

# LaCie Bolt 3 User Manual



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# Introduction

Welcome to the user manual for LaCie Bolt 3. Magnificently crafted in a black aluminum enclosure and outfitted with two Thunderbolt 3 ports, Bolt 3 is a stunning storage device with exceptional performance. Use LaCie Bolt 3 for fast transfers of your most important media and documents.

For common questions and answers about your device, please see Frequently asked questions.

You can get the latest tips regarding your product and updated technical information at LaCie customer support.

#### **Box content**

- LaCie Bolt 3
- Power supply 5V/12A
- Thunderbolt 3 cable
- Quick Start Guide
- Software: Intego Backup Manager Pro, Genie Backup Manager Pro and LaCie Private-Public

Software can be downloaded at LaCie.com.

**Important info:** 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

You can connect Bolt 3 to a computer that meets the following minimum system requirements:

- macOS Sierra or higher
- Windows 10 or higher

# Minimum hardware requirements

Connect your LaCie Bolt 3 to a computer with a Thunderbolt 3 port.

Important info regarding Thunderbolt 3 cables: Thunderbolt 3 cables feature USB-C connectors that look and feel the same as standard USB 3.1 cables. Make certain to use a Thunderbolt 3 cable when connecting your computer to Bolt 3. Additionally, some third-party Thunderbolt 3 cables can be faulty or defective due to improper materials and/or construction. Using poor quality third-party cables can damage Bolt 3. Therefore, LaCie recommends using the Thunderbolt 3 cable included with your Bolt 3 and cables that are certified as Thunderbolt 3 technology.

# LaCie Bolt 3 Advanced Storage

#### **Bolt 3: PCle and SSD**

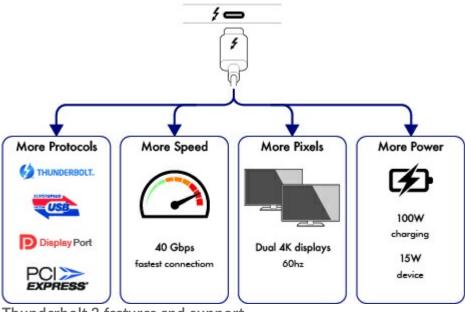
Bolt 3 is housed within LaCie's ground-breaking aluminum design for easy installation and exceptional reliability. Its internal parts have been carefully constructed to give you nothing short of the best performance for your increasingly demanding projects:

- Two Thunderbolt 3 ports. Transfer rates up to 40Gb/s bi-directional.
- Two PCle Gen 2 Solid State Drives (SSD). 2.5x faster than SATA III SSDs.
- Pre-configured striped set. RAID 0 optimizes drive utilization and throughput.

Unlike standard hard drives (HDDs), SSDs are not mechanical devices and they do not have moving parts. With an SSD, users can stop calculating revolutions per minute for data seek rates since it is composed entirely of NAND Flash. Thus, accessing data on an SSD is considerably faster than an HDD. As with most comparisons, the increase in speed is based upon the types of SSDs and HDDs as well as the throughput of the interface. However, SSDs have proven to be faster and are increasingly available in storage, mobile and computing devices.

At the heart of Bolt 3's incredible performance is two PCle Gen 2 SSDs. Most standard multi-disk enclosures that feature SSDs or HDDs share a SATA bus. No matter the version of SATA, the drives are limited to a fixed number of channels to pass data. However, each PCle Gen 2 SSD has its own bus which helps to limit data bottlenecks from multiple drives.

## Thunderbolt 3 Technology



Thunderbolt 3 features and support

Intel's Thunderbolt 3 technology provides the fastest data and high-end video over a single, versatile connector. While previous generations of Thunderbolt technology offered impressive transfer rates up to 20Gb/s bi-directional, Thunderbolt 3 doubles the potential up to 40Gb/s bi-directional when connected to other Thunderbolt 3 devices. For example, connecting LaCie Bolt 3 to a computer with a built-in Thunderbolt 3 port. Further, Thunderbolt 3 gives priority to the video stream, apportioning the required bandwidth for playback. This is a critical advantage when working with high-end video and 3D graphics.

Thunderbolt 3 uses a USB-C connector specially labeled with a thunderbolt. Since Thunderbolt 3 is protocol agnostic, it supports connections from:

- USB 2.0, USB 3.0 and USB 3.1
- DisplayPort 1.1 and 1.2a
- Thunderbolt at 20Gb/s and Thunderbolt 40Gb/s
- Ethernet (with adapter)

Non-Thunderbolt 3 devices that feature a USB-C port can be connected to Bolt 3 to terminate a daisy chain and, if compatible, to take advantage of the power delivery option for charging batteries.

# LED Indicator and Cables

# **Status light information**

Your hard drive features a status light that provides general information about the product. Refer to the table below for details.

Light behavior	Status
On and steady	Drive is on
Flickering	Data access
Off	Drive is off

# Thunderbolt 3 (USB-C)

			DisplayPort	
USB 2.0	USB 3.1	USB 3.1	Multi-Function	Thunderbolt 3
480 Mb/s	5 Gb/s	10 Gb/s	5 or 10 Gb/s	20 or 40 Gb/
	ss- —	ss< <sup>10</sup> ■	ss< <sup>10</sup>	4

**USB-C** protocols

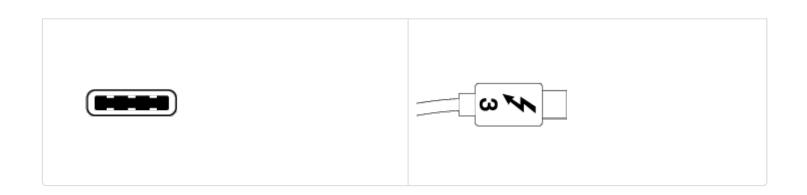
USB is a serial input/output technology for connecting peripheral devices to a computer. USB-C is the latest implementation of this standard and it provides higher bandwidth and new power management features. Further, USB-C ports that feature the thunderbolt icon include support for Thunderbolt 3 devices.

Thunderbolt 3 can attain up to 40Gb/s as opposed to USB 2.0's 480Mb/s, USB 3.0's 5Gb/s and Thunderbolt 2's 20Gb/s.

# Thunderbolt 3 (USB-C) cable

Use the included Thunderbolt 3 (USB-C) cable to ensure maximum data transfer performance when used with compatible ports. Connecting your product is easy since the Thunderbolt 3 (USB-C) cable is identical on both ends.

Connector face	Cable end



# Getting Connected

Follow the setup steps in the order they are given to ensure that your LaCie hard drive's volume mounts correctly on your computer. By default, the hard drive is formatted for Mac (HFS+ journaled).

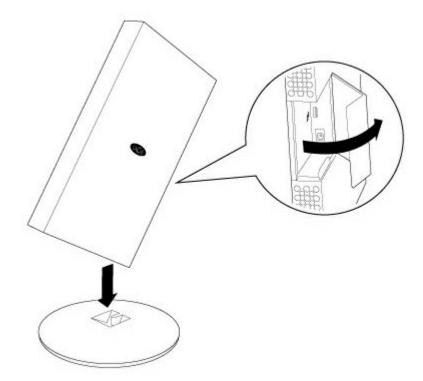
### Windows and LaCie Bolt 3

Since LaCie Bolt 3 is preconfigured for Mac, Windows users must clean the hard drives when first connecting the device to the computer. Directions to clean the hard drives can be found after the steps for getting connected.

# STEP 1 - Connect to the base and open the port protector

Place LaCie Bolt 3 on its base. Make certain to carefully align the ends of Bolt 3's stand with the landing points on the base. The magnetic ends allow for an easy connection.

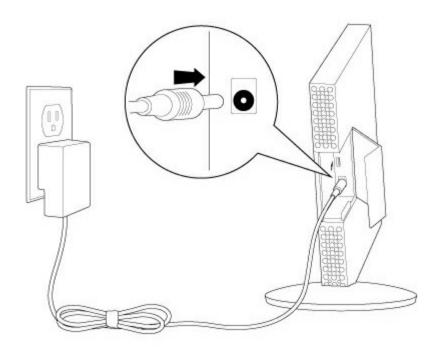
Once it is in place, gently open the port protector and keep it ajar for the next steps.



# STEP 2 - Connect the power supply

Connect the power supply to a wall outlet and to the hard drive.

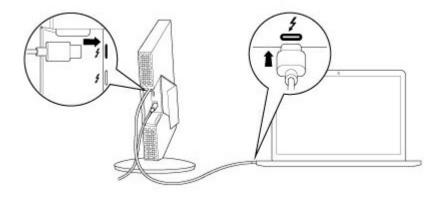
Only use the power supply provided with your device. Attaching third-party or other LaCie power cables with incorrect voltage can damage Bolt 3.



# STEP 3 - Connect the Thunderbolt 3 (USB-C) cable

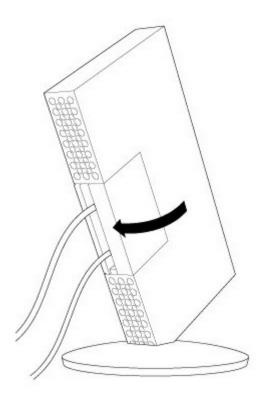
Before connecting LaCie Bolt 3, confirm the USB-C port on your computer features the Thunderbolt icon. The Thunderbolt icon indicates that the USB-C port is compatible with Thunderbolt 3.

Your LaCie Bolt 3 is shipped with one Thunderbolt 3 cable (see LED Indicator and Cables). Connect the cable to the Thunderbolt 3 port on the back of LaCie Bolt 3 and to the Thunderbolt 3 port on your computer.



# STEP 4 - Close the port protector

Gently close the port protector.



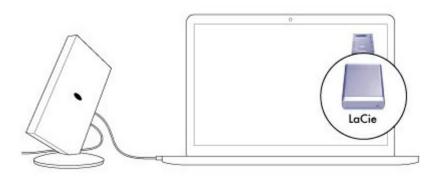
# STEP 5 - LaCie partition (Mac only)

**Mac:** The hard drive partition mounts on your desktop and is ready to use. You can open the partition to install LaCie Private-Public for data encryption and Intego for computer backup to Bolt 3.



**Note:** If the partition does not mount on your Mac desktop, see troubleshooting topics in the Frequently asked questions section to help resolve common issues.

**Windows:** A pop-up window asks if you want to format the volume. Close the pop-up window and refer to the steps below.



### Windows: Clean the hard drives

Since the hard drive is formatted for Mac (Journaled HFS+), all partitions must be erased, including the EFI partition. Windows Disk Management cannot erase the EFI partition so you must run **Diskpart**, a separate Windows utility. For additional information, see Windows Diskpart.



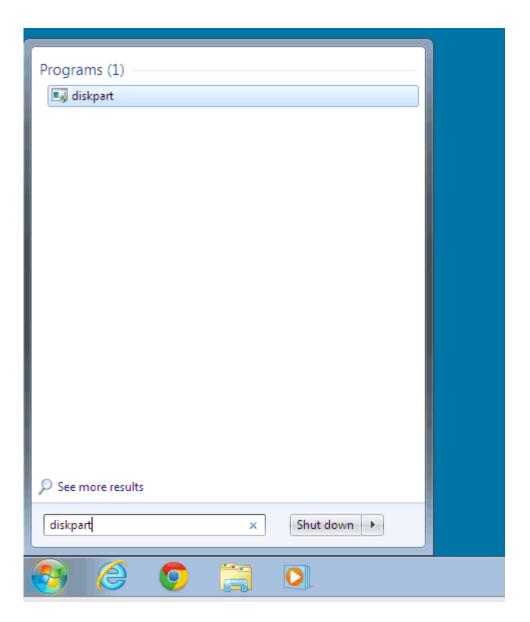
Important info: Cleaning hard drives is data destructive. If you have data on LaCie Bolt 3, LaCie recommends that you back up all files before following the steps below.

The steps below are illustrated using a standard hard drive enclosure with two hard drives. The images may not represent your product.

Diskpart deletes all information from any hard drive that you select. Therefore, to avoid deleting data on other devices, disconnect all external hard drives from your PC except LaCie Bolt 3.

Diskpart cannot delete the System disk.

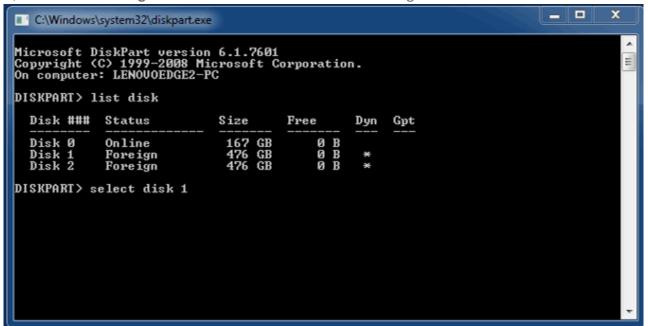
- Important info: LaCie is not responsible for lost data.
- 1. Connect the LaCie product to your Windows PC using the included Thunderbolt 3 cable.
- 2. Search for and launch Diskpart.



3. In the Diskpart prompt, type **list disk**.



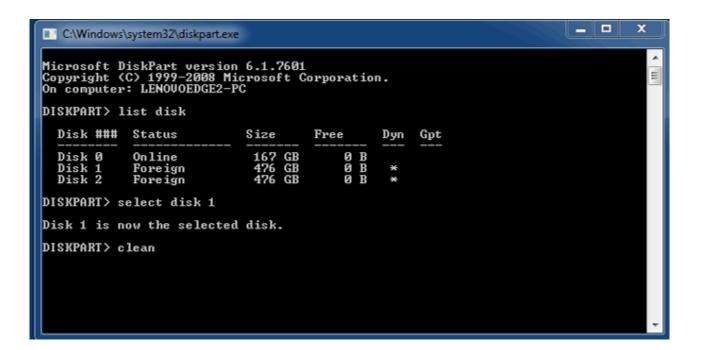
4. Make certain to locate the disk number for LaCie Bolt 3 then type **select disk** . is the number for the first LaCie hard drive ( in the screenshot below). If you are uncertain of the disk number for LaCie Bolt 3, launch **Disk Management**. You should see the number assigned to LaCie Bolt 3.



5. Diskpart confirms that your hard disk has been selected.



6. To delete all partitions on the hard disk, type clean.



7. Diskpart confirms that your hard disk is clean, meaning that the partitions have been deleted.



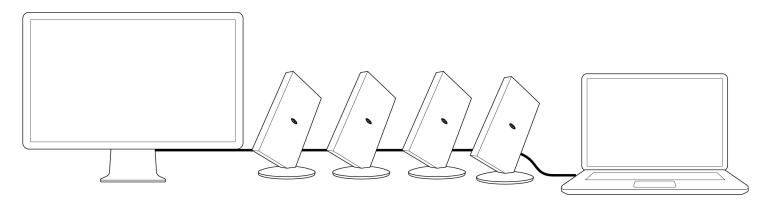
LaCie Bolt 3 is ready to be formatted for your operating system. See Optional formatting and partitioning for instructions.

# Daisy Chain and Power Delivery

Use the enclosure's two Thunderbolt 3 ports for:

- Direct connection to a computer that is compatible with Thunderbolt 3.
- Charging the battery for compatible USB-C devices. Bolt 3 must be connected to a power source to charge devices.
- Daisy chaining with devices and displays that are compatible with Thunderbolt 3.

## Daisy chain



Thunderbolt 3 is an update of Thunderbolt 2 technology. While Thunderbolt 2 technology continues to provide impressive transfer rates of up to 20Gb/s bi-directional, Thunderbolt 3 offers improved performance with a potential of up to 40Gb/s bi-directional. Thunderbolt also gives you the same flexibility when using video and data, assigning greater throughput to the stream that carries the heavier load. You must have a computer that supports Thunderbolt 3 in order to take advantage of the updates in perfomance and the intelligent sharing of bandwidth.

Similar to earlier generations of Thunderbolt technology, a single Thunderbolt 3 daisy chain can have up to seven devices, including the computer. For example, you can daisy chain five Bolt 3 enclosures on the same line with a display. While there are many displays with USB-C ports, most do not include support for Thunderbolt 3. Therefore, when connecting a display to the daisy chain, make certain it is the last device in the chain.

You can also add a USB 3.1 device to the end of a Thunderbolt 3 daisy chain. For example: your computer, two Bolt 3 enclosures and a USB 3.1 hard drive with a USB-C port. A standard USB 3.1 device must be placed at the end of the daisy chain.

### How to daisy chain

Connect the cable to one of the Thunderbolt 3 ports on the back of LaCie Bolt 3 and to your computer. Bolt 3's additional port can be used to daisy chain compatible Thunderbolt 3 peripherals, such as hard drives,

monitors and much more. If you have another Thunderbolt 3 storage device, make certain to connect it to the Bolt 3 before adding displays or USB 3.1 devices. When connecting a display that does not support Thunderbolt 3, make certain it is the last device in the daisy chain.

- Important info regarding cables: When connecting your enclosure to a computer or compatible devices, use cables specifically constructed to support Thunderbolt 3. While Thunderbolt 3 cables are compatible with USB 3.1 devices with USB-C ports, standard USB-C cables are not compatible with Thunderbolt 3 devices.
- Important info: To reach Thunderbolt 3 transfer rates of up to 40Gb/s bi-directional, Bolt 3 must be connected to a computer that supports Thunderbolt 3. Do not connect LaCie Bolt 3 to a USB-C port that does not feature the thunderbolt icon.

## Power delivery

Each Thunderbolt 3 port on LaCie Bolt 3 outputs up to 15W. You can connect compatible devices that support charging via USB-C to the Thunderbolt 3 ports. Bolt 3 must receive power via its power cable to deliver power to compatible devices.

Important info: LaCie is not responsible for devices that experience harm, damage or malfunction when connected to LaCie Bolt 3.

# Optional Formatting and Partitioning

Your LaCie Bolt 3 is formatted as HFS+ for compatibility with Mac out of the box. If you intend to use your Bolt 3 with only Mac computers, you can leave the format unchanged. If you expect to switch between Mac and Windows computers or, use it exclusively on Windows, review the details below to learn which format is best for you.

## About file system formats

NTFS: since it is the native file system for Windows, volumes created in NTFS are read and write with computers running Windows. Mac OS can read NTFS volumes but cannot natively write to them.

Mac OS Extended (HFS+): the native hard drive file system for Mac. Windows cannot natively read or write to HFS+ (journaled) hard drives.

**exFAT:** generally compatible with Mac and Windows. exFAT is not a journaled file system which means it can be more susceptible to data corruption when errors occur or the drive is not disconnected properly from the computer.

**FAT32:** compatible with Mac and Windows. However, FAT32 is a legacy file system designed for low capacity hard drives and it is not recommended for modern hard drives or operating systems. A FAT32 partition can reach up to 32GB when formatted on a Windows PC.

#### How to choose the file system format

#### Use NTFS if:

...the storage device is connected to Windows PCs.

#### Use HFS+ if:

...the storage device is connected to Macs.

#### You can use exFAT if:

...the storage device is shared between Mac and Windows computers.

#### Use FAT32 if:

...the storage device is connected to older Windows and Mac computers. FAT32 is not recommended for modern operating systems and computers.

# Formatting instructions

The steps below help you format and partition a storage device.

Caution: Formatting erases 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.



**Note:** Refer to your operating system's documentation for more information on formatting and partitioning storage devices.

#### Windows

- 1. Make sure the storage device is connected to and mounted on the computer.
- 2. Go to Search and then type diskmgmt.msc. In the search results, double click Disk Management.
- 3. From the list of storage devices in the middle of the Disk Management window, locate your LaCie device.
- 4. The partition must be available to format. If it is currently formatted, right click on the partion and then choose **Delete**.
- 5. To create a new partition, right click on the volume and select **New Simple Volume**. Follow the on-screen instructions when the New Simple Volume Wizard appears.

#### Mac

- 1. Make sure the storage device is connected to and mounted on the computer.
- 2. Select **Go** > **Utilities** in the Finder menu bar.
- 3. In the Utilities folder, double-click **Disk Utility**. All connected storage devices, partitions or disk images are displayed in the left column.
- 4. Select the LaCie hard drive in the left column.
- 5. Click the **Erase** tab.
- 6. Choose a format from the drop-down window.
- 7. Enter a name for the volume.
- 8. Click **Erase** and confirm your selection in the pop-up window.

# Safely Remove Bolt 3 From Your Computer

Always eject a storage drive from your computer before physically disconnecting it. Your computer must perform filing and housekeeping operations on the drive before it is removed. Therefore, if you unplug the drive without using the operating system's software, your files can become corrupt or damaged.

#### Mac

There are several ways you can eject your hard drive from a Mac. See below for two options.

#### **Eject via Finder window**

- 1. Open a Finder window.
- 2. In Devices on the sidebar, locate Seagate Backup Plus Desktop and click the eject symbol to the right of the drive name.
- 3. Once the drive disappears from the sidebar or, if the Finder window closes, you can disconnect the hard drive's cable from your Mac.

### Eject via Desktop

- 1. Select the desktop icon for your hard drive and drag it to the Trash.
- 2. When the image is no longer visible on your desktop, you can physically disconnect the hard drive from your Mac.

### Windows

Use the Safely Remove tool to eject the hard drive you want to remove.

1. Click the Safely Remove icon in your Windows System Tray to view the devices you can eject.



Windows 8 / Windows 10:



2. If you don't see the Safely Remove Hardware icon, click the **Show hidden icons arrow** in the system tray to display all icons in the notification area.

- 3. In the list of devices, choose the device you want to remove. Windows displays a notification when it is safe to remove the device.
- 4. Disconnect the hard drive from the computer.

# Frequently Asked Questions

For help setting up and using your LaCie hard drive, review the frequently asked questions below. For additional support resources, go to LaCie customer support.

### All users

### Problem: My file transfers are too slow.

Q: Are both ends of the Thunderbolt 3 cable firmly attached?

**A**: Review troubleshooting tips for cable connections below:

- Check both ends of the Thunderbolt 3 cable and make sure that they are fully seated in their respective ports.
- Try safely ejecting LaCie Bolt 3 from your computer and then disconnect the cable. Wait 10 seconds and then reconnect LaCie Bolt 3 to the computer.

Q: Are there other Thunderbolt 3 devices connected to the same port or hub?

**A**: Disconnect other devices and see if the drive's performance improves.

**Q**: Is the drive connected to a Thunderbolt 3 USB-C port on your computer or hub?

A: Connect LaCie Bolt 3 to a USB-C port on your computer that supports Thunderbolt 3 devices. The lightning bolt icon that represents Thunderbolt 3 support should appear next to the USB-C port.

Q: Does your computer or operating system support Thunderbolt 3?

A: Consult your computer and operating system documentation for Thunderbolt 3 compatibility information.

**Q**: Is your computer's internal hard drive limiting transfer speeds?

A: A computer with a low-performance internal hard drive can limit transfer speeds for external hard drives.

#### Problem: I must password protect and/or encrypt my hard drive

**Q**: Can I protect my hard drive with a password?

**A:** Yes, it is possible to protect the hard drive or individual folders and files with a password. There are many third-party solutions for password protection. However, LaCie cannot guarantee them since we do not test third-party applications.

Some versions of Windows have a built-in utility called Bitlocker that can protect hard drives with a password. For more information about Bitlocker, consult Microsoft's support documentation.

Q: Can I encrypt my hard drive?

**A:** Yes, the hard drive can be encrypted. There are many third-party solutions for encryption. However, LaCie cannot guarantee them since we do not test third-party applications.

Some versions of Windows have a built-in utility called Bitlocker that can encrypt hard drives. For more information about Bitlocker, consult Microsoft's support documentation

### Problem: I'm receiving file transfer error messages.

Q: Did you get an "Error -50" message while copying to a FAT32 volume?

A: When copying files or folders from a computer to a FAT32 volume, certain characters in the names cannot be copied. These characters include, but are not limited to: ? < > / \:

Check your files and folders to ensure that these characters are not in the names.

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

#### Mac

### Problem: The drive icon does not appear on my desktop.

**Q**: Is your Finder configured to hide hard drives on the desktop?

A: Go to Finder and then check **Preferences > General tab > Show these items on the desktop**. Confirm that **Hard Disks** is selected.

**Q**: Is your drive mounting in the operating system?

A: Open Disk Utility at Go > Utilities > Disk Utility. If the drive is listed in the left-hand column, check your Finder preferences to see why it is not displayed on the desktop (review the question above).

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

A: Refer to the product packaging for the list of supported operating systems.

**Q**: Did you follow the correct installation steps for your operating system?

A: Review the installation steps in Getting Connected.

### Windows

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

**Q**: Is the drive listed in Device Manager?

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

Go to Search to type Device Manager and then launch it. Look in the Disk Drives section and, if necessary, click the plus sign to view the full list of devices. If you're uncertain that your drive is listed, safely unplug it and then reconnect it. The entry that changes is your LaCie hard drive.

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

**A**: Windows Device Manager usually provides information about failures with peripherals. While the Device Manager can assist with troubleshooting most problems, it may not display the exact cause or provide a precise solution.

An unusual icon next to the hard drive can reveal a problem. For example, 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 and then choose **Properties**. The General tab provides a potential reason why the device is not working as expected.