

FW-200

*FireWire CardBus Card
User's Manual*

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FCC Warning

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 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 promise 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 to correct the interference by any of the following measures:

- Re-orient or move the receiving antenna.
- Increase the distance between the equipment and receiver.v2.5.1
- Connect the equipment to an outlet on a circuit that is separate from the one to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CE Declaration of Conformance

This is to certify that the FireWire PCMCIA Card is shielded against the generation of radio interference in accordance with the application of Council Directive 89/339/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. Conformity is declared by the application of **EN50081/EN50082:1992 Class A**.

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Specifications are subject to change without prior notice.

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Introduction

Congratulations to your purchase on the Macsense FW-200 FireWire CardBus Card. The FW-200 is a FireWire adapter card that works with any computer in a 32-bit PCMCIA Type II slot. It allows you to connect a portable computer to an FireWire peripheral with a 400Mbps connection.

The FW-200 FireWire CardBus Card comes with a dongle. A dongle is an FireWire adapter which links a 15-pin flat connector to a FireWire cable. The FW-200 has a dongle that connects to a 6-pin or 4-pin jack.

Connecting a portable computer to a FireWire Devices is a quick, simple process. The FW-200 FireWire CardBus Card is compliant with IEEE 1394 standards 1394-1995.

At Macsense we are continuously searching for roads to product and company improvement. Should you have any suggestions regarding your newly purchased FireWire CardBus Adapter Card, please contact us at support@macsense.com.

Features

- 5.0mm Credit-card size Type II PC Card slot support.
- Expandable up to 63 devices.
- Supports Hot-Swapping.
- High-Speed performance.

System Requirements

- Mac OS version 8.6 or higher.
- Support MS-Windows 98SE, MS-Windows 2000.
- PowerBook G3 Series or higher.
- 300MHz Power PC processor or faster.
- FireWire 2.3.3 or higher.

Please Note: FireWire 2.3.3 can be found Apple's web site at:

For English-North America:

<http://asu.info.apple.com/swupdates.nsf/artnum/n11632>

Chapter 1 - Before You Start

For English-International:

<http://asu.info.apple.com/swupdates.nsf/artnum/n11746>

Driver Installation for Mac OS 8.6 Users

Prior to installing the FW-200 FireWire CardBus Card into your computer's CardBus slot, you must first install Apple's FireWire 2.3.3 software. You must also install the inclosed FW-200's enabler. Without these software components, computer will not be able to recognize the FW-200.

To install the Required FW-200 Software, Follow the Instructions Below:

1. Download FireWire 2.3.3 from Apple Software Updates which can be found through the following websites:

For English-North America:

<http://asu.info.apple.com/swupdates.nsf/artnum/n11632>

For English-International:

<http://asu.info.apple.com/swupdates.nsf/artnum/n11746>

Note: *FireWire 2.4 and higher is not compatible with Mac OS 8.6*

2. Once you have downloaded the FireWire Software, double-click the "**Apple SW Install**" icon to start the installation process.
3. Choose "**Recommended Installation**" and click "**Start**" to install the FireWire Support software into the extensions folder on your startup disk.
4. When the installation is complete, restart your computer.
5. Once the computer is being restarted, install the FW-200 Enabler Software.

Chapter 2 - Software Installation for MacOS

To Install the FW-200 Enabler Software

1. Press the shift key as the computer turns off the system extensions.
2. Insert the FW-200's driver CD into the CD-ROM drive.



3. Double-click the “**Installer**” icon. The Easy Install dialog box appears.
4. Click the “**Install**” button.
5. Click “**Restart**” to complete the installation.

Driver Installation for Mac OS 9.0 - 9.0.4 Users

Prior to installing the FW-200 FireWire CardBus Card into your computer's CardBus slot, you must first install Apple's FireWire 2.4 software. To Install the Required FW-200 Software, Follow the Instructions Below:

1. Download FireWire 2.4 from Apple Software Updates which can be found through the following websites:

For English-North America:

<http://asu.info.apple.com/swupdates.nsf/artnum/n11719>

Note: *FireWire 2.4 and higher is not compatible with Mac OS 8.6.*

2. Once you have downloaded the FireWire Software, double-click the **"Apple SW Install"** icon to start the installation process.
3. Choose **"Recommended Installation"** and click **"Start"** to install the FireWire Support software into the extensions folder on your startup disk.
4. When the install is complete, restart your computer.

Note: *Apple's FireWire software displays FW-200 FireWire Card on the desktop as generic blank icon. To display our Macsense FireWire icon, you must install our FW- 200 FireWire Enabler Software in the supplied CD ROM. This is completely optional and is not required for operation.*

Optional FW-200 Enabler Software installation

1. Press the shift key as the computer turns off the system extensions.
2. Insert the FW-200's driver CD into the CD-ROM drive.



Chapter 2 - Software Installation for MacOS

3. Double-click the “**Installer**” icon. The Easy Install dialog box appears.
4. Click the “**Install**” button.
5. Click “**Restart**” to complete the installation.

When the installation of the appropriate software for the FW-200 is complete, the computer should have the ability to recognize the FW-200 FireWire CardBus Card. The next step is to plug the card into your computer's CardBus slot. Please carefully read the following instructions before you begin.

Hardware Description

The FW-200 FireWire CardBus Card is enclosed in a stainless steel compact frame that is both durable and portable. One end of the card has a 68-pin connector for plugging into the port on every portable computer. The other end of the card has a dongle with 6 pin and 4 pin FireWire port. The dongle also has a DC input port that allows you to connect an optional power adapter.

Note: *Some devices, like those of FireWire hard drives, can utilize Bus power or an external power adapter for operation. The FW-200 by itself does not supply enough power for such devices, therefore you may need to use an external power adapter.*

Cautions on Handling the FireWire CardBus Card and Connector

1. Handle your FW-200 FireWire CardBus Card with care.
2. Be careful while connecting or disconnecting the adapter from your FW-200 FireWire CardBus Card.
3. Do not to jerk or pull the adapter.
4. Insert the FireWire Card carefully into your computer's CardBus slot.

Installing the FireWire CardBus Card

Follow the instructions below to install the FW-200 FireWire CardBus Card.

1. Turn off the host computer.
2. Insert the card firmly into the CardBus slot with the Macsense logo facing upwards. Do not press hard.

Chapter 3 - Hardware Installation

3. Plug the FireWire adapter cable (dongle) into the 15-pin connector on the card. Do not press hard.
4. Plug a standard FireWire cable (6P or 4P) into the FireWire's adapter (dongle). Plug the other end of this cable into the FireWire hub, FireWire repeater, or FireWire devices.
5. Turn on the computer.

Driver Installation for Windows 98 Users

The FW-200 FireWire CardBus Card utilizes the Windows 98 1394 OHCI driver located on the Windows 98 CD-ROM. It does not need any additional software for application.

To Install the Required Software, Follow the Instructions Below:

1. Once you complete the installation of the FW-200 FireWire PC CardBus Card (refer to the "Hardware Installation" section), turn on the computer.
2. Windows 98 will automatically inform you with a "Add new Hardware" dialog box. Press "**Next**" to continue.
3. Then select "**Search for the best driver for your device (Recommended)**" and click "**Next**."
4. Windows 98 will request the driver location. Specify where your Windows 98 CD is located and click "**Next**".
5. Windows 98 will then inform you with a confirmation that the appropriate driver has been found. Press "**Next**" to confirm.
6. Windows 98 will now install the appropriate driver. To complete the installation of the software, press "**Finish**."

Ejecting the FireWire Card

We recommend the users to remove the FW-200 FireWire CardBus Card from the CardBus slot on the portable computer before transporting the computer to another location. Follow the procedure below to remove the FW-200 FireWire CardBus Card.

1. Turn on your computer.
2. Quit any DV edit application (e.g. iMovie, FinalCut) or FireWire devices (e.g. FireWire HD, FireWire MO).

NOTE: *The FireWire card cannot be ejected while the card is in use.*

3. For Mac OS users:

Drag the FireWire icon into the Trash. The FireWire card will be ejected automatically.

4. For Windows98 users:

Click on the Windows “**PC Card status**” icon (typically located on the right side of the Windows Task Bar) and press “**Stop**” for the card.

5. Follow the directions of this users manual to remove the FireWire PC Card as it may vary from model to model.

Specifications

Standards :	IEEE 1394 standards 1394-1995 and OHCI 1.0	
Card Size:	Credit Card size 5.0mm Type II	
Transfer Rate:	100Mbps; 200Mbps: 400Mbps	
Media Supported:	Standard FireWire cable	
Operating Distance:	4.5m maximum hub to node distance	
FireWire Interface:	Standard 6Pin jack	
Temperature	Operating	0°C to 50°C (32°F~122°F)
	Storage	-40°C to 50°C (40°F~122°F)
Humidity	Operating	10% to 80% (non-condensing)
	Storage	5% to 90% (non-condensing)
Weight:	30 grams (N.W)	
Certification:	FCC Class A; CE	

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