



## Installation and Operation Guide



# EZ8 Installation and Operation Guide

©2002 Event Electronics, LLC

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## Important Safety Instructions

- Please read all safety and operating instructions before using this product.
- Please note and follow all warnings printed in the EZ8 Owner's Manual.
- Keep all liquids away from this product. Do not operate this product in environments where it may be subjected to moisture.
- Do not operate this product in environments where it may be subjected to excessive heat.
- This unit contains no user-serviceable parts. Refer all servicing to qualified personnel. Do not attempt to service this unit yourself.
- Refer this unit for servicing to qualified personnel if:
  - Liquid has spilled into the unit, or the unit has been exposed to excessive moisture
  - The unit has been dropped or physically damaged
  - A marked change in performance is noticed

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# Getting Started

Congratulations on your purchase of the EZ8 Optical Audio Interface. When used in conjunction with an EZbus, the EZ8 provides a simple and cost-effective means of greatly enhancing your computer-based recording capabilities, supporting a full eight tracks of simultaneous record/playback—all via fiber optic cables. The EZ8 is also an ideal computer interface for any lightpipe-equipped device, providing eight tracks of 24-bit/48kHz audio, or up to four tracks of 24-bit/96kHz audio.

## Contents of the EZ8 Box

When you open the EZ8 box you should find the following:

- The EZ8 PCI card encased in a protective plastic cover
- Two fiber optic cables, each two meters in length (approx. 6')
- A compact disc containing the EZ8 Windows MME and ASIO audio drivers, the EZ8 Tray Application, a PDF version of this manual, and music software demos from a variety of manufacturers.
- The EZ8 Owner's Manual

## Computer System Requirements

**When using the EZ8 with the EZbus:**

- An IBM-PC or compatible computer with PCI architecture expansion slots (version 2.1 PCI BIOS), at least one built-in USB port, a genuine Intel-brand Pentium microprocessor (Pentium II 300 or better highly recommended) and Intel brand USB Chipset, or a genuine AMD microprocessor and a motherboard with the AMD 760 or AMD 760 MP chipsets, and minimum 64Mb RAM (128Mb or more highly recommended) running Windows 98 SE or

Windows ME. Windows ME is recommended for the most complete functionality. Please consult the EZbus technical support pages on the Event Web site, [www.event1.com](http://www.event1.com), for the latest information on Windows system compatibility.

- A fast, high-capacity IDE or SCSI hard disk drive for storing audio files
- Peripheral audio equipment, such as monitor speakers, Alesis ADAT® digital tape recorder, MIDI keyboard, microphone, etc.

### **When using the EZ8 with other lightpipe-equipped devices (*i.e.*, ADAT, A/D converters):**

- An IBM-PC or compatible computer with with PCI architecture expansion slots (version 2.1 PCI BIOS), a genuine Intel-brand Pentium microprocessor (Pentium II 300 or better highly recommended) or a genuine AMD microprocessor, and minimum 64Mb RAM (128Mb or more highly recommended) running Windows 95 or newer.
- A fast, high-capacity IDE or SCSI hard disk drive for storing audio files
- Peripheral audio equipment, such as a monitor speakers, Alesis ADAT® digital tape recorder, MIDI keyboard, microphone, etc.

**IMPORTANT NOTE:** Event Electronics makes no claims as to the suitability for use with the EZ8 those computer systems that do not conform to the requirements listed above. Non-conforming systems include those systems based on non-Intel- or AMD- brand processors and USB chipsets, even when such systems claim performance specifications that equal or exceed those of Intel- or AMD- brand chipsets. Furthermore, Event Electronics cannot provide customer support to end users that are having difficulty making the EZ8 work reliably with non-conforming systems.

# Installing the EZ8 PCI Hardware

**IMPORTANT:** Unplug your computer and detach all peripherals before proceeding with the following steps.

- 1. Remove your computer's cover.**
- 2. Select the PCI slot into which you will install the EZ8 card. You may use any PCI slot that is available. Unscrew and remove the bracket covering the selected PCI slot.**
- 3. Insure that you have fully discharged all static electricity from your body before handling the EZ8 card.**
- 4. Remove the EZ8 card from its protective plastic case. Handle the card carefully by its edges and insert it into the selected PCI slot, centering the card over the slot and using a gentle rocking motion while pushing downward until it is firmly seated. Be careful not to force the card into the slot, or bend or twist it while it is being inserted, as this could result in the card being damaged.**
- 5. Use the screw removed earlier from the protective backplate to attach the metal bracket at the back of the EZ8 card to the computer's rear panel.**
- 6. Replace the computer's cover and secure it. Reattach its AC power cord and reconnect any peripherals that you may have removed prior to installing the EZ8.**

# Installing the EZ8 Software

Now that you have completed the hardware installation, the next step is to install the Windows MME and ASIO audio drivers and the EZ8 Tray Application. The drivers provide the means for the EZ8 to pass audio into and out of your software applications; the Tray Application provides control over numerous EZ8 functions.

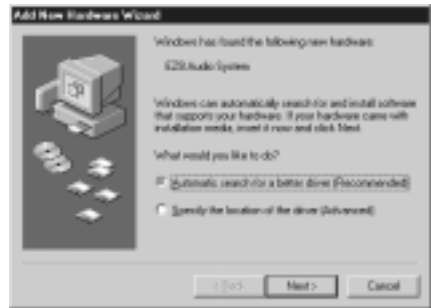
## Installation Procedure

Apply power to your computer's CPU. As Windows boots, it will automatically find the newly-installed EZ8, and the "Found New Hardware" dialog box will appear.



The next box to appear will be the New Hardware Wizard, with the EZ8 Audio System listed. When you see the Wizard, insert the EZ8 Installation CD into your computer's CD-ROM drive, and click on the button next to **Automatic search for a better driver (Recommended)**.

Click NEXT. Windows will locate the drivers and software on the EZ8 Installation CD and copy the files into your system.



After all of the files have been installed, you'll see the following dialog box:



Click **FINISH** to complete the Installation.

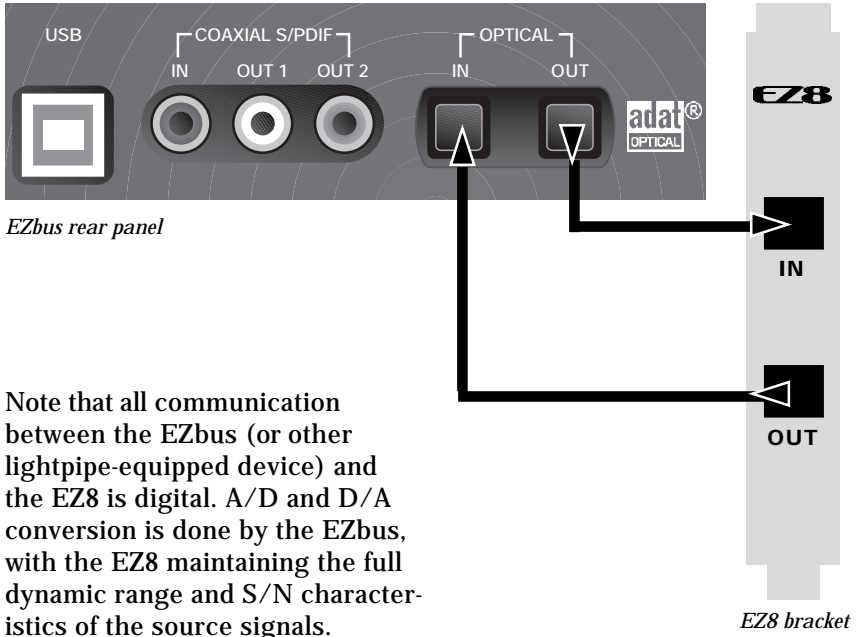
## Using the EZ8 ASIO Driver

The EZ8 ASIO driver provides significantly better performance— *i.e.*, greatly reduced latency—than the Windows MME driver. The EZ8 ASIO driver is selected from within an ASIO-compatible application, such as Cubase VST™ (below). ASIO buffer settings are made using the EZ8 Hardware Settings Panel (page 14).



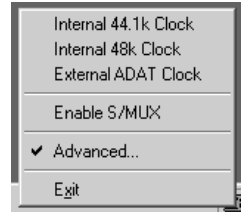
## Connecting the EZ8 to the EZbus

For two-way communication, use the included fiber-optic cables to connect the optical output of the EZ8 card to the optical input of the EZbus, and the optical output of the EZbus to the optical input of the EZ8.



# The EZ8 Tray Application

The EZ8 Tray Application, which resides in the Windows System Tray, provides access to a number of EZ8 utilities. Basic functions, such as selecting the sample rate and enabling S/MUX mode, can be accessed directly from the tray application's pop-up menu. Selecting Advanced from the pop-up brings you to the Control Panels, where you set and monitor I/O levels, configure the EZ8 clocking, set buffer sizes, and the like.



## The Digital Mixer Panel

The Digital Mixer panel is where you to set the input and output levels for all eight EZ8 channels.

### Channel Faders

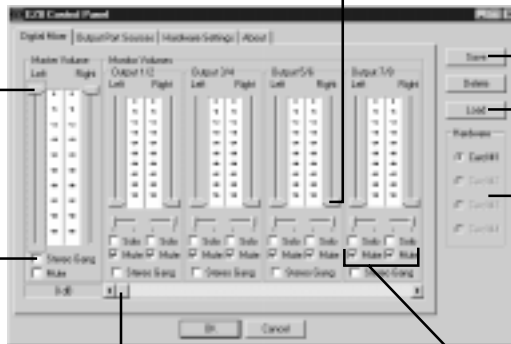
Use to set each channel's input and/or output level. In normal use, a setting of 0 (max) is recommended for output monitoring.

### Stereo Master Faders

Control the overall mix level of all eight EZ8 input and output channels

### Stereo Gang Control

Use this to lock the left and right faders together for precise simultaneous adjustments.



### Settings Controls

Use these buttons to Save, Delete, and Load settings.

### Hardware Controls

When using multiple EZ8 cards, selects which card's settings are displayed.

### Input/Output Monitor Select

Move slider to far left to monitor and adjust output levels (shown); move to far right to monitor and adjust input levels.

### Mute and Solo

Use to mute or solo one or more EZ8 channels.

## The Output Port Sources Panel

The Output Port Source Panel is used to route the EZ8 audio inputs to its outputs for monitoring. Note that its flexible matrix-style architecture allows you to easily monitor inputs, outputs, or both.

### Output Source Select Buttons

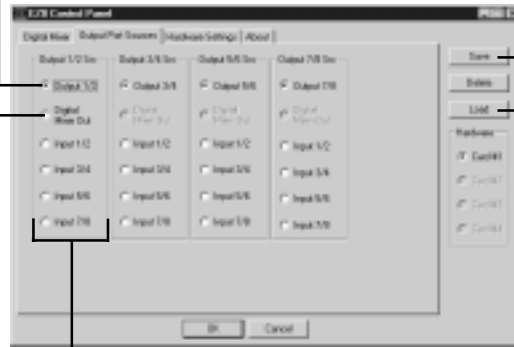
When a channel's Output button is checked, that channel's output signal appears at the channel's hardware output. Use this setting when playing back recorded signals from the computer.

### Digital Mixer Output Selector

When this button is checked, all signals routed through the Digital Mixer (both inputs and outputs) appear at Outputs 1 and 2. Use this setting for easy monitoring while recording and overdubbing.

### Input Selector Buttons

When these buttons are checked, the input signal(s) is routed directly to the output(s). Use this function to set up multiple monitor mixes when recording.



### Settings Controls

Use these buttons to Save, Delete, and Load Output Port settings.

## The Hardware Settings Panel

The Hardware Settings panel is where you set the operational mode of the Wave drivers, adjust the buffer size of the ASIO and Wave drivers, and select the internal and external clocking options.

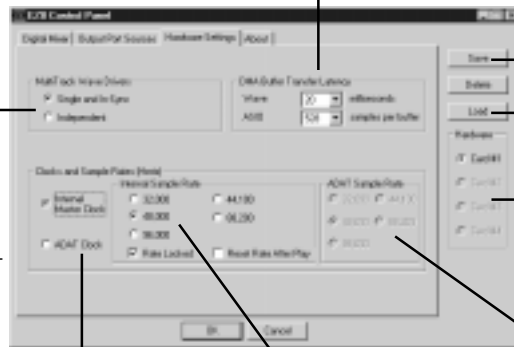
### Buffer/Latency Settings

Use **Wave** to set the buffer size when the MME driver is used.

Use **ASIO** to set the buffer size when the ASIO driver is used.

Lower buffer settings result in lower latencies; the ability to use lower settings is computer-dependent.

**Wave Driver Mode Selector**  
Use **Single and In-Sync** to start and stop all eight EZ8 channels simultaneously with sample-accuracy (recommended). Use **Independent** to allow channel pairs 1/2, 3/4, 5/6, and 7/8 to operate as four independent stereo Wave drivers. This latter mode is useful when you have multiple applications accessing the EZ8 card simultaneously.



### Settings Controls

Use these buttons to Save, Delete, and Load settings.

### Hardware Controls

When using multiple EZ8 cards, selects which card's settings are displayed.

### External Sample Rate Selector

When the EZ8 is slaved to an external clock, check **ADAT Sample Rate** that matches the rate of the external clock.

### Clock Selector

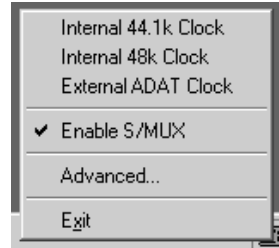
Check **Internal** to have the EZ8 be the source of the master clock. Check **ADAT** to have an external device be the master clock source.

### Internal Sample Rate Selector

When the EZ8 is the source of the master clock, check the **Internal Sample Rate** that matches the rate used in your audio application. Check **Rate Locked** to prevent Windows system sounds from changing the sample rate.

## Using S/MUX Mode

In its normal operating mode, the EZ8 supports eight channels of full-duplex 24-bit/48kHz audio. When S/MUX mode is enabled, the EZ8's internal workings are reconfigured to provide four channels of full-duplex 24-bit/96kHz audio. It does this by splitting a 96kHz data stream into two 48kHz streams. Note that in order to use S/MUX mode, both the device providing the input to the EZ8 (a stand-alone A/D converter, for example) and the device receiving signal from the EZ8 (a digital mixer, for example) must support S/MUX mode. Consult the device's owner's manual for information on S/MUX support.



S/MUX is enabled on the EZ8 from the EZ8 Tray Application pop-up menu.

## Contacting Customer Service

If you experience any trouble with your EZ8, please call the Event Electronics Customer Service department at 805-566-7777, ext. 5. Before calling, however, we ask that you please consult the Technical Support section of our Web site, [www.event1.com](http://www.event1.com).

If you believe your EZ8 is in need of repair, please contact the Event Electronics Customer Service department for a Return Authorization Number (RA#). We can accept for servicing only those units that are accompanied by an RA#. Units shipped without an RA# number will be refused.

# **EZ8**

**24-bit / 96kHz Optical Audio Interface**



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