



# FireWire 800 + Hi-Speed USB Combo

## Quick Installation Guide

### **Introducing the *FireWire 800 + Hi-Speed USB Combo***

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The *FireWire 800+Hi-Speed USB Combo* features the latest technology in FireWire 800 and USB 2.0.

#### **Features and Benefits**

- Combo card design adds five USB 2.0 (480 Mbps), one 1394a (400Mbps) and two 1394b (800 Mbps) ports into your system.
- Built-in 4-pin power connector provides extra power when connected to the system's power supply (Recommended)
- Supports hot-swapping and Plug-n-Play connection of peripheral devices

#### **FireWire 800 (1394b) interface**

- Provides 3 FireWire ports for multiple 1394b and 1394a device connections
- Adds two FireWire 800 (1394b) ports (1 int. + 1 ext.) and one external 1394a (400Mbps) port
- Supports IEEE 1394b and backwards compatible with 1394a-2000 and 1394-1995 standards
- Supports data transfer rates of 100, 200, 400, and 800Mbps

## **USB 2.0 interface**

- Adds two external and three internal USB 2.0 ports (two internal via USB Pin-out Header, see page 4)
- Compliant with USB specification rev. 2.0
- Supports high-speed (480 Mbps), full-speed (12 Mbps), and low-speed (1.5 Mbps) data transfer modes for simultaneous operation of multiple USB 2.0/1.1 devices

**Note:** USB 1.1 devices are limited to USB 1.1 speeds even when they are connected to USB 2.0 host adapter or USB 2.0 hubs.

## **System Requirements**

### **PC:**

- Pentium® or equivalent computer with an available PCI slot
- Windows® 2000/XP (32-/64-bit)/Server 2003 (32-/64-bit)/Vista (32-/64-bit)
  - Requires 2000 SP4 or later/XP SP1 or later/2003/Vista for USB 2.0 speed

### **MAC:**

- Power Mac G3 Blue & White or later with an available 64-bit or 32-bit PCI slot
- Mac OS 8.6 or later
  - Requires Mac OS X (v10.2.4) or later for FireWire 800 speed
  - Requires Mac OS X 10.2.8 or later for USB 2.0 speed

## Package Contents

- *FireWire 800+Hi-Speed USB Combo* adapter
- "Y" split power cable
- Driver CD
- Quick Installation Guide

## Board Layout



Figure 1. Board Layout

**Note:** The **Power Connector** (same as the one used with your floppy disk drive) is designed to provide additional power to the board when needed. Connect this power connector (recommended) when one of the following conditions occur:

- Device(s) not being detected.
- All ports are used.

Power off your system first before making this connection.

## USB Pin-out Header

The internal **USB Pin-out Header** consists of 9 pins arranged in 2 rows; the header provides 2 USB ports. Match up **+5VDC (Pin 1)** on the **4-Pin USB Connector** to **Pin 1** on the pin-out header. Connecting the USB cable improperly may damage the system. Please refer to your system's manual for proper connection.

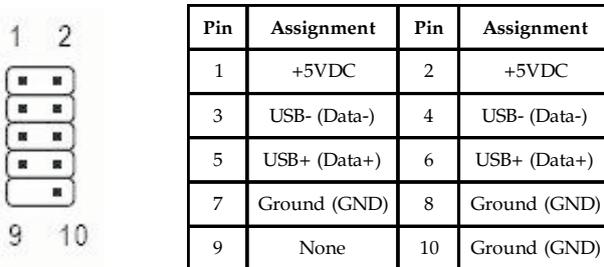


Figure 2. USB Pin-out Header

**Note:** The diagram and table shows labeling for a typical motherboard 9-pin pin-out header. Please note that the 1st pin on the 5-pin row of the **FireWire 800+Hi-Speed Combo** is labeled pin1 but corresponds to pin 2 on the diagram, nevertheless, the assignment for each pin are identical to the table. The pin-out header is designed to connect to front mounted USB ports, flash memory card readers, or any USB devices that require pin-out header connection. Reference the image above and review your computer's manual for proper connection.

## Hardware Installation

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General instructions for installing the card are provided below. Since the design of computer cases and motherboards vary, refer to your computer's reference manual for further information, if needed.

Static Electricity Discharge may permanently damage your system. Discharge any static electricity build up in your body by touching your computer case for a few seconds. Avoid any contact with internal parts and handle cards only by their external edges.

1. Turn OFF the power to your computer and any other connected peripheral devices. Unplug the computer's power cord.
2. Remove your computer's cover and install the card in an available PCI slot.
3. Push the board down firmly, but gently, until it is well seated.
4. Connect internal connections where needed. See **Board Layout** on page 3 for more details.
5. Secure the card and replace the cover.

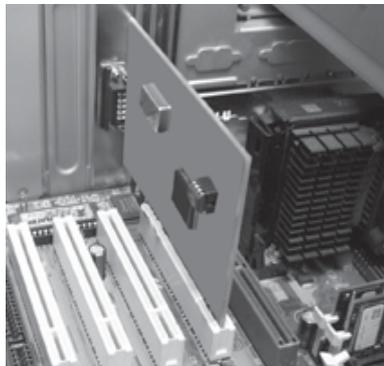


Figure 3. Inserting the PCI Board

## **Windows Driver Installation**

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The instructions below are divided into two sections, USB 2.0 and FireWire 800. To ensure proper installation of this board, please follow the instructions step-by-step.

### **USB 2.0 Driver Installation**

#### **For Windows 2000 (with SP4 or later)/XP (with SP1 or later)/2003/Vista**

Windows will automatically detect and install it's built-in USB 2.0 driver. No additional driver installation is needed. The board will operate at USB 2.0 speed.

#### **For Window 2000 (with SP3 or earlier)**

Windows will automatically detect and install it's built-in USB 1.1 driver. The board will operate at USB 1.1 speed.

1. At the **Found New Hardware Wizard**, click **Next**.
2. Select **Search for the best driver...**, click **Next**.
3. Uncheck all boxes, then click **Next**.
4. Select **Disable the Device...**, then click **Finish**.

#### **XP (without SP1)**

Windows will automatically detect and install it's built-in USB 1.1 driver. The board will operate at USB 1.1 speed.

1. At the **Found New Hardware Wizard** select **Install the software automatically**, then click **Next**.
2. Select **No, do not connect to the internet now**, then click **Next**.
3. Check **Don't prompt me again to install this software**, then click **Finish**.

## FireWire 800 Driver Installation

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Windows will automatically install its built-in FireWire 400 driver for the *FireWire 800 + Hi-Speed USB Combo*. To get the full speed from the controller, install the FireWire 800 driver using the directions below.

### Windows 2000

Windows 2000 automatically installs its built-in FireWire 400 driver for the *FireWire 800 + Hi-Speed USB Combo*. To get the full speed out of this controller, install the Firewire 800 driver using the directions below.

1. Insert the driver CD. Click **Start, Run**. Type **D:\setup32.exe**, click **OK**. (Change **D:** to match your CD-ROM drive letter)
2. At the Welcome screen, click **Next**.
3. At the License Agreement screen, click **Yes**.
4. At the Destination Location screen, click **Next**.
5. Select **Complete**, then click **Next**.
6. At the Program Folder screen, click **Next**.
7. At the Digital Signature screen, click **Yes**, then click **Finish**.
8. Select the restart computer option, then click **Finish**.

### 32-bit Windows XP

Windows XP automatically installs its built-in 1394a driver for the *FireWire 800 + Hi-Speed USB Combo*. To get the full speed out of this controller, install the FireWire 800 driver using the directions below.

1. Insert the driver CD. Click **Start, Run**. Type **D:\setup32.exe**, click **OK**. (Change **D:** to match your CD-ROM drive letter)
2. At the Welcome screen, click **Next**.

3. At the License Agreement screen, click **Yes**.
4. At the Destination Location screen, click **Next**.
5. Select **Complete**, then click **Next**.
6. At the Program Folder screen, click **Next**.
7. At the Software Installation screen, click **Continue Anyway**, then click **Finish**.
8. Select the restart computer option, then click **Finish**.

## **64-bit Windows XP**

Windows XP automatically installs its built-in 1394a driver for the *FireWire 800 + Hi-Speed USB Combo*. To get the full speed out of this controller, install the FireWire 800 driver using the directions below.

1. Insert the driver CD. Click **Start, Run**. Type **D:\setup64.exe**, click **OK**. (Change **D:** to match your CD-ROM drive letter)
2. At the Welcome screen, click **Next**.
3. At the License Agreement screen, click **Yes**.
4. At the Destination Location screen, click **Next**.
5. Select **Complete**, then click **Next**.
6. At the Program Folder screen, click **Next**.
7. At the Security Alert box, click **Yes** two times.
8. At the Software Installation screen, click **Continue Anyway**, then click **Finish**.
9. Select the restart computer option, then click **Finish**.

## 32-bit Windows Server 2003

Windows Server 2003 automatically installs its built-in FireWire 400 driver for the *FireWire 800 + Hi-Speed USB Combo*. To get the full speed out of this controller, install the FireWire 800 driver using the directions below.

1. Insert the driver CD. Click **Start, Run**. Type **D:\setup32.exe**, click **OK**. (Change **D:** to match your CD-ROM drive letter)
2. At the Welcome screen, click **Next**.
3. At the License Agreement screen, click **Yes**.
4. At the Destination Location screen, click **Next**.
5. Select **Complete**, then click **Next**.
6. At the Program Folder screen, click **Next**.
7. At the Security Alert box, click **Yes** two times.
8. At the Software Installation screen, click **Continue Anyway**, then click **Finish**.
9. Select the restart computer option, then click **Finish**.

## 64-bit Windows Server 2003

Windows Server 2003 automatically installs its built-in FireWire 400 driver for the *FireWire 800 + Hi-Speed USB Combo*. To get the full speed out of this controller, install the FireWire 800 driver using the directions below.

1. Insert the driver CD. Click **Start, Run**. Type **D:\setup64.exe**, click **OK**. (Change **D:** to match your CD-ROM drive letter)
2. At the Welcome screen, click **Next**.
3. At the License Agreement screen, click **Yes**.
4. At the Destination Location screen, click **Next**.
5. Select **Complete**, then click **Next**.

6. At the Program Folder screen, click **Next**.
7. At the Security Alert box, click **Yes** two times.
8. At the Software Installation screen, click **Continue Anyway**, then click **Finish**.
9. Select the restart computer option, then click **Finish**.

## Windows Vista™

Windows Vista operating system automatically installs its built-in FireWire 400 driver for the *FireWire 800 + Hi-Speed USB Combo*. To get the full speed out of this controller, install the FireWire 800 driver using the directions below.

1. Insert the driver CD. Click **Start**.  
*For 32-bit Windows Vista:* In the **Start Search** box, type **D:\setup32.exe**, press **Enter**. (Change **D:** to match your CD-ROM drive letter)  
*For 64-bit Windows Vista:* In the **Start Search** box, type **D:\setup64.exe**, press **Enter**. (Change **D:** to match your CD-ROM drive letter)
2. Click **Allow**.
3. At the Welcome screen, click **Next**.
4. At the License Agreement screen, click **Yes**.
5. At the Destination Location screen, click **Next**.
6. Select **Complete**, then click **Next**.
7. At the Program Folder screen, click **Next**.
8. At the Windows Security box, click **Install** three times, then click **Finish**.
9. Select the restart computer option, then click **Finish**.

## To Verify Windows Installation

1. Check Device Manger to verify installation:  
*For 2000/XP/Server 2003:* Right click **My Computer**, click **Manage**, then click **Device Manager**.  
*For Windows Vista:* Right click **Computer**, click **Manage**, click **Continue**, click **Device Manager**.
2. The drivers for this controller show up differently under different versions of Windows. Please refer to the correct Windows version to verify:

### Windows 2000 (with SP4 or later):

#### a) Under **Universal Serial Bus Controllers:**

- **NEC... Open Host Controller**
- **NEC... Open Host Controller**
- **Standard Enhanced PCI to USB Host Controller**
- **USB 2.0 Root Hub**
- **USB Root Hub**
- **USB Root Hub**

#### b) Under **1394 Bus host controllers:**

- **Unibrain driver/OHCI Compatible Board or IEEE 1394b (FireWire 800) adapter**

### Windows 2000 (with SP3 or earlier) and XP (without SP1):

#### a) Under **Universal Serial Bus Controllers:**

- **NEC PCI to USB Open Host Controller**
- **NEC PCI to USB Open Host Controller**
- **USB Root Hub**
- **USB Root Hub**

b) Under **1394 Bus host controllers:**

- **Unibrain driver/OHCI Compatible Board or IEEE 1394b (FireWire 800) adapter**

c) Under **Other Devices:**

- **Universal Serial Bus (USB) Controller** will display with a yellow exclamation mark.

**Windows XP (with SP1 or later)/Server 2003/Vista:**

a) Under **Universal Serial Bus Controllers:**

- **NEC PCI to USB Open Host Controller**
- **NEC PCI to USB Open Host Controller**
- **Standard Enhanced... USB Host Controller**
- **USB Root Hub**
- **USB Root Hub**
- **USB Root Hub**

b) Under **1394 Bus host controllers:**

- **Unibrain driver/OHCI Compatible Board or IEEE 1394b (FireWire 800) adapter**

## **Mac OS Driver Installation**

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The instructions below are divided into two sections, USB 2.0 and FireWire 800. To ensure proper installation of this board, please follow the instructions step-by-step in both sections.

### **USB Driver Installation**

**Mac OS 8.6-9.x, OS X (version 10.2.7 and earlier)**

This board will only work at USB 1.1 speed in these OSes. Just install the board and Mac OS will automatically detect and install the correct USB 1.1 driver for it. No additional driver is necessary.

## **Mac OS X (version 10.2.8 ) or later**

Mac OS X (version 10.2.8) or later have built-in USB 2.0 driver support for this controller. Just install the board and Mac OS will automatically detect and install the correct drivers for it. No additional driver is necessary.

## **FireWire Driver Installation**

To ensure proper operation of the *FireWire 800+Hi-Speed USB Combo* in your Mac, some Mac OS requires the most current Firewire software from Apple. Apple's website contains all the information needed to download and install Firewire software update. Mac software download URL is: <http://www.info.apple.com/support/downloads>.

When you are at the download page, in the **Search** box, check **Restrict to downloads**, type in **1394**, then click the search button. The information below will help you decide whether or not to download and install the latest Firewire driver update.

1. **Mac OS 10.2.4 or later** has built-in Firewire 800 (1394b) driver support with the operating system. No driver installation is needed. The firewire 800 ports will work up to 800 Mbps.
2. **Mac OS 9.1, 9.2.x, and Mac OS 10.1.x-10.2.3** have built-in Firewire 400 (1394a) driver support with the operating system. No driver installation is needed. The Firewire 800 ports will work up to 400 Mbps.
3. **Mac OS 9.0.x** users should download the Firewire software version 2.5 or later. The Firewire 800 ports will work up to 400 Mbps.
4. **Mac OS 8.6** users should download the Firewire software version 2.3.3. The Firewire 800 ports will work up to 400 Mbps.

## To Verify Mac OS Installation

Since we didn't load any additional driver under these Mac OSes, plug in a USB device to verify installation.

## Connecting Devices

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General driver installation steps are provided below. Please review your device's user manual for more details.

### USB Devices

**Windows** and **Mac OS** will automatically detect and install most USB devices when connected. For devices that do not install automatically, additional drivers may be required. Refer to the device's users manual for more information.

### FireWire Devices

#### For Windows 2000

1. At the Found New Hardware Wizard, click **Next**.
2. Select **Search for a suitable driver...**, then click **Next**.
3. Uncheck all check boxes, then click **Next**.
4. Click **Next**, then click **Finish**.

#### For Windows XP

1. At the Found New Hardware Wizard,  
For XP w/SP2 or later  
Select **No, not this time**, then click **Next**.  
For XP w/SP1 or earlier  
Go directly to step #2.
2. Select **Install the Software Automatically**, then click **Next**.
3. Click **Continue Anyway**. (Skip if not prompted)
4. Click **Finish** to complete the installation.

### **For Server 2003**

1. At the Found New Hardware Wizard,  
For 2003 w/SP1 or later  
Select **No, not this time**, then click **Next**.  
For 2003 no service pack installed  
Go directly to step #2.
2. Select **Install the Software Automatically**, then click **Next**.
3. At the Security Alert box click **Yes**, or the Hardware Installation box click **Continue Anyway**, then click **Finish** to complete the installation.

### **For Windows Vista**

Windows Vista will automatically detect and install the drivers for most FireWire devices when connected. However, for devices that do not install automatically, follow the steps below to complete the installation.

1. Click **Locate and install driver software**.
2. Click **Continue** to complete the installation.

### **For Mac OS**

MacOS will automatically detect and install most FireWire devices when connected. For devices that do not install automatically, additional drivers may be required. Refer to the device's users manual for more information.

## **ubSwitch Utility (for Windows only)**

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In order to use a DV camcorder with this controller, Microsoft's FireWire 400 driver must be installed in the system. We have supplied an easy to use utility that allows switching between Microsoft's driver and the FireWire 800 driver. *Before using this utility, unplug all devices from the FireWire 800 card.*

1. Click **Start, Programs, Unibrain ubcore, Tools** then **ubSwitch**.
2. Right click the **ubSwitch** icon located in the system tray by the clock.
3. Click the **1394 Adapter** that you want to switch, then click on **Microsoft 1394 Drivers**.

**Note:** If your system has multiple 1394 adapters installed, make sure that you click on the 1394 adapter that the camcorder will be plugged into.

4. Windows will display an information box when the driver is ready for use. It may take a few seconds for this box to appear.

**Note:** To switch back to the FireWire 800 driver, follow the same procedures, but in step 3 instead of clicking on **Microsoft 1394 Drivers**, click on **Unibrain 1394 Drivers**.

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# Technical Support and Warranty

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**QUESTIONS?** SIIG's **Online Support** has answers! Simply visit our web site at [www.siig.com](http://www.siig.com) and click **Support**. Our online support database is updated daily with new drivers and solutions. Answers to your questions could be just a few clicks away. You can also submit questions online and a technical support analysts will promptly respond.

SIIG offers a lifetime manufacturer warranty with this product. Please see our web site for more warranty details. If you encounter any problems with this product, please follow the procedures below.

A) If it is within the store's return policy period, please return the product to the store where you purchased from.

B) If your purchase has passed the store's return policy period, please follow these steps to have the product repaired or replaced.

**Step 1:** Submit your RMA request.

Go to [www.siig.com](http://www.siig.com), click **Support**, then **RMA** to submit a request to [SIIG RMA](#). If the product is determined to be defective, an RMA number will be issued. SIIG RMA department can also be reached at (510) 413-5333.

**Step 2:** After obtaining an RMA number, ship the product.

- Properly pack the product for shipping. All software, cable(s) and any other accessories that came with the original package must be included.
- Clearly write your RMA number on the top of the returned package. SIIG will refuse to accept any shipping package, and will not be responsible for a product returned without an RMA number posted on the outside of the shipping carton.
- You are responsible for the cost of shipping. Ship the product to the following address:

**SIIG, Inc.**  
**6078 Stewart Avenue**  
**Fremont, CA 94538-3152, USA**  
**RMA #:** \_\_\_\_\_

- SIIG will ship the repaired or replaced product via Ground in the U.S. and International Economy outside of the U.S. at no cost to the customer.

## About SIIG, Inc.

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Founded in 1985, SIIG, Inc. is a leading computer upgrade manufacturer of I/O connectivity products, including PCI & ISA serial and parallel ports, USB, Serial ATA & UltraATA controllers, FireWire (1394a/b), networking, sound cards, and other accessories. SIIG is the premier one-stop source of upgrades.

SIIG products offer comprehensive user manuals, many user-friendly features, and are backed by an extensive manufacturer warranty. High-quality control standards are evident by the overall ease of installation and compatibility of our products, as well as one of the lowest defective return rates in the industry. SIIG products can be found in computer retail stores, mail order catalogs, through major distributors, system integrators, and VARs in the Americas and the UK, and through e-commerce sites.

### **PRODUCT NAME**

FireWire 800 + Hi-Speed USB Combo

FCC RULES: TESTED TO COMPLY WITH FCC PART 15, CLASS B OPERATING ENVIRONMENT: FOR HOME OR OFFICE USE

### **FCC COMPLIANCE STATEMENT:**

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.

THE PARTY RESPONSIBLE FOR PRODUCT COMPLIANCE

SIIG, Inc.  
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