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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.

FCC Statement:

LaCie PCI Card
(FireWire 800)
Tested to comply with FCC standards for home or office use

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

NOTE: 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 and correct the interference by one or more of the following measures:

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

Canada Compliance Statement

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Manufacturer's Declaration for CE Certification

We, LaCie, solemnly declare that this product conforms to the following European standards:

Class B EN60950, EN55022, EN50082-1, EN61000-3-2

With reference to the following conditions:

2006/95/EC Low Voltage Directive

2004/108/EC EMC Directive

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.

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 attempt to disassemble or modify your PCI card. Never insert any metallic object into the circuitry to avoid any risk of electrical shock, fire, short-circuiting or dangerous emissions. Your PCI card contains 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 PCI card, as they may spill onto its circuitry. Doing so increases the risk of electrical shock, short-circuiting, fire or personal injury.
- Make sure that the computer and PCI card are electrically grounded. If the devices are not grounded, there is an increased risk of electrical shock.
- Do not expose the PCI card to temperatures outside the range of 5° C to 45° C (41° F to 104° F). Doing so may damage the card or disfigure its casing. Avoid placing your card near a source of heat or exposing it to sunlight (even through a window). Inversely, placing your card in an environment that is too cold or humid may damage the unit.

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 drive, for instance, and a second copy either on your internal hard drive, another external hard drive 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 Web site.

1. Introduction

Congratulations on the purchase of your new LaCie FireWire 800 PCI Card. Now when you connect your FireWire devices through your LaCie FireWire 800 PCI Card, you will be able to achieve the impressive transfer rates that FireWire makes possible.

The LaCie FireWire PCI Card has three high-speed FireWire ports, giving you a convenient solution to connect more FireWire peripheral devices to your computer, such as high-speed hard drives, digital cameras, scanners and most popular D8 camcorders.

Your LaCie PCI Card Capabilities

- IEEE 1394b compliant, 1394a backward compatible (with appropriate cables (9 to 6 pin or 9 to 4 pin cables)
- Three external FireWire ports
- Transfer files at up to 800MBits/sec
- Digital video capture capabilities
- Plug & Play convenience
- No drivers required
- Anti-static handle

Quick Links

Click a topic:

- **Inserting** your LaCie PCI Card
- **Driver** Installation

2. Your LaCie FireWire 800 PCI Card

1.1. Minimum System Requirements

The LaCie FireWire 800 PCI Card is compliant with the Open Host Controller Interface (OHCI), the Enhanced Host Controller Interface (EHCI).

IMPORTANT INFO: The format of this card is not compatible with PCI express slots, laptops or notebook computers, and therefore cannot be installed on these types of systems.

CAUTION: Before handling and installing your LaCie FireWire 800 PCI Card, ensure that you have properly grounded yourself. Electrostatic Discharge (ESD) can quickly and easily damage or destroy your component or your computer. Please see section *3.1. Electrostatic Discharge* for information on how to properly ground yourself.

IMPORTANT INFO: During installation or removal, always hold your card by the anti-static gripping pad.

Windows

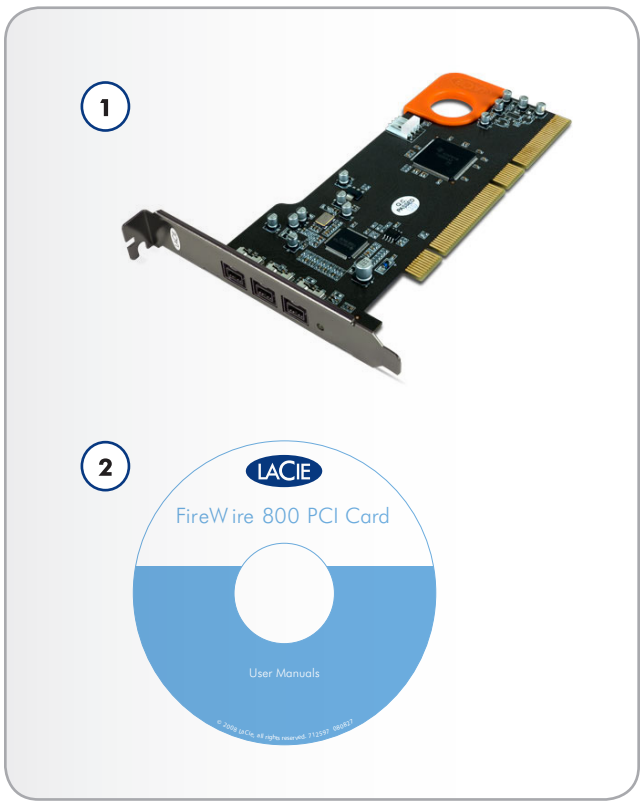
- Windows 2000, Windows XP, Windows Server 2003, or Windows Vista
- One PCI slot that complies with PCI Specification Rev.2.3 or above
- Pentium III or higher compatible processor
- 128MB RAM

Mac

- Mac OS 10.2.4 or higher
- One PCI slot that complies with PCI Specification Rev.2.3 or above
- G4, G5, or Intel processor
- 128MB RAM

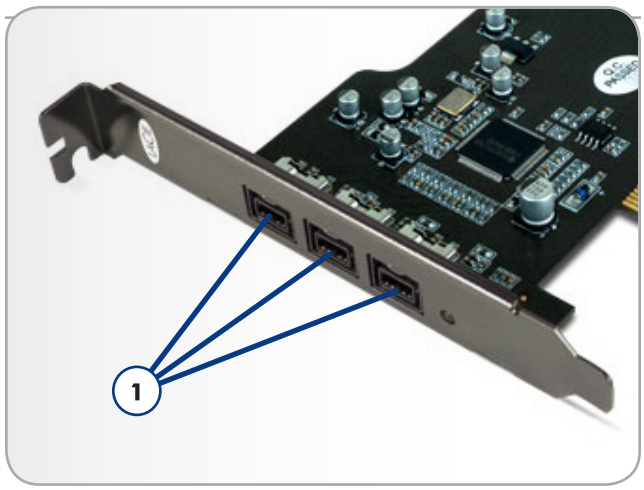
2.1. Package Content

1. LaCie FireWire 800 PCI Card, Design by Sismo
2. Quick Install Guide
3. LaCie FireWire 800 PCI Card Utilities CD-ROM (includes User Manual)



2.2. View of the Card

1. **Three external FireWire 800 ports** – These ports are where you attach the FireWire 800 interface cables.



3. Installing Your LaCie PCI Card

3.1. Electrostatic Discharge (ESD)

IMPORTANT INFO: During installation or removal, always hold your card by the anti-static gripping pad.

Static electricity is an electric charge caused by an imbalance of electrons on the surface of a material. When you touch an object and are shocked, this is the transfer of the static charge or the balancing of your charge to that of the object. This exchange is called Electrostatic Discharge or ESD.

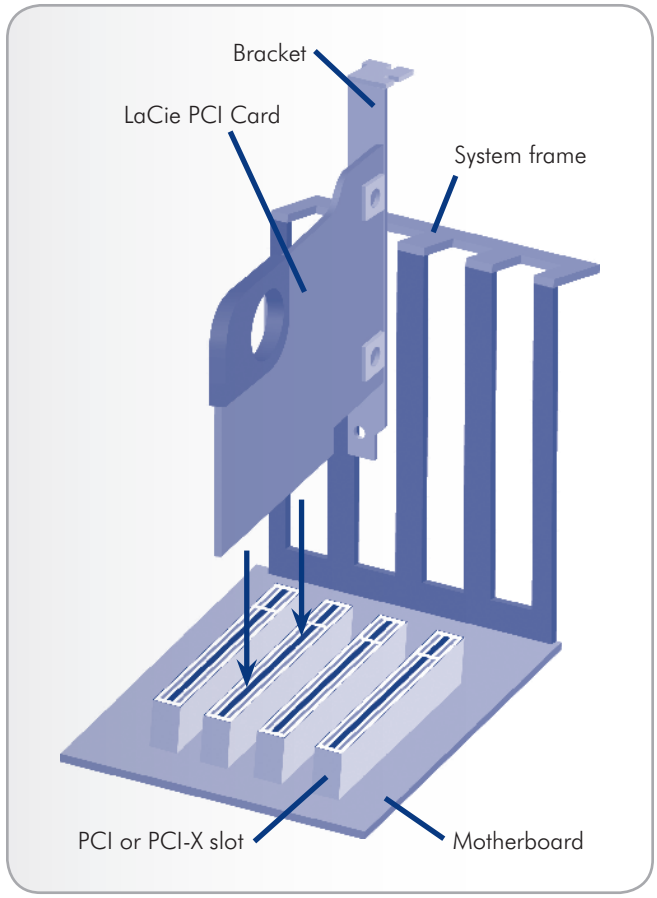
ESD can cause two different types of damage to computers and peripherals: (1) Catastrophic, which is the complete loss of device functionality, and (2) Latent Defect, where the device is only partially effected, and the device loses part of its productivity and longevity.

Because we cannot eliminate the generation of static electricity, it is extremely important to follow the proper steps to ground yourself before handling your LaCie FireWire 800 PCI Card or touching any internal component of your computer. This can be accomplished by proper grounding in conjunction with the use of ESD safe mats, wrist or shoe straps. Consult your computer supply specialist for more details on the correct ESD dissipative device to fit your needs.

3.2. Inserting Your LaCie PCI Card

Required Tools

- Philips-head and/or flat-head screw driver
- Computer System Manual



1. Turn off your computer and disconnect all external peripheral devices and cables, i.e. power cord, modem/fax line, monitor, etc.

2. Remove your computer's cover. For most computers, several screws will need to be unseated before you can remove the computer's cover. These screws are usually located at the rear of the computer, along the edge of the cover. However, placement of these screws and cover attachment may vary by manufacturer, so please refer to your computer's manual for specific details.

3. Once you have removed the cover, you will need to locate the PCI slots on the motherboard. The PCI slots are generally located in the back of the computer, with the slots built into the side-wall of the computer (please refer to your computer system's manual for the exact location of your PCI slots – the LaCie PCI Card may be installed in either a 32 or 64-bit PCI card slot). If necessary, you may need to remove the expansion slot cover, and you may also need to remove any add-in boards which block access to the PCI slots.

4. Take the LaCie PCI Card out of its anti-static blister package and, being careful to touch only the anti-static gripping pad, push the card into the empty PCI card slot. There is only way to mount the card, so if you are having problems inserting the card into the PCI slot, make sure that it is oriented correctly. Be sure that the gold contact pins of the PCI card are seated completely inside your computer's PCI slot. Be aware that it may take some force to get the card fully seated in the slot.

5. Once the PCI card is seated correctly, tighten with a screw.

6. If necessary, replace any add-in boards that you removed in Step 3.

7. Now you are ready to put the computer's cover back on and reconnect all of your external peripheral devices and cables.

8. Power on your computer. After the start up procedure has finished, you should be able to connect devices through the available FireWire ports.

3.3. Driver Installation

Windows Users

There are no drivers to install for Windows 2000, 2003 Server, XP, and Vista. The LaCie FireWire PCI Card has the drivers built into the BIOS for these operating systems.

Mac Users

There are no drivers to install. The LaCie FireWire PCI Card has the drivers built into the BIOS for the Mac OS.

4. FireWire 800 Questions & Answers

What Does IEEE 1394 Mean?

IEEE (the Institute of Electrical and Electronics Engineers) refers to the engineering corps that developed the 1394th standard, defining the high-performance serial input/output (I/O) bus used to connect peripheral devices. There are now two standards: IEEE 1394a, which refers to the original standard adopted in 1995, and IEEE 1394b, which refers to the new standard, adopted in 2002.

What Is The Relationship Between IEEE 1394, FireWire, iLink And DV?

These four names all refer to the same interface:

- IEEE 1394 is the term commonly used in the computer industry.
- FireWire is the brand name used by Apple.
- iLink is the brand name used by Sony for both consumer electronics and personal computers.
- DV is short for "Digital Video," and is used as the logo for the interface on most video camcorders.

What Are The Benefits Of The FireWire Interfaces?

The FireWire interface is a fast, cross-platform serial bus, and is ideal for digital audio, video and graphic applications that demand plenty of bandwidth. Both versions of FireWire offer Plug & Play connectivity, so all you have to do is plug in your drive and begin using it, they also allow up to 63 devices to be connected via a single bus and offer peer-to-peer connectivity, enabling multiple computers and FireWire devices to be connected at the same time. FireWire also supports both isochronous and asynchronous capabilities, meaning that it can guarantee real-time data delivery, so there is no danger of inaccurately ordered or delayed frames.

What Is The Difference Between FireWire 400 And FireWire 800?

Essentially, the main difference between the two interfaces can be summed up in one word: speed. FireWire 800 effectively doubles the bandwidth of the original FireWire 400 interface. The new FireWire 800 interface offers truly impressive results, with speeds up to 800Mb/s for a single bus, and even greater for several buses in RAID0 configurations.

Other key advancements include the support of increased cabling distances and a newly enhanced arbitration architecture.

Utilizing cables constructed of professional-grade glass optical fiber, when both devices are connected via a FireWire 800 hub, FireWire 800 can burst data across 100 meters of cable.

The new arbitration scheme greatly improves on the existing architecture by incorporating advanced 8B10B data encoding (based on codes used by Gigabit Ethernet and Fibre Channel), which reduces signal distortion, and also improves the arbitration time by prepping the arbitration while the current data packet is being sent, so that data is sent as soon as the current transmission is completed.

What Are The Ideal Uses For FireWire?

FireWire helped fuel a revolution for digital content creators, and was awarded a 2001 Primetime Emmy Engineering Award by the Academy of Television Arts & Sciences for its contribution. Due to its high bandwidth and support of both isochronous and asynchronous data delivery, FireWire has found a very successful place in both the computer and consumer electronics industries. Whether connecting game consoles, personal video recorders, home stereo equipment, digital TVs, hard drives, CD/DVD-RW drives, printers, scanners, tape drives or other digital hardware equipment, FireWire is well-suited to handle all these various requirements.

With the advent of the new FireWire 800 standard, the revolution created by the original will only grow. For those working with digital video, the new standard will enable new bandwidth-intensive applications, such as multiple-stream, uncompressed, standard-definition video.

Will FireWire 400 Devices Run Faster When Connected To A FireWire 800 Port?

Unfortunately, this is not the case. In order to attain FireWire 800 speeds, both the device and port have to be FireWire 800 enabled. For instance, an external hard drive with a FireWire 800 9-pin connection will only reach FireWire 800 transfer rates when it is connected to a FireWire 800 9-pin host bus adapter card via a properly certified FireWire 800 9-pin to 9-pin beta cable.

When a FireWire 400 device is connected to a FireWire 800 port, the FireWire 400 device will only operate at the original FireWire 400 speeds.

Will FireWire 800 Devices Work On FireWire 400 Ports And Vice Versa?

The new standard was designed to be backwards compatible, meaning that FireWire 800 devices will still operate via the original FireWire 400 port. To connect a FireWire 800 device to a FireWire 400 port, a specific adapter cable must be used, though. There are two types of FireWire 400 ports: 6-pin and 4-pin. For FireWire 800 devices to work, they must be connected by placing the 9-pin end of the FireWire cable into the FireWire 800 port of the device, and the opposite 6-pin or 4-pin end into the FireWire 400 port.

The same holds true for FireWire 400 devices being connected to a FireWire 800 host port. The 4-pin or 6- pin end of the FireWire cable must be connected to the FireWire 400 port of the device, and the 9-pin end must be connected to the FireWire 800 port.

When FireWire 400 and FireWire 800 devices are mixed, all transfer rates revert to the original FireWire 400 speed.

For more information about the FireWire interface, please visit:

http://www.lacie.com/technologies

5. Contacting Customer Support

Before You Contact Technical Support

- Read the manual.
- Try to isolate the problem.

If you still can't get your LaCie PCI Card to work properly, contact us via the provided Web link. Before contacting us, make sure that you are in front of your computer and that you have the following information on hand:

- Your card's serial number
- Computer brand and model
- Operating system and version
- Amount of memory installed
- Names of CD or DVD drives installed on your computer
- Names of any other devices installed on your computer

5.1. LaCie Technical Support Contacts

LaCie Asia, Singapore, and Hong Kong Contact us at: http://www.lacie.com/asia/contact/	LaCie Australia Contact us at: http://www.lacie.com/au/contact/
LaCie Belgium Contact us at: http://www.lacie.com/be/contact/ (Français)	LaCie Canada Contact us at: http://www.lacie.com/caen/contact/ (English)
LaCie Denmark Contact us at: http://www.lacie.com/dk/contact	LaCie Finland Contact us at: http://www.lacie.com/fi/contact/
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LaCie Italy Contact us at: http://www.lacie.com/it/contact/	LaCie Japan Contact us at: http://www.lacie.com/jp/contact/
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LaCie Ireland Contact us at: http://www.lacie.com/ie/contact/	LaCie USA Contact us at: http://www.lacie.com/contact/
LaCie International Contact us at: http://www.lacie.com/intl/contact/	

6. Warranty Information

LaCie warrants your PCI card against any defect in material and workmanship, under normal use, for the period designated on your warranty certificate. In the event this product is found to be defective within the warranty period, LaCie will, at its option, repair or replace the defective PCI card.

This warranty is void if:

- The card was operated/stored in abnormal use or maintenance conditions;
- The card is repaired, modified or altered, unless such repair, modification or alteration is expressly authorized in writing by LaCie;
- The card was subjected to abuse, neglect, lightning strike, electrical fault, improper packaging or accident;
- The card was installed improperly;
- The serial number of the card is defaced or missing;

LaCie will not, under any circumstances, be liable for direct, special or consequential damages such as, but not limited to, damage or loss of property or equipment, loss of profits or revenues, cost of replacement goods, or expense or inconvenience caused by service interruptions. Under no circumstances will any person be entitled to any sum greater than the purchase price paid for the card.

To obtain warranty service, call LaCie Technical Support. You may be asked to furnish proof of purchase to confirm that the card is still under warranty. All cards returned to LaCie must be securely packaged in their original box and shipped with postage prepaid. Register online for free technical support:

www.lacie.com/register.htm