# **INTERFACES**

# FIREWIRE OUESTIONS AND ANSWERS

#### What is FireWire 400/IEEE 1394?

A serial bus used to connect external computer and consumer electronic devices to computers and consumer electronic consoles. IEEE (the Institute of Electrical and Electronic Engineers) is the name of the engineering corps that developed this standard.

#### What does IEEE 1394 mean?

"1394" is an abbreviation of IEEE 1394, the name given to this high-performance serial bus. The 1394 refers to the 1,394th standard that the IEEE has produced.

What is the relationship between IEEE 1394, FireWire, iLink, and DV?

These four names all refer to the same interface:

- IEEE 1394 the name used in the computer industry.
- FireWire the brand name used by Apple.
- iLink the brand name used by Sony.
- DV the logo used by video camcorder manufacturers.

### What can the FireWire interface be used for?

FireWire is a great interface for consumer electronics such as optical disc recorders, external hard drives, and video devices due to its extremely large bandwidth. FireWire offers greater stability with video due to its support for asynchronous and isochronous data transfers. It 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 form of linking peripherals to a computer is commonly referred to as "daisy chaining". To daisy chain FireWire peripherals, connect one device (Peripheral A) directly to the computer then connect another FireWire device (Peripheral B) to the first device (Peripheral A). FireWire 400 supports a daisy chain of up to 63 devices on the same bus, with 16 devices on one branch.

## Does my computer have a FireWire port?

Macs and PCs can have FireWire or i-Link interfaces. If your computer does not include a FireWire interface, an expansion card can be purchased from your LaCie reseller or from the LaCie website <u>Accessories</u>.

#### Can I connect the LaCie Blu-ray XL to a FireWire 800 port?

Yes. It can be connected to a FireWire 800 port using the included FireWire 400 to FireWire 800 cable. Please note that transfer rates will not exceed FireWire 400.

For more information about FireWire, please visit our **Technology Page**.

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# **USB QUESTIONS AND ANSWERS**

What are the benefits of the USB interface?

- Cross-platform: All Apple computers and PCs include USB ports.
- Hot swappable: No need to shut down or restart your computer when adding or removing a USB device. Plug it in and its ready.
- Multiple USB devices on a single USB port: Using USB hubs, you can connect up to 127 peripherals on a single USB port.
- Easy installation: One standardized port makes it simple to connect.

There are multiple types of USB: SuperSpeed USB 3.0, Hi-Speed USB 2.0, and USB 1.1. Can I use any type of USB device with any USB interface?

Yes. Please note that adding slower USB types to faster USB interfaces does not enhance performance. For example, a USB 1.1 device will not go faster than 12Mb/s when attached to a USB 2.0 port.

For more information about USB, please visit our <u>Technology Page</u>.

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## FIREWIRE OR USB?

If your computer supports both interfaces, LaCie recommends using FireWire. With support for asynchronous and isochronous data transfers and easy daisy chaining, FireWire can be a more efficient interface for peripherals such as the LaCie d2 Blu-ray XL.

# **DELAYED DATA TRANSFERS**

Data transfers are the flow of data (i.e. files, folders, etc.) from storage to computer RAM or between storage devices. To avoid delays in data transfers or "hanging", it is best to wait for a transfer to finish before launching other applications on the same FireWire or USB port. Another reason for a data hang could be FireWire or USB controllers that do not conform to OHCI (Open Host Controller Interface) standards.

If you experience a lag when transferring your data:

- 1. Make sure that the FireWire or USB cable is connected tightly and securely on the drive and the computer. If you are using a FireWire cable other than the one supplied with your LaCie drive, check that it is IEEE 1394 certified.
- 2. Check that the power supply and ground connection are seated properly.
- 3. Disconnect your computer's FireWire or USB cable. Wait 30 seconds. Reconnect.

**Technical note on the Controller:** This is a component or an electronic card ("controller card") that enables a computer to communicate with and manage peripheral devices. An external controller is an expansion card that fits into a free slot inside your computer and enables you to connect a supported peripheral (i.e. DVD/RW drive, Hard Drive, scanner, printer, etc.). If your computer is not equipped with a FireWire controller card, you can purchase an external controller through LaCie at <u>Accessories</u>.

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