds itself using the hot spare, but the failed disk should be replaced as soon as possible.

CHANGING THE RAID MODE

The 4big comes preconfigured in RAID 0 mode. Before you change the RAID mode of the LaCie 4big, familiarize yourself with the 4big's RAID modes. See About RAID Modes.

> **Important info:** Changing the RAID mode destroys data stored on the LaCie 4big. If you have saved data on the drives, back up data before following these steps.

To Change the RAID Mode

1. Unmount or safely remove the 4big Quadra volumes from your computer, disconnect the interface cable and switch off the 4big.
2. To enter RAID modification mode, push and hold the front button and simultaneously turn on the 4big. Continue holding the front button for 15 seconds.
3. Push the + or - buttons on the RAID mode selector until the desired RAID number appears.
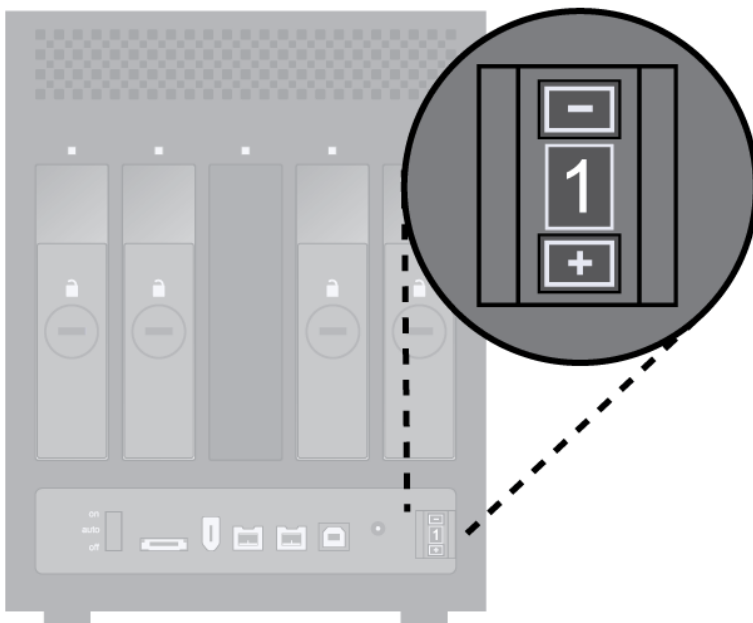
- 0=RAID 0
- 1=RAID 10
- 2=Concatenation
- 3=RAID 3
- 4=RAID 3+Spare
- 5=RAID 5
- 6=RAID 5+Spare
- 7=N/A. Although the number 7 appears in the RAID selector, no RAID changes will take effect if 7 is selected.
4. Validate the mode by pushing and holding the front LED button for 2 seconds.
5. Let the drives turn on, and then turn off the 4big, allow it to shut down and turn it back on.

6. Partition the disks. See Formatting and Partitioning.

> **Important info:** You must partition the disk drives after changing the storage policy configuration. See Formatting and Partitioning.

> **Caution:** Your LaCie 4big comes preconfigured in RAID 0 (Fast) mode. RAID 0 allows access to the whole storage capacity but does not provide any security. If a drive fails, all data will be lost. If you are concerned about data security, LaCie highly recommends a RAID 10, 3, 3+SPARE, 5, or 5+SPARE configuration. See RAID for more information.

REMOVING AND INSTALLING DRIVES

In the event that an individual hard disk fails in the LaCie 4big, please contact your LaCie reseller or LaCie Customer Support. Please replace a defective hard drive only with a new drive provided by LaCie.

Caution: After continuous use of the LaCie 4big, drives may be hot. Use caution when removing.

To Remove a Drive

1. If the 4big is in RAID 0 or Concatenation mode, turn it off and unplug it. If the 4big is in RAID 10, 3, 3+, 5 or 5+ mode, you can leave it turned on and continue to step 2.
2. The drive tray may be locked. To unlock it, insert the round end of the provided 2-in-1 tool into the slot on the drive lock and turn the lock until the slot is vertical.
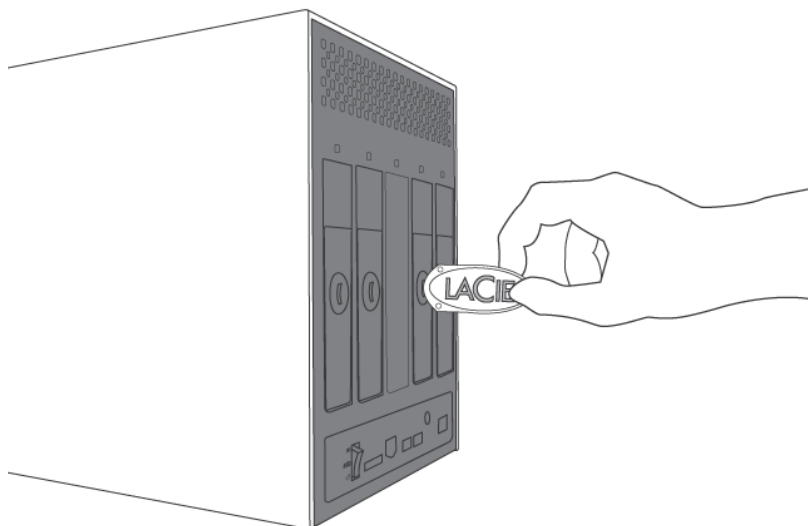
3. Draw out the drive tray by inserting your finger into the space behind the drive tray handle and pulling to disengage the drive.
4. Grasp the drive tray handle and carefully extract the drive.
5. Turn the drive on to continue using the remaining drives.

To Install a Drive

1. If the 4big is in RAID 0 or Concatenation mode, turn it off and unplug it. If the 4big is in RAID 10, 3, 3+, 5 or 5+ mode, you can leave it turned on and continue to step 2.
2. Carefully insert the drive tray into an empty drive bay. When the drive tray is most of the way in and you feel resistance, press the drive tray handle firmly until you feel the drive snap into place and the drive tray handle is flush with the back of the 4big.
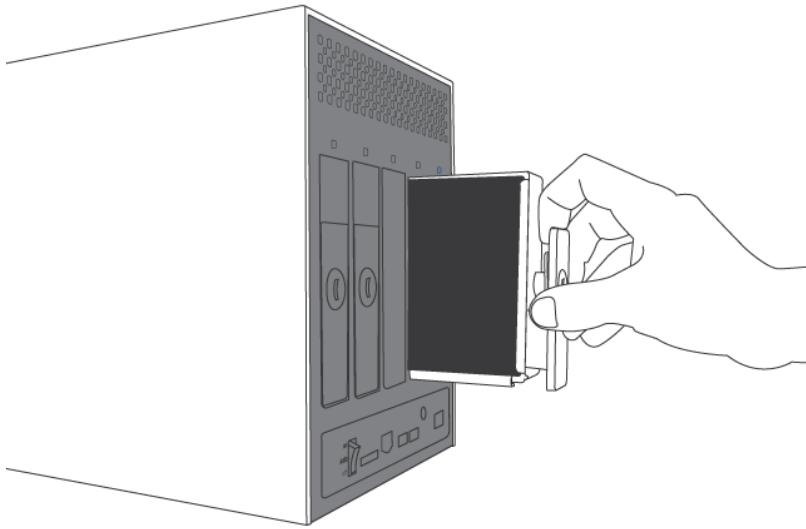
3. Use the 2-in-1 tool to lock the drive lock. Turn the locks until the grooves are oriented vertically. The drives are locked when all locks are horizontal.

Technical Note: Data are still accessible during a rebuild. The 4big can be disconnected from the workstation during the rebuild, even in AUTO mode; only the power must be connected.

Important Info: Drive warranty will be void if you replace the defective drive with a drive not provided by LaCie. Drives purchased from LaCie are shipped pre-installed in drive trays with handles.

A replaced drive should not have a smaller capacity than the drive it is replacing.

Rebuilding a RAID array can take several hours. For example, rebuilding a 1TB RAID 3 array can take up to 6 hours. This time it takes to rebuild will be increased if you access the drives during the rebuild.

LaCie does not recommend removing any drives during rebuild.

UNMOUNTING YOUR DRIVE

USB, FireWire, Thunderbolt, and eSATA external devices feature "plug & play" connectivity, which means that your LaCie storage can be connected and disconnected while the computer is running. To prevent failures, however, it is important to follow these steps when disconnecting your device.

WINDOWS XP USERS

From the System Tray (located in the lower right-hand side of your screen), click the Eject icon (a small green arrow over a hardware image). A message will appear, listing the devices the Eject icon controls (it should say, "Safely remove…"). Click on the LaCie storage device in this prompt.
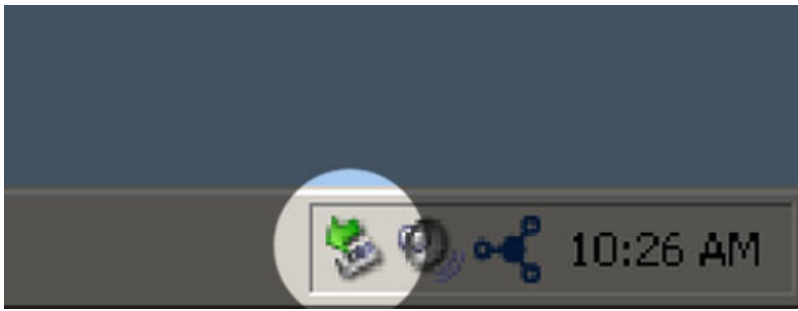
This message will appear: "Safe to Remove Hardware" (or similar). It is now safe to disconnect the device.

WINDOWS VISTA & WINDOWS 7 USERS

From the System Tray (located in the lower right-hand side of your screen) click on the plug icon (note the white check mark inside a green circle).

A message will appear, detailing the devices that may be safely unmounted.

Select **Eject** for the device you wish to unmount. A message will appear notifying you that it is safe to remove it.
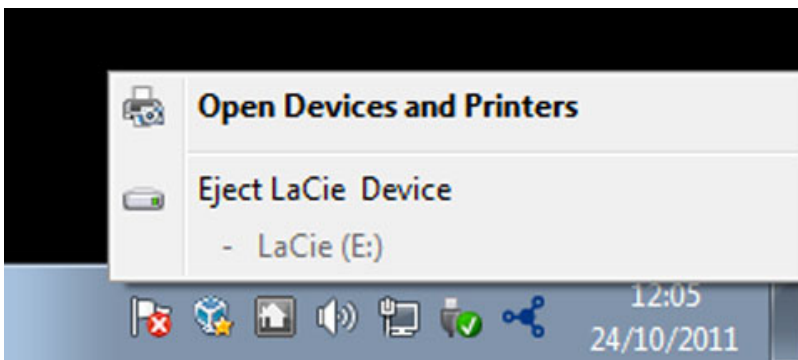
MAC USERS

Drag the storage device icon to the Trash. (The icon pictured below is a generic USB device icon. Your LaCie storage may be represented by an icon that looks like the device itself.)
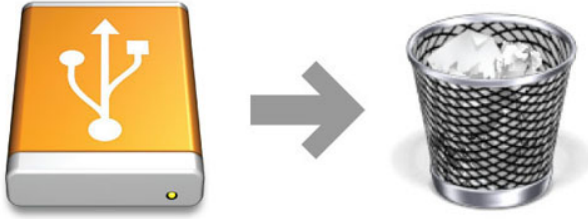
When the icon disappears from the desktop, the storage device can be disconnected.

FORMATTING AND PARTITIONING

Standard LaCie storage devices will prompt you to run LaCie Setup Assistant when they are first connected to a computer (Windows or Mac). LaCie Setup Assistant helps you to quickly format the storage device according to your needs.

Please read the information below carefully if you:

- Abort LaCie Setup Assistant while it is formatting.
- Wish to reformat your storage device after LaCie Setup Assistant has successfully completed.
- Own a LaCie storage device that does not feature Setup Assistant (for example, select LaCie USB Keys).

ABOUT FILE SYSTEM FORMATS

Windows Users

FAT 32: FAT is an acronym for File Allocation Table, which dates back to the beginnings of DOS programming. Originally, FAT was only 16 bits, but after the second release of Windows 95 it was upgraded to 32 bits, hence the name FAT 32. In theory, FAT 32 volume sizes can range from less than 1MB all the way to 2TB.

It is the native file system of Windows 98 and Windows Me, and is supported by Windows 2000, Windows XP, Windows Vista, and Windows 7. When FAT 32 is used with Windows 2000, Windows XP, Windows Vista, and Windows 7 however, volume size is limited to 32GB (by the Windows partition utility, i.e. Disk Manager), and the individual file size is limited to 4GB.

NTFS: This acronym stands for New Technology File System, and it is the native file system for Windows NT, 2000, XP, Vista, and 7. NTFS offers several features that are not available with FAT 32: file compression, encryption, permissions, auditing, and mirroring drives. The minimum supported volume size for NTFS is 10MB with a maximum of 2TB when initialized in the MBR format. The more recent GPT format does not assign limits to file or partition sizes. Volumes created in NTFS are native read and write for Windows NT, 2000, XP, Vista, and 7. Earlier versions of Windows and Mac OS X 10.5 or higher may read and write to the NTFS partitions with the help of third-party drivers.

See the table below for a comparison of NTFS and FAT 32.

Windows File System Formats
Use NTFS if:
…you will be using the storage device only with Windows XP, Vista, and 7 since performance will be enhances when compared to FAT 32. This file system is compatible in read-only mode with Mac OS 10.3 and higher.
Use FAT32 if:
…you will be using your storage device with both Windows and Mac computers. Maximum single file size is limited to 4GB.

Mac Users

You may customize the storage device by reformatting and/or partitioning it with separate file system formats. For optimal performance in Mac OS environments, format and partition the storage device as one large Mac OS Extended volume.

Mac OS Extended (HFS+): Mac OS Extended refers to the file system used by Mac OS X. HFS+ represents an optimization of the older HFS file system by using hard disk space more efficiently. With HFS+, you are no longer limited by block size.

MS-DOS File System (FAT 32): This is the Microsoft file system, more typically known as FAT 32. Use FAT 32 if you are going to be sharing your LaCie storage device between Mac and Window computers.

See the table below for a comparison between HFS+ and FAT 32 (MS-DOS).

Mac File System Formats
Use HFS+ if:
...you will be using the storage device on Macs only. Performance will be enhances when compared to FAT 32. HFS+ is NOT compatible with Windows OS.
Use FAT32 if:
...you will be using your storage device with both Windows and Mac computers. Maximum single file size is limited to 4GB.

FORMATTING INSTRUCTIONS

The steps listed below will help you to format and partition a storage device. For more information on choosing the optimal file format, refer to **About File System Formats**.

Caution: Formatting will erase everything on the storage device. **LaCie highly recommends that you back up all data on your storage device before performing the steps below. LaCie is not responsible for any data lost due to formatting, partitioning, or using a LaCie storage device.**

Important Info: Formatting the **LaCie** partition will delete the included User Manual and utilities. Please copy all data, including documentation and software from LaCie, before formatting your storage device. User Manuals and select software may also be downloaded from www.lacie.com/support/.

Note: Refer to your operating system's documentation for more information on reformatting and partitioning your storage device.

Windows Users

> **Technical Note on volumes larger than 2TB:** *Windows XP 32-bit -* This version of Windows will not recognize volumes larger than 2TB; *Windows XP x64, Vista and 7 -* All of these versions of Windows can recognize volumes greater than 2TB. However, disks must be converted to the GPT file system before partitions greater than 2TB can be created. To do this, go to Windows Disk Management and right-click on the disk. Select **Convert to GPT**. You may now create partitions greater than 2TB.

1. Make sure the storage device is connected to and mounted on the computer.
2. Right-click on **Computer** and choose **Manage**. From the Manage window select **Disk Management**.
3. From the list of storage devices in the middle of the Disk Management window, locate your LaCie device.
4. By default, a partition is already created on the device with LaCie software utilities. Follow your operating system instructions to reset the existing partition.
5. To create a new partition, select **New Simple Volume**. Follow the on-screen instructions when the New Simple Volume Wizard appears.

Mac Users

1. Make sure the storage device is connected to and mounted on the computer.
2. Select **Utilities** from the **Go** menu in the Finder menu bar.
3. In the Utilities folder, double-click **Disk Utility**.

   Disk Utility will display the message **Select a disk, volume, or image**. All connected storage devices, partitions, or disk images will be displayed in this column. Storage devices in this column may have multiple listings. The top name is the name of the physical device's manufacturer, and includes the formatted capacity.

4. Select the storage device in the left-hand column.
5. Click the **Erase** tab.
6. Choose a format from the drop-down window. See **About File System Formats** for more information on choosing a file format.
7. Give the volume a name.
8. Click **Erase...** and confirm your selection in the popup window.

GETTING HELP

If you are having problems with your LaCie product, consult the table below for a list of available resources.

Order	Source	Description	Location
1	Quick Install Guide	Concise steps to follow for getting your product up and running	Either a printed leaflet or accessory box and included in the product box, or download PDF from the product page
2	Support Pages	Includes interactive troubleshooting topics for most common problems	www.lacie.com/support/, select your product, then click the "Troubleshooting" tab
3	User Manual	Includes common troubleshooting topics	See **Troubleshooting Topics** below
4	Customer Support	Create an account on lacie.com, register your product, and fill out a support ticket	Create an account here: www.lacie.com/us/mystuff/login.htm?logout&rtn=mystuff

Note: LaCie is dedicated to providing high quality products that enrich the lives of our customers. To help LaCie offer the best customer support, we encourage you to create an account and register your product at www.lacie.com/us/mystuff/login.htm? logout&rtn=mystuff. You can give us important feedback as well as receive updated information on your LaCie device.

TROUBLESHOOTING TOPICS

> **Note:** Interactive troubleshooting, a highly effective way to resolve problems with your product, is available from www.lacie.com/support/. Select your product, then click the "Troubleshooting" tab.

All Users

Problem: My file transfers are too slow.

Q: Are there other USB devices connected to the same port or hub?

A: Disconnect any other USB devices and see if the drive's performance increases.

Q: Is the drive connected to a USB 1.0 port on your computer or hub?

A: If your drive is connected to a USB 1.0 port or hub, this is normal. A Hi-Speed USB 2.0 device can only operate at USB 2.0 performance levels when it is connected directly to a USB 2.0 port or hub. Otherwise, the USB 2.0 device will operate at the slower USB transfer rates. Consider buying a USB 2.0 PCI Express Card (for desktop computers) or an ExpressCard 34 (for laptops) to allow your computer to achieve full USB 2.0 transfer speeds.

Q: Does your computer or operating system support eSATA or FireWire 800?

A: Please refer to the product packaging or consult the product support web page at www.lacie.com/support/ to check the minimum system requirements.

Q: What do I do if I lose my USB 2.0, eSATA, or FireWire cable?

A: You can purchase a replacement cable from www.lacie.com/accessories/.

Problem: I'm receiving file transfer error messages.

Q: Did you get an "Error -50" message while copying to a FAT 32 volume?

A: When copying files or folders from a computer to a FAT 32 volume, certain characters cannot be copied. These characters include, but are not limited to:

? < > / \ :

Check your files and folders to ensure that these types of characters are not being used.
The easiest solution is to check for incompatible characters in file names, change them, then resume file transferring.

If this is a recurrent problem or you can't find the files with incompatible characters, consider reformatting the drive to NTFS (Windows users) or HFS+ (Mac users). See Formatting and Partitioning.

Q: Did you get an error message telling you that the drive has been disconnected when coming out of sleep mode?

A: Simply ignore this message. The drive will remount to the desktop. LaCie drives conserve power by spinning down when you set your computer to sleep mode, and when the computer is awoken from sleep, it may not give the drive enough time to spin-up from its sleep mode.

Mac OS X Users

Problem: The drive icon doesn't appear on my desktop.

Q: Are both ends of the interface cable firmly attached?

A: Check both ends of the interface cable and make sure that they are fully seated in their respective ports. Try disconnecting the cable, waiting 10 seconds, and then reconnecting it, or trying a different interface cable. If the drive is still not recognized, restart your computer and try again. Still not working? Read on.

Q: Is your Finder configured not to show hard drives on the desktop?

A: Go to your Finder and check if **Preferences > General tab > Show these items on the desktop:** and then **Hard Disks** is selected. If not, go on to the next topic.

Q: Is your drive mounting on the operating system?

A: Open Disk Utility (**Applications > Utilities > Disk Utility**). If the drive is listed in the left-hand column, check your Finder preferences to see why it's not being displayed on the desktop. If that is not helpful, you may need to format your drive. See Formatting and Partitioning.

Q: Does your computer's configuration meet the minimum system requirements for use with this drive?

A: Please refer to the product packaging or consult the product support web page at www.lacie.com/support/ to check the minimum system requirements.

Q: Did you follow the correct installation steps for the specific interface and operating system?

A: Review the installation steps in Getting Connected. Check if you've misunderstood or omitted a step or followed instructions for a different configuration (such as interface or operating system).

Still not working? There may be a hardware defect or other problem. Time to contact www.lacie.com/support/.

Windows XP, 2000, Vista, and Windows 7 Users

Problem: The drive icon doesn't appear in My Computer/Computer.

Q: Are both ends of the interface cable firmly attached?

A: Check both ends of the interface cable and make sure that they are fully seated in their respective ports. Try disconnecting the cable, waiting 10 seconds, and then reconnecting it, or trying a different interface cable. If the drive is still not recognized, restart your computer and try again. Still not working? Read on.

Q: Is the drive listed in Device Manager?

A: All LaCie drives appear in at least one place in Device Manager.

To access Device Manager, click on **Start** and select **Run** from the menu. In Windows Vista, the 'Run' option doesn't appear by default, so press [Windows-button] and [R] on your keyboard.

Enter the command: **devmgmt.msc**

Click **OK** and the Device Manager program will open. For troubleshooting, look in the **Disk Drives** section. It might be necessary to click on **+** on the left side.

If you're not sure if your drive is listed, unplug it, then reconnect it. The entry that changes is your LaCie drive.

Q: Does your disk not appear at all?

A: Proceed to physical troubleshooting topics above.

Q: Is your drive listed next to an unusual icon?

A: Windows Device Manager can usually provide information about failures in accessories. It does not display the exact cause, or a solution, but it can assist in troubleshooting most problems.

A problematic device can be found by its unusual icon. Instead of the normal icon based on the type of device, it is instead an exclamation point, question mark, or an X.

Right-click this icon, then choose **Properties**. The **General** tab will show why the device is not working.

Still not working? There may be a hardware defect or other problem. Time to contact www.lacie.com/support/.

Q: Is your operating system Windows XP and the disk size is greater than 2TB?

A: Windows XP does not support disks larger than 2TB. Please refer to the note for Windows users in Formatting Instructions.

PRECAUTIONS

Caution: It is essential that you use only the power supply that shipped with your product, since it is a shielded-type power cord that meets FCC emission limits as well as to prevent interference to the nearby

radio and television reception.

Caution: Modifications not authorized by the manufacturer may void the user's authority to operate this device.

Important info: Any loss, corruption or destruction of data while using a LaCie drive is the sole responsibility of the user, and under no circumstances will LaCie be held liable for the recovery or restoration of this data. To help prevent the loss of your data, LaCie highly recommends that you keep TWO copies of your data; one copy on your external hard disk, for instance, and a second copy either on your internal hard disk, another external hard disk or some other form of removable storage media. If you would like more information on backup, please refer to our website.

Important info: 1TB (Terabyte) = 1,000GB. 1GB = 1000MB. 1MB = 1,000,000 Bytes. Total accessible capacity varies depending upon operating environment (typically up to 10% less per TB).

HEALTH AND SAFETY PRECAUTIONS

- Only qualified persons are authorized to carry out maintenance on this device.
- Read this User Manual carefully and follow the correct procedure when setting up the device.
- Do not open a disk drive or attempt to disassemble or modify it. Never insert any metallic object into the drive to avoid any risk of electrical shock, fire, short-circuiting or dangerous emissions. The disk drives shipped with your LaCie device contain no user-serviceable parts. If it appears to be malfunctioning, have it inspected by a qualified LaCie Technical Support representative.
- Never expose your device to rain, or use it near water, or in damp or wet conditions. Never place objects containing liquids on the LaCie device, as they may spill into its openings. Doing so increases the risk of electrical shock, short-circuiting, fire or personal injury.
- Make sure that the computer and LaCie device are electrically grounded. If the devices are not grounded, there is an increased risk of electrical shock.

GENERAL USE PRECAUTIONS

- Power requirements 100-240 V~, 50-60 Hz, (supply voltage fluctuations not exceeding ± 10% of the nominal and transient over-voltages according to over-voltage category II).
- Do not expose the LaCie device to temperatures outside the range of 5º C to 30º C (41º F to 86º F); or to operational humidity beyond 10-80%, non-condensing, or non-operating humidity beyond 10-90%, non-condensing. Doing so may damage the LaCie device or disfigure its casing. Avoid placing your LaCie device near a source of heat or exposing it to sunlight (even through a window). Inversely, placing your LaCie device in an environment that is too cold may damage the unit.
- Rated cooling for altitudes up to 2000 meters.
- If your drive features a power cable, always unplug it from the electrical outlet if there is a risk of lightning or if it will be unused for an extended period of time. Otherwise, there is an increased risk of electrical shock, short-circuiting or fire.
- Use only the power supply shipped with the device (if applicable).
- Do not use the LaCie device near other electrical appliances such as televisions, radios or speakers. Doing so may cause interference which will adversely affect the operation of the other products.
- Do not place the LaCie device near sources of magnetic interference, such as computer displays, televisions or speakers. Magnetic interference can affect the operation and stability of your LaCie device.
- Never use excessive force on your LaCie device. If you detect a problem, consult the troubleshooting section in this manual.
- Protect your LaCie device from excessive exposure to dust during use or storage. Dust can build up inside the device, increasing the risk of damage or malfunction.
- Never use benzene, paint thinners, detergent or other chemical products to clean the outside of the LaCie device. Such products will disfigure and discolor the casing. Instead, use a soft, dry cloth to wipe the device.

WARRANTY INFORMATION

LaCie offers first-rate service and support through our generous three-tiered warranty policy. Our 1-, 2-, 3-, and 5-year policies include comprehensive, complimentary web-based resources, expert in-house technical support, and worldwide repair and/or replacement coverage. To benefit from this warranty, please contact LaCie Support at www.lacie.com/us/support where you can find online support and contact information. You may also contact representatives at the original point of purchase who will be able to help guide you.

Standard warranties vary depending on the product. To verify your product's warranty status and to see which standard warranty is included with your product, type in your product's serial number at www.lacie.com/us/support. If no warranty is listed under your product's name, this means that the warranty has expired.

WARRANTY UPGRADES

If you wish to extend your warranty coverage, you can purchase Silver, Gold, or Platinum Care or Advanced Exchange. For details, see www.lacie.com/warranties.

LEGAL INFORMATION

A standard LaCie limited warranty is included with all products. Please read the terms and conditions below.

LaCie Limited Warranty Policy

LaCie ("LaCie") warrants, to the original purchaser, that this equipment shall be free of defects in materials and workmanship for a period of one (1), two (2), three (3), or five (5) years, depending on the model, from LaCie's date of original shipment when the equipment is used normally and is properly serviced when needed. If you discover a defect covered by the warranty set forth above, your sole and exclusive remedy will be for LaCie, in its sole discretion to (i) repair or replace the product at no charge to you; or, if a repaired unit or replacement product is not available, (ii) to refund the current market value of your product. You acknowledge and agree that replacement product, at the sole option of LaCie, may be a new product or a remanufactured product. In order to receive the remedy set forth above, you must return the product during the warranty period and include with each returned product (i) a copy of your original purchase invoice to verify your warranty; (ii) a Return Material Authorization number; (iii) your name, address and telephone number; (iv) a copy of the bill of sale bearing the appropriate LaCie serial numbers as proof of date of original retail purchase; and (v) a description of the problem. The customer must pay all transportation costs for a returned product. The product will need to be returned to LaCie within the country of original retail purchase. This warranty applies only to hardware products; LaCie software, media, and manuals are licensed and warranted pursuant to separate written agreement. This warranty does not apply if the product has been misused or has been damaged by accident, abuse, misuse, or misapplication; if it has been modified without permission of LaCie; or if any LaCie serial number has been removed or defaced. If a customer has purchased a LaCie Advance Care Option (ACO) to go with this equipment, the ACO shall be valid for three (3) years from activation.

EXCEPT FOR THE LIMITED WARRANTY SET FORTH ABOVE, ALL PRODUCTS ARE SOLD "AS IS" AND LACIE EXPRESSLY DISCLAIMS ALL WARRANTIES OF ANY KIND, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, NONINFRINGEMENT AND FITNESS FOR A PARTICULAR PURPOSE. WITHOUT FURTHER LIMITING THE GENERALITY OF THE FOREGOING, DOES NOT WARRANT (1) THE PERFORMANCE OR RESULTS OBTAINED FROM USING THIS PRODUCT, (2) THAT THE PRODUCT IS APPROPRIATE FOR THE CUSTOMER'S PURPOSES, (3) THE MANUAL IS ERROR FREE, OR (4) THAT NO DATA WILL BE LOST WHILE USING THE PRODUCT. THE ENTIRE RISK AS TO THE RESULTS AND PERFORMANCE IS ASSUMED BY THE CUSTOMER. THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED.

EXCLUSIONS AND LIMITATIONS

This Limited Warranty applies only to hardware products manufactured by or for LaCie that can be identified by the "LaCie" trademark, trade name, or logo affixed to them. The Limited Warranty does not apply to any non-LaCie hardware products or any software, even if packaged or sold with LaCie hardware. Manufacturers, suppliers, or publishers, other than LaCie, may provide their own warranties to the end user purchaser, but LaCie, in so far as permitted by law, provides their products "as is". Software distributed by LaCie with or without the LaCie brand name (including, but not limited to system software) is not covered under this Limited Warranty. Refer to the licensing agreement accompanying the software for details of your rights with respect to its use.

LaCie does not warrant that the operation of the product will be uninterrupted or error-free. LaCie is not responsible for damage arising from failure to follow instructions relating to the product's use. This warranty does not apply: (a) to consumable parts, unless damage has occurred due to a defect in materials or workmanship; (b) to cosmetic damage, including but not limited to scratches, dents and broken plastic on ports; © to damage caused by use with non-LaCie products; (d) to damage caused by accident, abuse, misuse, flood, fire, earthquake or other external causes; (e) to damage caused by operating the product outside the permitted or intended uses described by LaCie; (f) to damage caused by service (including upgrades and expansions) performed by anyone who is not a representative of LaCie or a LaCie Authorized Service Provider; (g) to a product or part that has been modified to alter functionality or capability without the written permission of LaCie; or (h) if any LaCie serial number on the product has been removed or defaced.

No LaCie dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

Any loss, corruption or destruction of data while using a LaCie drive is the sole responsibility of the user, and under no circumstances will LaCie be held liable for the recovery or restoration of this data. To help prevent the loss of your data, LaCie highly recommends that you keep TWO copies of your data; one copy on your external hard disk, for instance, and a second copy either on your internal hard disk, another external hard disk or some other form of removable storage media. LaCie offers a complete line of CD and DVD drives. If you would like more information on backup, please refer to our website.

LACIE IS NOT RESPONSIBLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY, OR UNDER ANY LEGAL THEORY, INCLUDING LOST PROFITS, DOWNTIME, GOODWILL, DAMAGE TO OR REPLACEMENT OF EQUIPMENT AND PROPERTY, AND ANY COSTS OF RECOVERING, REPROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED IN OR USED WITH LACIE PRODUCTS EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights, which vary from state to state.

Your opening of your package, your use of the product, or your return of the enclosed Registration Card acknowledges that you have read and agree to the terms of this Agreement. You further agree that it is the complete and exclusive state of the agreement between us and supersedes any proposal or prior agreement, oral or written, and any other communications between us relating to the subject matter of this Agreement.

Read carefully all information related to warranty and precautions of use of your new LaCie product in the user manual.

For products purchased in the United States, you may contact LaCie at 7555 Tech Center Drive, Tigard, Oregon 97223 USA. Email: sales@lacie.com. Website: www.lacie.com. Customer service: 503-844-4503.

Service DOA

On rare occasions, a newly purchased LaCie product may be delivered in non-working order. We are working to avoid these issues, but unfortunately, these situations may arise from time to time. Within the 15 calendar days of purchase, should you experience an issue with your new LaCie product, we ask you to return the product to the place where it was originally bought. You will be required to give a proof of purchase.

Customer Warning

Please be sure to back up your data before returning your drive to LaCie for repair. LaCie cannot under any circumstances guarantee the integrity of data remaining on a returned drive. We make no provisions for data recovery and cannot be held liable for any data loss on drives or media returned to LaCie.

All products returned to LaCie must be securely packaged in their original box and shipped with postage prepaid, except for Products registered under the Advance Care Option.

NOTE TO AUSTRALIAN CUSTOMERS

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Contact us:

LaCie Australia, 6/151 Beauchamp Rd, Matraville NSW 2036 AUSTRALIA
Phone: 02 8063 3711
Email: info.au@lacie.com

For fast technical support, create a support ticket after registering your product at www.lacie.com/au/register.

LEGAL INFORMATION

COPYRIGHTS

CHANGES

The material in this document is for information only and subject to change without notice. While reasonable efforts have been made in the preparation of this document to assure its accuracy, LaCie assumes no liability resulting from errors or omissions in this document, or from the use of the information contained herein. LaCie reserves the right to make changes or revisions in the product design or the product manual without reservation and without obligation to notify any person of such revisions and changes.

FEDERAL COMMUNICATION COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

> **Important info: FCC Radiation Exposure Statement:** This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

WEEE

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designed collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service, or the shop where you purchased the product.

MANUFACTURER'S DECLARATION FOR CE CERTIFICATION

We, LaCie, solemnly declare that this product conforms to the following European standards:
Electromagnetic Compatibility Directive (2004/108/EC); Low-Voltage Directive: 2006/95/EC

TRADEMARKS

Apple, Mac, Time Machine, and Macintosh are registered trademarks of Apple Computer, Inc. Microsoft, Windows XP, Windows Vista, and Windows 7 are registered trademarks of Microsoft Corporation. Other trademarks mentioned in this manual are the property of their respective owners.

CANADA COMPLIANCE STATEMENT

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.
CAN ICES-3 (B)/NMB-3(B)

JAPAN COMPLIANCE STATEMENT

This is a Class B product based on the standard of the Voluntary Control Council for Interference from Information Technology Equipment (VCCI). If this is used near a radio/TV receiver, it may cause radio interference. Install the equipment according to the manual. This statement does not apply to the LaCie CloudBox.