# Actiontec™

**Internal PCI**
# 1394 FireWire Card
**Capture, Edit, & E-mail Digital Videos**

# User's Manual

# Table of Contents

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# Introduction

Thank you for purchasing an *Action*tec 1394 FireWire Card. *Action*tec's implementation of the IEEE 1394 standard brings the latest in serial bus technology to your PC in an inexpensive PCI card. An integral part of any PC-based video editing solution, the 1394 FireWire Card also opens you up to a world of other fast, inexpensive peripherals, such as storage devices. FireWire devices also support "hot-swapping"—the ability to install and remove the devices without turning your computer off to do so.

Easy to install, the 1394 FireWire Card is a very convenient way to expand your PC into the world of IEEE 1394 devices.

## Contacting *Action*tec Technical Support

*Action*tec Electronics prides itself on making high-quality, durable, high-performance products. If you should need assistance, the *Action*tec Technical Support Department is available from 7:00 AM to 7:00 PM Pacific Coast Time, Monday through Friday to provide professional support.

New drivers and firmware are released as need arises to insure maximum compatibility and operation of your new *Action*tec 1394 FireWire Card. To find out more about this and other *Action*tec products, and to sign up for a free e-mail newsletter, visit the *Action*tec web site at: **http://www.actiontec.com**.



| | |
|---|---|
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| Technical Support | (Choose Option 7) |
| 760 N. Mary Avenue | Fax: 408-732-0097 |
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# Do This First

### Minimum System Requirements

- 333Mhz (or above) PC with 32MB of RAM and CD-ROM drive

- One available PCI slot

- Microsoft Windows 98, Windows 98SE, or Windows 2000 installed

### Package Contents

Make sure the following items came in this package:

- 1394 FireWire Card

- This user's manual

- (1) 4-pin to 6-pin FireWire Cable

- MEI Video-Editing Software

### Before you Install the 1394 FireWire Card

Make sure you have your Windows 98 or Windows 98 Second Edition (SE) CD-ROM on hand during the installation process. Windows may need to copy some files from its own installation CD-ROM during the installation of the 1394 FireWire Card. In this case, insert your Windows installation CD when it is requested and follow the on-screen instructions. When windows has copied the files it needs, you will be returned to the installation process where you left it.

- To reduce the chance that there will be problems operating the 1394 FireWire Card, do not install it at the same time as you install any other PCI devices.

- Use the extension cable provided to avoid stretching the power cables in your computer to reach the card. The cable from your computer's power supply should be able to reach *farther*, when fully extended, than the location of the card. Make sure there is slack in the cable when the connection has been made.

- *Do not, under any circumstances, insert or remove the PCI card while the computer is turned on.* Doing so with *any* PCI card will have unpredictable results which may include permanent physical damage to the card, your computer's mainbord, or both.

# Installing the PCI Card

Step 1    Turn off the computer and all peripheral devices connected to it.

Step 2    Unplug the computer power cord from the wall receptacle.

Step 3    Remove the computer's cover. Refer to your computer owner's manual for instructions.

Step 4    Remove the screw securing the expansion slot cover behind one of the computer's available PCI expansion slots. Lift the expansion slot cover out as shown below.

CAUTION: Always discharge static electricity before handling the1394 FireWire Card. You may discharge static electricity by touching a grounde metal structure or by using any commercially available grounding strap.

Note: Make sure the slot is a PCI slot. PCI slots are smaller than ISA slots and nearly always white in color. ISA slots are generally black in color.
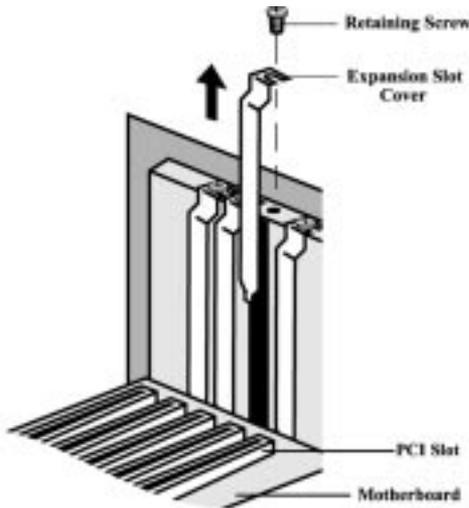


**Figure 1: Removing the Backplate**

The position of the expansion slots in your computer may differ from the illustrations shown in this user's manual, depicting the slots in a vertical position. Regardless of the position of the expansion slots, the installation steps remain the same. Please refer to your computer owner's manual for more information about the expansion slot configuration of your computer.

Step 5    Insert the PCI card into the available PCI expansion slot. Ensure that the card is seated properly before securing it with the screw removed in Step 4, as shown in the following diagram.
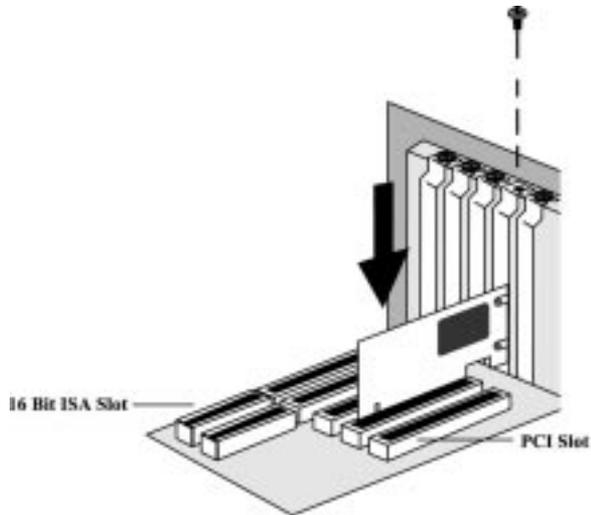


16 Bit ISA Slot

PCI Slot

**Figure 2: Installing The PCI Card**

Note: Make sure the power connector from your system is long enough to reach the card so that there is no tension in the wires. If the spare power connector available in your system will not reach the card, use the power connector provided with the card as an extension

Step 6    On the card is a white, 4-wire "female" power connector. Connect this device to an unused "male" connector coming from your computer's power supply.

Step 7    Put the chassis cover back on the computer.

Step 8    Make sure that all power switches are in the OFF position, then reconnect the power cables to the computer and its peripherals.

Step 9    Turn on the computer and proceed to the following sections to configure the *Action*tec 1394 FireWire Card for the operating system you are using.

### *Connecting Devices to the Actiontec 1394 FireWire Card*

On the rear panel of the *Action*tec 1394 FireWire Card are jacks to connect FireWire devices. Make sure, especially when connecting multiple devices to the 1394 FireWire Card that your PC's internal power has been connected to the card. See Step 6 above for details on how to make this connection.

# Configuring Windows 98

Step 1    After you have installed the 1394 FireWire Card in your computer, turn on the power and allow the system to boot normally.

Step 2    Windows 98 will immediately display the Add New Hardware Wizard and identify the modem as a "PCI OHCI Compliant IEEE 1394 Host Controller". Click the **Next** button.



Step 3    At the next dialog box, make sure that "Search for the best driver for your device. (Recommended)" is selected, and then click **Next.**

Note: After inserting
the CD-ROM, make
sure to wait a few
seconds before
clickin **Next.** Other-
wise, the Wizard
may report that it
was unable to find
the drivers. If this is
the case, click Back
and then click Next,
repeating this pro-
cess until the CD-
ROM has been rec-
ognized by the drive.

Step 4    Next the wizard will ask which drives or folders it
should search for the drivers. Click to select the CD-
ROM drive. Make sure that all the other options are
deselected, clicking them to deselect, if necessary.
Insert the 1394 FireWire Card installation CD-ROM
and click **Next.**



Step 5    The Wizard will find the correct driver on the CD-
ROM and identify the device as an "*Action*tec 1394
FireWire Card". Click **Next.**

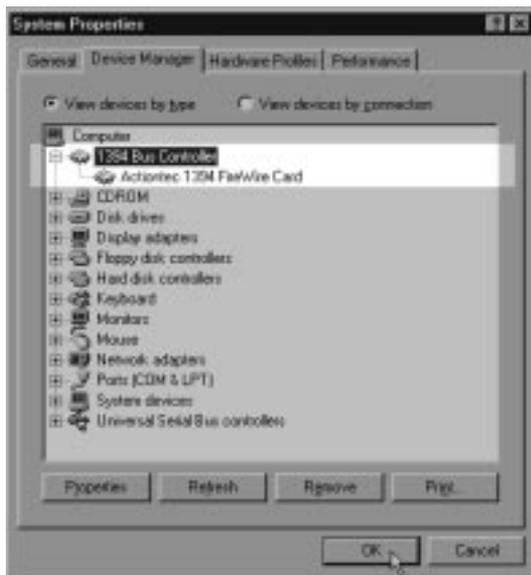After Windows has finished copying the files to where they belong in your system, it will announce the en of the installation process. Click the **Finish** button.

Next, find out if the 1394 FireWire Card has been properly installed and configured for use with your operating system.

Step 1   On the Windows desktop, right-click the icon for My Computer. In the dialog box that appears, click the **Device Manager** tab.

Step 2   The Device Manager will be displayed, listing the kinds of devices that are connected to your system. Click the plus (+) sign next to "1394 Bus Controller" to expand that section of the listing.
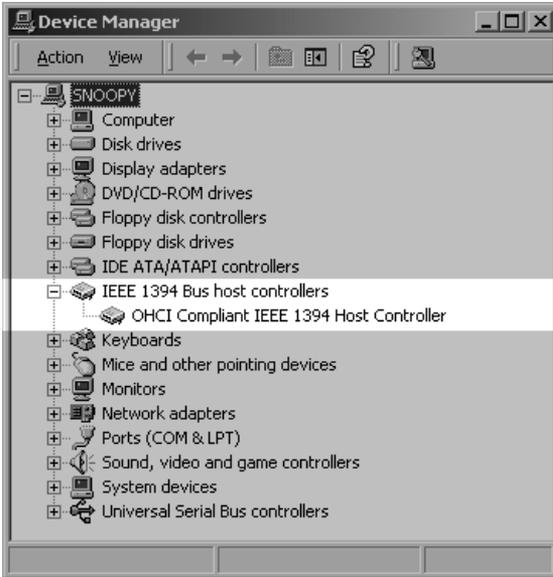


The highlighted area shown above should match the same section of the listing displayed by your computer. If so, the 1394 FireWire Card has been installed correctly. See "Connecting Devices to the Actiontec 1394 FireWire Card" on page 6 to connect FireWire devices to the card.

# Configuring Windows 2000 Professional

Step 1   After you have installed the PCI card in your computer, turn on the power and allow the system to boot normally.

Step 2   On the Windows desktop, right-click the icon for **My Computer.** On the menu that appears, click **Properties.** The system properties dialog box will appear. Click the Hardware tab to bring it to the front, then click the **Device Manager** button.

Step 3   In Device Manager, click the plus (+) sign next to **IEEE 1394 Bus Host Controller** to expand that section of the listing. A listing for OHCI Compliant IEEE 1394 Host Controller should appear.



Note: Windows did not display anything when you started up your computer to acknowledge the fact that you had installed new hardware. This was because it recognized the modem as one corresponding with one of the generic drivers that come as part of Windows 2000, in this case the OHCI Compliant IEEE 1394 Host Controller driver. This procedure effectively tells Windows to use the *Action*tec driver instead, which will allow you to take full advantage of the 1394 FireWire Card's features and capabilities.

Step 4    Double-click the listing for **OHCI Compliant IEEE 1394 Host Controller.** Click the Driver tab to bring it to the front, then click **Update Driver.**



Step 5    This will start the Update Device Driver Wizard. Click **Next.**

Step 6    In the dialog box that appears next (shown below) make sure "Search for a suitable driver for my device (Recommended) is selected, then click **Next.**



Step 7    In the dialog box that appears next, make sure that "CD-ROM drives" is the only option selected. Insert the *Action*tec 1394 FireWire Card Installation CD-ROM into your computer's CD-ROM drive. then click **Next.**

Step 8    In the dialog box that appears next, Windows will announce that it has found a better driver (the *Action-tec* driver) on the CD-ROM. Click **Next.**



Step 9    Windows will copy the necessary files and report that installation of the "Actiontec 1394 FireWire Card" i complete. Click **Finish.**
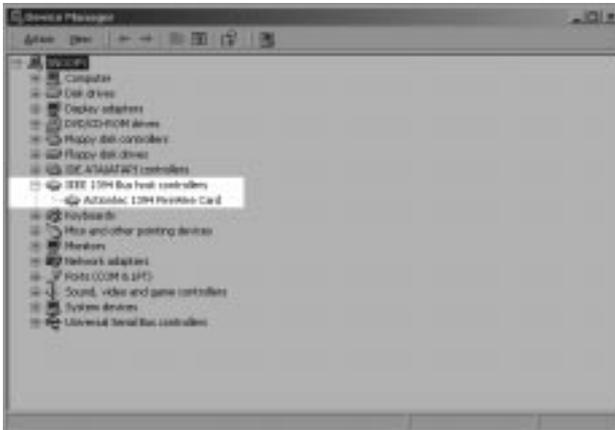
### *Checking the installation in Windows 2000 Professional*

Next, find out if the 1394 FireWire Card has been properly installed and configured for use with your operating system.

Step 1    On the Windows desktop, right-click the icon for **My Computer.** On the menu that appears, click **Properties.** The system properties dialog box will appear. Click the Hardware tab to bring it to the front, then click the **Device Manager** button.

Step 2    In Device Manager, click the plus (+) sign next to **IEEE 1394 Bus Host Controller** to expand that section of the listing. A listing for an "Actiontec 1394 FireWire Card" should appear as shown in the illustration below:



The highlighted area shown above should match the same section of the listing displayed by your computer. If so, the 1394 FireWire Card has been installed correctly. See "Connecting Devices to the Actiontec 1394 FireWire Card" on page 6 to connect FireWire devices to the card.

# Notices

### *FCC Regulations—Declaration of Conformity*

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 and television reception, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient 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.

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