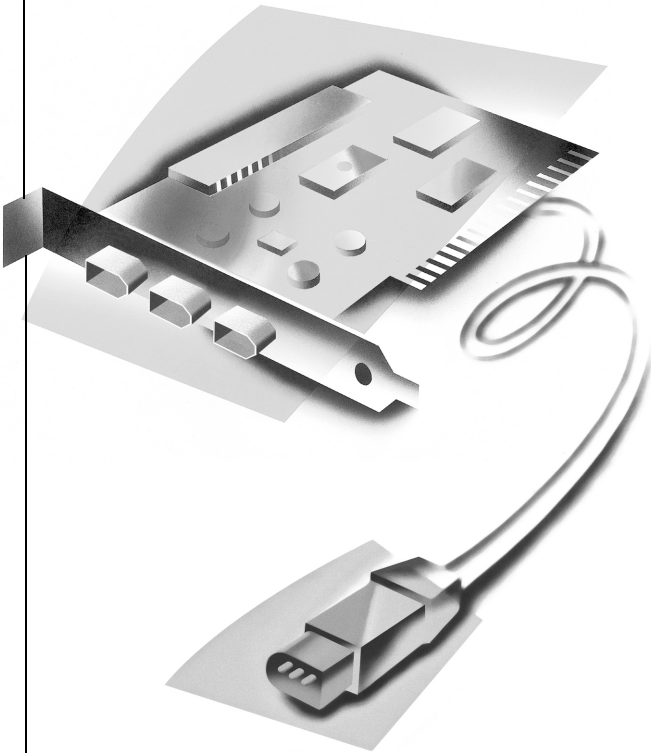




# HARDWARE INSTALLATION GUIDE

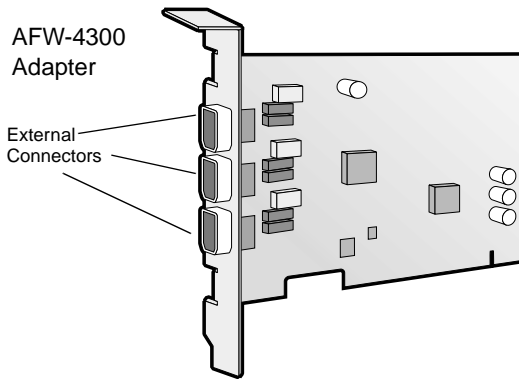


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**AFW-4300**  
400 MBPS FIREWIRE HOST BUS ADAPTER

# INTRODUCTION

With the Adaptec AFW-4300 Host Adapter (or AFW-4300), you can connect Digital Video (DV) camcorders or other devices with a 1394 (also known as FireWire® or i.LINK) digital interface to any PC compatible or Power Macintosh® computer with PCI expansion slots. The AFW-4300 is specified for a maximum transmission speed of 400 Megabits per second (Mbps), providing an ideal interconnect for multimedia applications with high data transfer rate requirements. This adapter is a 32-bit and 33 MHz PCI card and will work in only 32-bit or 64-bit, 33 MHz or 66 MHz slots.



This installation guide explains how to:

- Install the AFW-4300
- Install the appropriate driver selection through the operating system
- Attach standard 1394 cables between the AFW-4300 to your DV camcorder or other 1394 device.

# INSTALLING THE AFW-4300

## STEP 1

Discharge any static electricity build-up before handling the AFW-4300 by touching a grounded metal object (such as the exposed metal parts on the back of your computer).

**WARNING** Turn OFF power to the computer and disconnect the power cord.

## STEP 2

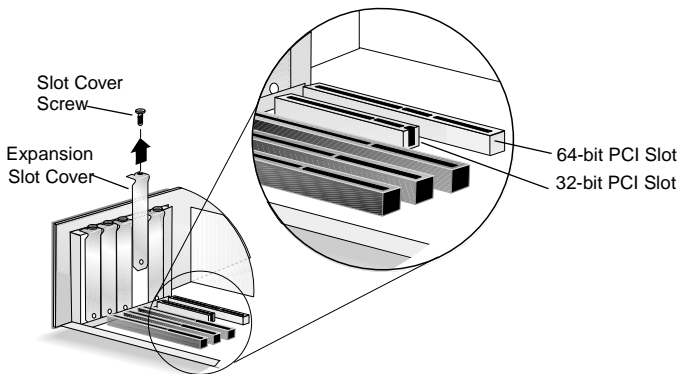
After you turn OFF your computer and unplug the power cord, remove the cover from the computer.

**NOTE** See your computer system's manual for specific instructions on opening your computer and installing a PCI card.

## STEP 3

Locate an unused 32-bit or 64-bit PCI expansion slot and remove the expansion slot cover.

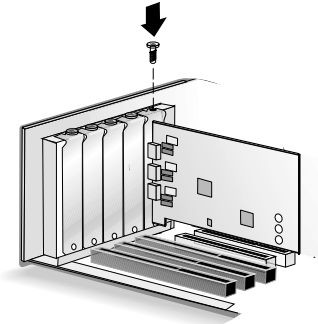
Save the slot cover screw for use in Step 4.



**STEP 4**

Insert the AFW-4300 into the PCI expansion slot. Press down firmly until the card clicks into place; then replace the slot cover screw. When installed properly, the card should appear level with the expansion slot, as shown below.

**NOTE** Depending on the tightness of the PCI slot, considerable force might be required to insert the card.



## COMPLETING THE INSTALLATION

Once the AFW-4300 is installed in your system complete the following steps.

### *Windows Installation*

**STEP 1**

After physically installing the card into the PCI slot and replacing the slot cover screw, replace the cover on your computer and then reattach the power cord. Once this is done, power up the computer.

**STEP 2**

During the operating system startup, the card will automatically be detected and Windows will load an embedded driver for the card. If your system prompts you to restart the computer, do so.

**STEP 3**

Go in the Windows Device Manager and check to see if the adapter is installed correctly under the IEEE 1394 Bus Host Controller section.

### *Macintosh Installation*

**STEP 1**

Insert the Installation CD into your Macintosh CD-ROM drive.

**STEP 2**

Double-click on the **Start Installation Here** file on your Installation CD.

**STEP 3**

Follow the instructions to install the latest Macintosh FireWire drivers.

**STEP 4**

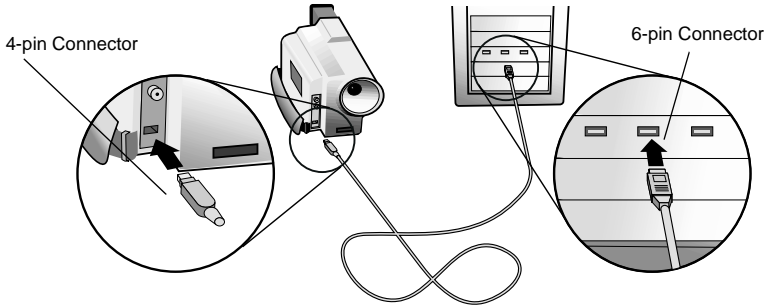
After installation is complete, click **Restart** to reboot your Macintosh and have the new settings take effect.

# ATTACHING A DIGITAL VIDEO CAMERA

Follow these steps to attach a Digital Video Camera to your AFW-4300.

## STEP 1

Using a standard 6-to-4-pin 1394 cable, plug the larger connector (6-pin) of the cable into the external 1394 port on AFW-4300.



## STEP 2

Plug the smaller connector (4-pin) of the 1394 cable into the 1394 port on your digital video camera.

**CAUTION** When inserting the 4-pin connector of the 1394 cable into the DV camera, make sure the connector and the 1394 port are properly aligned. Failure to do so can bend the pins and damage the internal connector of the camera.

**NOTE** There are two types of 1394 connectors commonly used; a 4-pin and a 6-pin. The AFW-4300 has three 6-pin connectors on it. Digital Video cameras use a 4-pin connection and may not include the cable. Other peripherals typically use a 6-pin connection and include a corresponding 6-to-6-pin cable for you to connect the device to your FireConnect 4300.

## STEP 3

You are now ready to install the 1394 software included with the AFW-4300. See the installation instructions included on your CD-ROM jacket cover for more information.

## CONNECTING OTHER 1394 DEVICES

You can connect up to 62 1394 devices to the AFW-4300 in almost any configuration using either 6-to-6-pin or 6-to-4-pin 1394 cables.

**NOTE** The AFW-4300 host adapter supports hot-plugging, allowing 1394 devices to be attached and recognized even when the computer is powered on.

**NOTE** Some peripheral manufacturers support hot-plugging in different ways. Please see instructions for each device to determine the best way to attach and mount the peripheral.

## TROUBLESHOOTING

If you have any problems while installing the AFW-4300, check the following items first:

- Is the card seated evenly all the way into the PCI slot?
- Is bus mastering support provided and enabled for the PCI slot containing the AFW-4300? (Check your motherboard documentation for information on this.)
- Is your 1394 DV camcorder or device powered on?
- Is the 1394 cable properly connected to AFW-4300 and the DV camcorder, or other 1394 device?
- Checked the Windows 2000 Event Log if you encounter problems loading the drivers on your Windows 2000 operating system?
- Checked the troubleshooting section of your operating system user manual?
- Checked the Software Tutorial and Read Me file on the CD if you encounter any problems with the software?
- If the driver fails to load, moved the card to a different PCI slot?

- For the Power Macintosh system, verified that the card is seen by the Apple System Profiler?

To verify that the card is seen by the Apple System Profiler, follow these steps:

1. Pull down from the Apple Menu to Apple System Profiler.
2. Click the **Devices and Volumes** tab.
3. In the window that appears, scroll down to the **PCI** area and click the arrow next to each PCI slot to reveal the PCI card information. If the AFW-4300 is installed properly, you will see the following information listed under one of the slots:

Card type:	Not available
Card name:	pci104c,8010
Card model:	Not available
Card ROM #:	Not available
Card Revision:	0
Card vendor ID:	104C

4. If the card is not seen, verify the Apple FireWire 2.4 or later extensions are loaded and enabled.
5. If the extensions are loaded and enabled, verify that the card is seated properly.

If you are still unable to resolve a problem, see the Adaptec Web site at <http://www.adaptec.com>, or the Adaptec Support Knowledgebase at <http://ask.adaptec.com> for additional troubleshooting information.



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## Adaptec Customer Support

If you have questions about installing or using your Adaptec product, check this user's guide first—you will find answers to most of your questions here. If you need further assistance, use the support options listed below.

### *Technical Support Identification (TSID) Number*

- The 12-digit TSID can be found on the white barcode-type label included inside the box with your product. The TSID helps us provide more efficient service by accurately identifying your product and support status. The TSID is required when contacting Technical Support.
- Affix your TSID label to the CD jacket cover for easy reference.

### *Support Options*

- Search the Adaptec Support Knowledgebase (ASK) at <http://ask.adaptec.com> for articles, troubleshooting tips, and frequently asked questions for your product.
- For support via Email, submit your question to Adaptec's Technical Support Specialists at <http://ask.adaptec.com>.

### *North America*

- Visit our Web site at <http://www.adaptec.com>.
- For information about Adaptec's support options, call +1 408-945-2550, 24 hours per day, 7 days per week.
- To speak with a Technical Support Specialist,

For **Hardware products** call +1 408-934-7274,  
Monday–Friday, 3:00 A.M. to 5:00 P.M., Pacific Time.

For **RAID and Fibre Channel** call +1 321-207-2000  
Monday–Friday, 3:00 A.M. to 5:00 P.M., Pacific Time.

To expedite your service, have your computer in front of you.

- To order Adaptec products, including software and cables, call +1 800-442-7274 or +1 408-957-7274.

### *Europe*

- Visit our Web site at <http://www.adaptec-europe.com>.
- **English and French:** To speak with a Technical Support Specialist, call one of the following numbers, Monday–Thursday, 10:00 to 12:30 and 13:30 to 17:30; Friday, 10:00 to 12:30 and 13:30 to 16:30, Central European Time:
  - **English:** +32 2 352 3470
  - **French:** +32 2 352 3460

To expedite your service, have your computer and TSID in front of you.

- **German:** To speak with a Technical Support Specialist, call +49 89 456 40660, Monday–Thursday, 09:30 to 12:30 and 13:30 to 16:30; Friday, 09:30 to 12:30 and 13:30 to 15:00, Central European Time. To expedite your service, have your computer and TSID in front of you.
- To order Adaptec products, including accessories and cables:
  - **UK:** +0800 96 65 26 or fax +0800 731 02 95
  - **Other European countries:** +32 11 300 379

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- Visit our Web site at <http://www.adaptec.com.au>.
- To speak with a Technical Support Specialist, call +612 9416 0698, Monday–Friday, 10:00 A.M. to 4:30 P.M., Eastern Australia Time. To expedite your service, have your computer and TSID in front of you.

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- Visit our Web site at <http://www.adaptec.com>.
- To speak with a Technical Support Specialist, call +852 2869 7200, Monday–Friday, 10:00 to 17:00.
- Fax Technical Support at +852 2869 7100.

### ***Singapore***

- Visit our Web site at <http://www.adaptec.com>.
- To speak with a Technical Support Specialist, call +65 245 7470, Monday–Friday, 10:00 to 17:00.

## **Regulatory Compliance Statements**

### **Federal Communications Commission Radio Frequency Interference Statement**

**WARNING:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. However, if this equipment does cause interference to radio or television equipment reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.
- Use a shielded and properly grounded I/O cable and power cable to ensure compliance of this unit to the specified limits of the rules.

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.



#### European Union Compliance Statement

This Information Technology Equipment has been tested and found to comply with the following European directives:

EMC Directive 89/336/EEC, as amended by 92/31/EEC and 93/68/EEC

EN 50081-1 (1992)  
EN55022 (1994) Class B  
EN 50082-1 (1992)  
EN61000-4-2 (1998)  
EN61000-4-3 (1998)  
EN61000-4-4 (1995)  
EN61000-4-5 (1995) Surges  
EN61000-4-6 (1996) Conducted immunity  
EN61000-4-11 (1994) Supply dips of variation



#### Australian/New Zealand Compliance Statement

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to the Australian/New Zealand standard AS/NZS 3548 set out by the Spectrum Management Agency.



#### Canadian Compliance Statement

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

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.



#### Japanese Compliance (Voluntary Control Council Initiative)

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