Creative Ensoniq AudioPCI

User Guide
On-line Version

CRE▲TIVE®

Getting Started

Creative Ensoniq AudioPCI
Creative Mixer Software

Contents

Introduction

The colored insert in this manual gives you the latest information about your audio card, and contact information for Creative Labs.

Creative Ensoniq AudioPCI uses the latest music synthesis technology to play many notes simultaneously, creating a new dimension for musical and multimedia applications. Creative's Ensoniq AudioPCI is upgradeable with user-selectable banks for loading wavetable samples (digital instrument and sound samples).

After installing the Creative audio software, refer to the on-line *User's Guide*, located in the audio card group, and Help for detailed information about the Creative Mixer and other utilities.

System Requirements

For the best results from your audio card, you need:

- IBM-compatible PC with an Intel® Pentium or AMD® K Series processor rated at 100 MHz
- 16 MB RAM (Random Access Memory)
- 6 MB of storage space on your hard disk for included applications
- Windows® 95, Windows® 95, or Windows NT 4.0
- SVGA display card that supports 640x480 resolution and a minimum of 256 colors
- CD-ROM drive
- PCI 2.1 compliant expansion slot for the audio card

Latest Information

The README file on the Creative Ensoniq AudioPCI Installation CD contains information and changes not available at the time of printing. Read the file before you begin.

Document Conventions

The following typographical conventions are used throughout this document:

Bold   Bold face type identifies words and phrases that are to be entered exactly as shown. For example:
`SET SOUND=C:\SB16`

Italic   Italic type identifies words and phrases that are to be replaced by you. For example:
`DEVICE=C:\SBCD\DRV\SBIDE.SYS /D:MSCD001 /P:xxx,yy`
In the example, you must supply a value for *xxx,yy*.
Italic in the text emphasizes or identifies a word or phrase that is being defined. In this document, it is also used to identify a button or menu item that you are to select: for example, "Select the *Play* button on the main menu."

ALL CAPS   A word in all capital letters identifies a key you are to press. For example, "Select *Yes* and press ENTER."

The notepad icon indicates information that is of particular importance and should be considered before continuing.

Designates a caution or warning that can help you avoid situations involving risk.

Installing Your Audio Card

What You Need

Most of the items you need for installation are included. The following illustration shows the basic components necessary for a complete installation.

Installing your audio card requires you to perform the following steps:

- Install the audio card
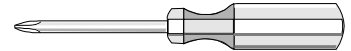- Install the Creative audio software
- Test the installation.

Creative Audio Software
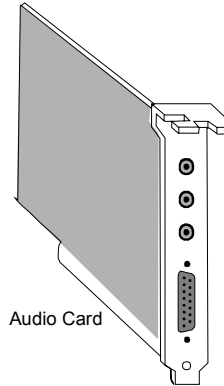
CD Audio Cable

Audio Card

Phillips Screwdriver (not included)

Refer to the colored insert for specific information about the audio card.

Installing the Audio Card

Before you remove the computer cover, touch a grounded metal surface to discharge static electricity.

Remove or disable any existing audio card and its driver from your computer. Refer to the manufacturer's documentation for details.

To install the audio card:

1. Turn off your computer, and disconnect the power cable.
2. Disconnect the monitor and other devices that are connected to the computer.
3. Remove the computer cover.
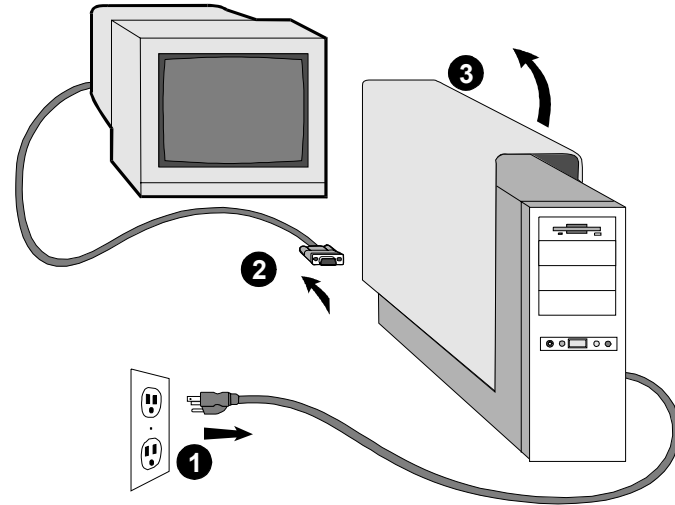
4. Locate a PCI slot to accommodate the audio card.
5. Remove the slot cover from your computer—save the screw to secure the audio card.
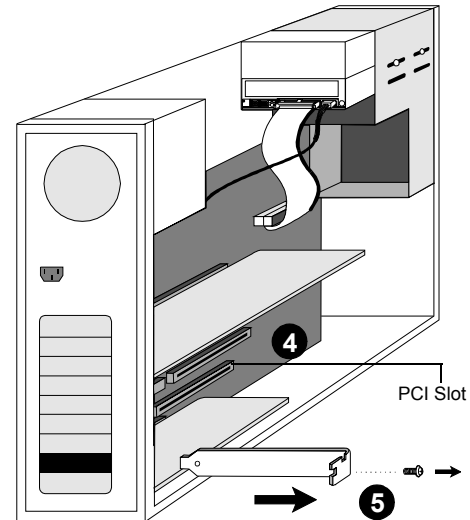
PCI Slot

6. Align the gold-striped tabs on the bottom of the audio card with the PCI slot, and firmly press the card into place until it fits snugly.

7. Use the screw from the slot cover to secure the audio card to the frame of the computer—securing the card assures proper grounding.

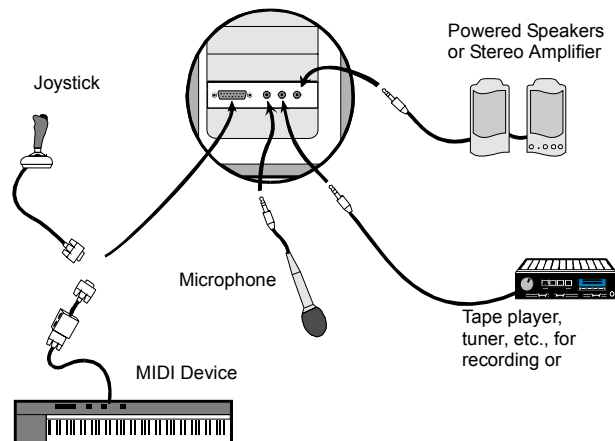8. Connect the CD audio cable from your CD-ROM drive to the audio card CD_IN connector.

CD_IN Connector
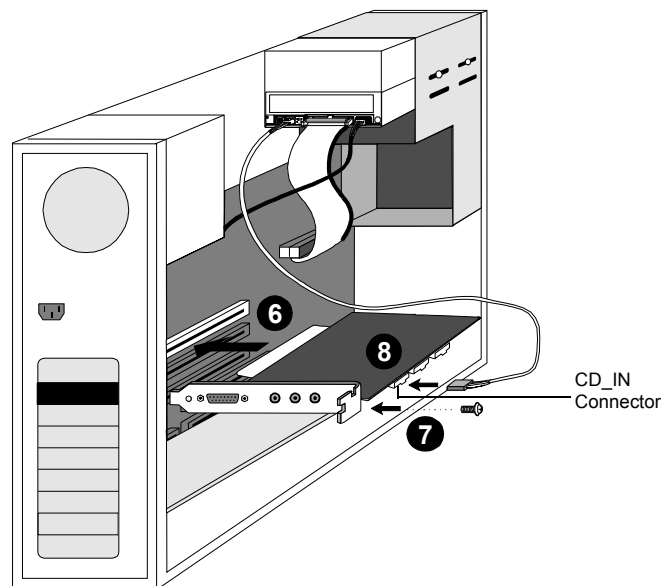
The microphone jack supports 600 ohms (or less) passive microphones.

9. Connect your speakers, headphones, microphone, joystick, MIDI devices, or other devices to the back panel of the audio card.

10. Replace the computer cover.

11. Reconnect the power cable, monitor, and other devices.

MIDI devices require a MIDI adapter cable.

Joystick

Powered Speakers or Stereo Amplifier

Microphone

Tape player, tuner, etc., for recording or

MIDI Device

Installing the Creative Software

The Creative Ensoniq AudioPCI Software CD contains drivers necessary for operation and utilities to make the most of the audio card. The software installation varies according to your computer's operating system. The following installation software is provided:

- Windows 95/98
- Windows NT

Windows 95/98

This manual reflects a software installation in an unmodified version of the Windows 95 operating system. Your installation screens and procedure may vary slightly from what is shown and described. The variations may be caused by other software/hardware installed on your computer, or the version of the Windows 95 operating system.

When you turn on your computer, Windows 95/98 automatically detects the new hardware, and prompts you for the software installation disk. The installation may vary from the instructions below based upon previously installed software and hardware.

To install in Windows 95:

1. Turn on your computer for Windows 95 to automatically detect your new hardware. The New Hardware Found dialog appears.
2. Select the *Driver from disk provided by hardware manufacturer* option, and click OK. The Install From Disk dialog appears.

3. Insert the Creative Ensoniq AudioPCI CD in your CD-ROM drive. Enter the path for your CD-ROM drive and the software. For example, use the Browse button to locate, or type, the

following: **D:\AUDIO\ENGLISH\WIN95DRV\EAPCI95.INF** (**D:** represents your CD-ROM drive). Click OK to install the Windows 95/98 drivers.
4. When prompted, install the gameport/joystick drivers from the installation CD. For example, use the Browse button to locate, or type, the following: **D:\DIRECTX\DIRECTX\DRIVERS\USA.** Click OK to install the gameport/joystick drivers.
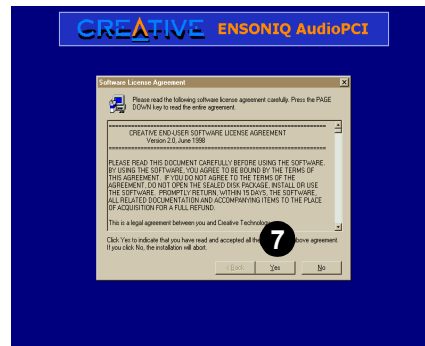5. Restart your computer when prompted.
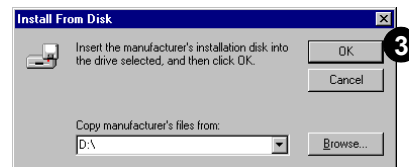
6. If Autorun is enabled and the
    AudioPCI disk is in the drive, the
    Creative Ensoniq AudioPCI screen
    appears and announces that you
    are about to install the drivers and
    software for your Creative Ensoniq
   AudioPCI. Click OK to continue.

7. Next, read the Software License
    Agreement and, if you agree, click
    Yes to continue.

8. The README file that is
    displayed contains recent
    information that may not appear in
    this manual. After you have
   finished reading, click Next to
    continue.
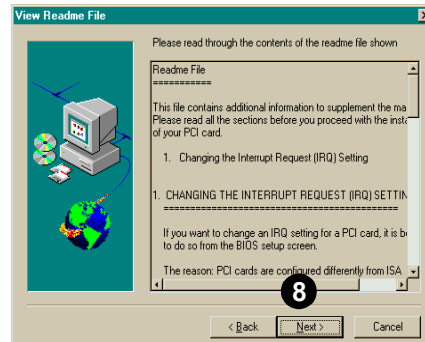
9. The Destination Directory dialog asks you to confirm the location and the name of the directory to which the drivers and software will be copied. When the directory name is correct, click Next to begin the installation.
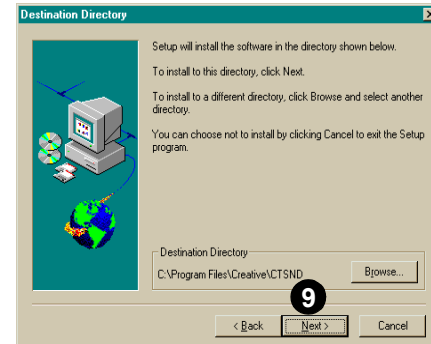
10. The status screen gives a continuous update of the installation progress.

11. When the installation is complete, the Restart Windows dialog asks whether you want to restart Windows now or later. You must restart Windows before the installation and new settings are in effect.
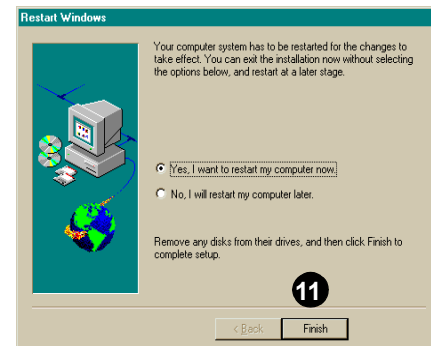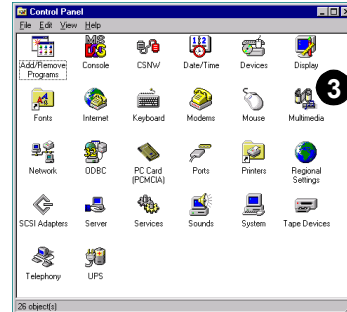
Windows NT

The following instructions describe the Creative Ensoniq AudioPCI installation in Windows NT 4.0.

To install in Windows NT 4.0

1. Start Windows NT 4.0. Log on and establish any network connections.

2. From the Start menu, select Settings and then click on Control Panel.

3. On the Control Panel, double-click the Multimedia icon.


4. On the Audio Devices tab page, select any existing audio devices and then click the Remove button.

   If you remove one or more audio devices, proceed to step 5.

   If no audio devices are present, proceed to step 6 below.

5. Click on OK to close the Multimedia dialog, restart your computer, and return to the Devices tab page.
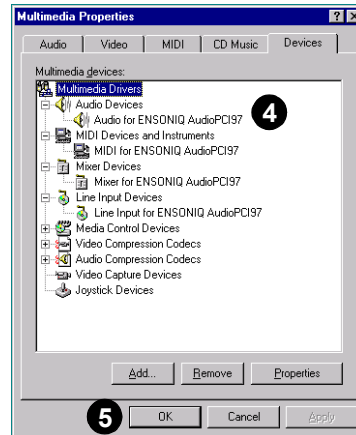
6. Click the Add option, and choose the Unlisted or Updated Driver option. Click the OK button.

7. Insert the AudioPCI Windows NT 4.0 diskette or CD containing the driver. Type or use the Browse option to point to the driver; for example, **D:\AUDIO\ENGLISH\NT4DRV** or **A:**).
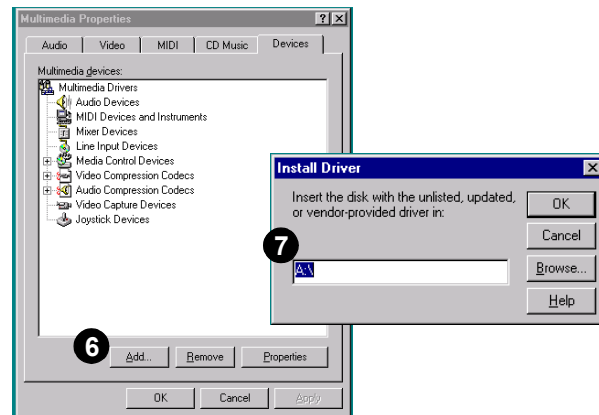
8. Click OK to display the Add Unlisted or Updated Driver dialog. Select "Creative Ensoniq AudioPCI" and click the OK button to continue.

9. If you are updating your existing AudioPCI Windows NT 4.0 drivers, the Driver Exists dialog appears. Select New to install the new drivers.

10. On the Creative Ensoniq AudioPCI Driver dialog, click the OK button to complete the installation.
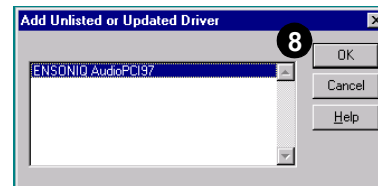
Testing the Installation

To test the installation:

1. Click [Start] in the task bar; select *Programs*, *Accessories*, *Multimedia*, and *Media Player* from the menus. The Windows Media Player appears.
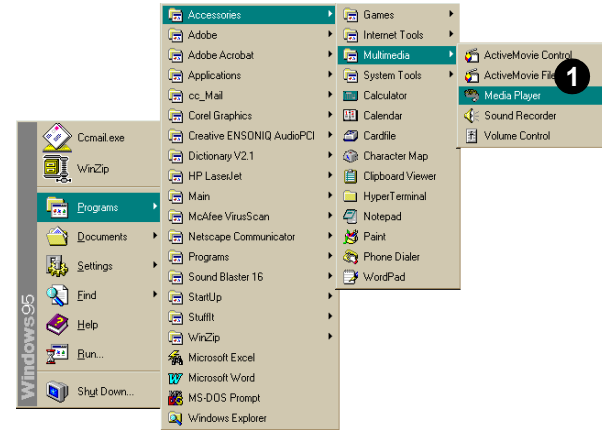
If no sound is heard, see "Troubleshooting" on page 20 for tips.

2. Open a wave file, such as THE MICROSOFT SOUND.WAV, and select the *Play* (▶) button. You should hear the wave file being played.

3. Open a MIDI file, such as CANYON.MID, and select the *Play* (▶) button. You should hear the MIDI file being played.
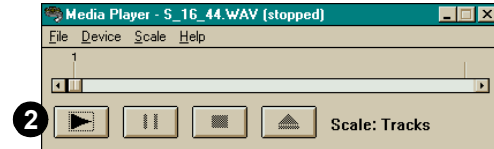
Creative Mixer

The Mixer is installed with the AudioPCI drivers and other software; an icon is added to the Windows Taskbar in the right corner. You may open the Mixer by double-clicking on the icon ![icon] in the Taskbar.

Real-Time Effects

AudioPCI supports the real-time effects:

- *Spatial*, surround sound, is available for the Wave and Synthesizer devices
- *Reverb* is available for the Synthesizer
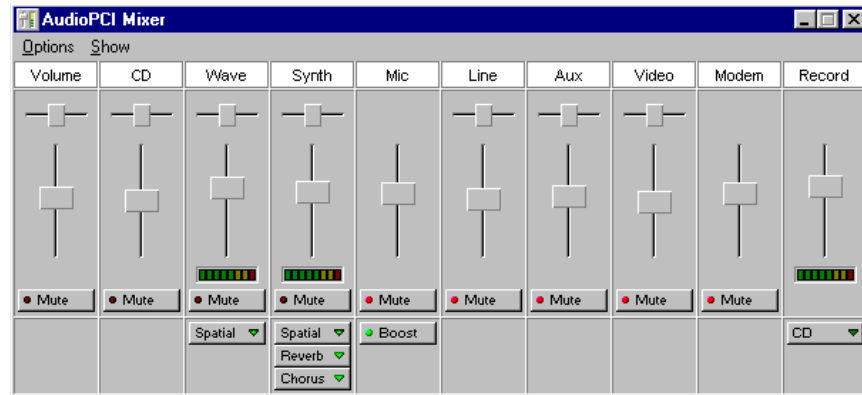- *Chorus* adds depth to music files played back by the Synthesizer

Recording

The audio source available for recording are indicated in the list below the recording volume slider. The playback volume is not affected by changes to the recording volume.

Microphone

Boost and *Mute* are microphone controls available on the Mixer.

- *Boost* adds a 20-dB audio gain to the microphone.
- *Mute* can eliminate feedback when you are using a full-duplex telephone application. When *Mute* is selected, microphone input is heard from speakers (or headphones) attached to the AudioPCI card. If only Mic (microphone) is selected in the recording panel, *Mute* does not affect input.

Options

- *Always on Top* places the Mixer on top of other active windows. This feature allows you to dynamically adjust the settings for sound currently being input/output.
- *Voice Control Only* limits the Mixer display to only the main volume control. You can select the panels to be included in the display from the list on the Options menu.
- *Save Options Now/On Exit* allow you to use the Save command to suit your needs.

Advanced Configurations

Resolving Hardware Conflicts

In the Device Manager, a [+] represents an expandable list of items. A [-] represents an expanded list. A circled exclamation mark denotes a conflict.

Hardware conflicts occur when two or more devices contend for the same resources. Conflicts between your audio card and another device may occur regarding the I/O address, IRQ line, or DMA channel.

To resolve hardware conflicts:

1. Right-click the *My Computer* icon on your desktop, and select *Properties*. The System Properties dialog appears.

2. Click the *Device Manager* tab.
3. Double-click *Sound, video, game controllers*. A list of multimedia devices appears.
4. Select your audio card, for example, Creative Ensoniq AudioPCI.
5. Choose the *Properties* button.
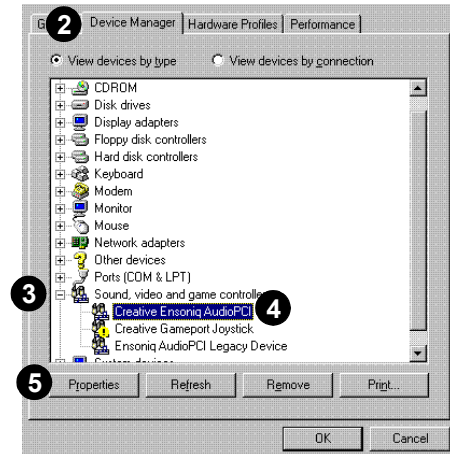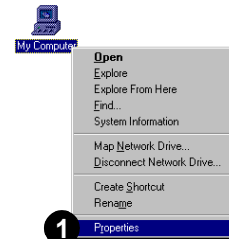
6. Click the *Resources* tab.

7. Uncheck the *Use automatic settings* option.

8. Change "Settings based on:" to *Basic Configuration 0009*.

   Determine if there is a conflict by reviewing the "Conflicting device list."

9. If a conflict remains, try other Basic Configuration choices before changing the settings yourself.

10. Select OK to close each of the properties windows, and restart your computer.
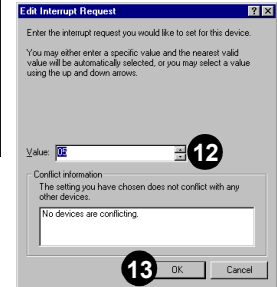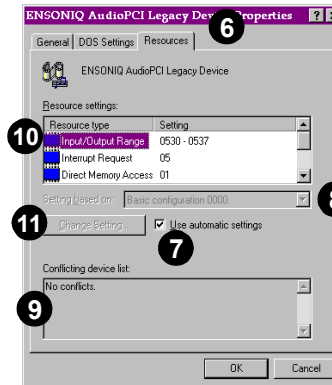
Uninstalling the Software

Close all audio card applications before running the uninstall procedure. If a card's application is running during the uninstall procedure, that application is not uninstalled.

The Windows 95 Uninstall utility allows you to remove applications and to re-install them to correct problems, change configurations, or make upgrades.

To uninstall the software:

1. Click **Start** on the taskbar, and select *Settings* from the Start menu.

2. Select *Control Panel.* The Control Panel group appears.

3. Double-click the *Add/Remove Program* icon. The Add/Remove Programs Properties dialog appears.

4. Select the software to uninstall from the list.

5. Select the *Add/Remove* button.

6. Follow the instructions on-screen to complete the uninstall procedure.
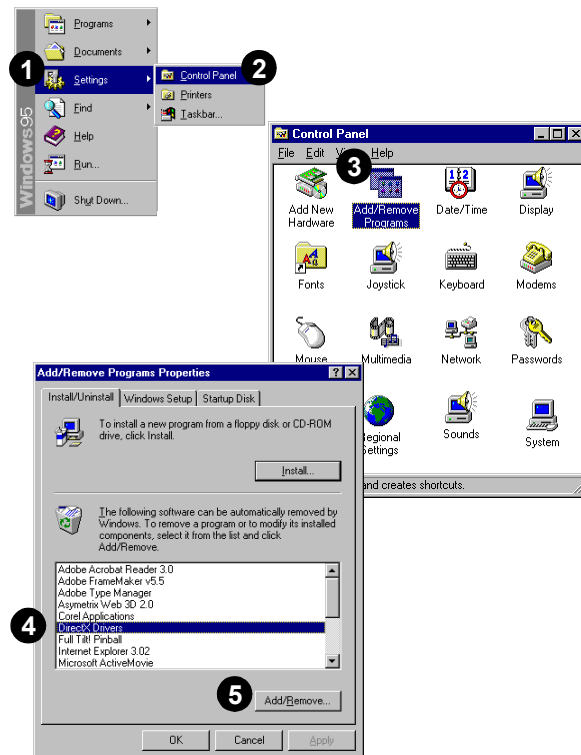
Connecting a Joystick

The joystick port on the audio card is a standard PC game control adapter or game I/O port. You can connect most analog joysticks with a 15-pin D-sub connector directly to the port; it works with any application that is compatible with standard PC joysticks.

If you need to run two joysticks, a Y-cable is available from Creative Labs' Customer Service (Y-cables from other sources may not work). Some sophisticated joysticks may require the MIDI adapter or Y-cable to work with the audio card.

Connecting a MIDI Device

The audio card supports the following MIDI standards:
- MPU-401 UART
- Sound Blaster MIDI

To connect a MIDI device to the audio card, you need a MIDI cable adapter. The MIDI cable adapter allows you to attach both a MIDI instrument and a joystick at the same time. Contact your local dealer or Creative Labs' Customer Service for more information.

Another manufacturer's MIDI adapter cable may not work properly.

Troubleshooting

This chapter provides solutions for problems you may encounter during installation or normal use of your audio card.

No sound is heard from audio (music) CDs

Various conditions may be responsible. To troubleshoot, please check the following:

- Creative Mixer or Microsoft Volume Control mute options and volume sliders. (Refer to the on-line Creative Ensoniq *User's Guide* or Help, or Windows on-line help for detailed information.)
- Connect headphones to the stereo phone jack on your CD-ROM drive's front panel, and adjust the volume control settings on the drive. If there is sound from your headphones, check the CD audio cable connection from the CD-ROM drive to the audio card.
- Ensure the speakers are properly connected to the audio card's output connector. (See the colored insert for detailed connection information.)

## Joystick port is not working

To troubleshoot, check the following:

- The audio card joystick port conflicts with another joystick port in the system. Disable the audio card joystick port, and use the system's joystick port. To disable the joystick port, see "Resolving Hardware Conflicts" on page 11.
- The Windows joystick drivers, MSJSTICK.DRV and VJOYD.VXD, may not be installed. Uninstall the joystick, then reinstall to load the drivers. The drivers are located on the Creative Ensoniq Installation Disk in the **\DIRECTX\DIRECTX\DRIVERS\USA** directory. See Windows on-line help for detailed information.

Determining your Windows version

To determine your Windows 95 version number:

1. Right-click the *My Computer* icon, and select *Properties*. The System Properties dialog appears.
2. On the *General* tab, note your Windows 95 version number. Possible version numbers are:

   q 4.00.950

   q 4.00.950A

   q 4.00.950B
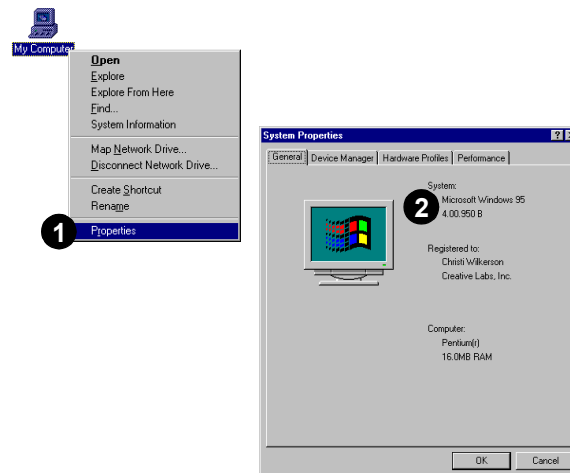
Computer hangs or restarts during installation

A hardware conflict may cause the computer to hang or restart during the installation procedure. Check the following to resolve the conflict:

- A hardware conflict with another device in your system (see "Resolving Hardware Conflicts" on page 11).
- Previously installed audio card hardware or software needs to be removed (see "Uninstalling the Software" on page 13).
- The audio card is not seated in the slot properly (see "Installing the Audio Card" on page 2).
- PCI bus mastering devices may be interfering with the operation of the audio card. Temporarily remove non-essential PCI bus mastering devices.

Audio card is not automatically detected

To manually configure your audio card for Windows 95/98:

1. Click ![Start] on the taskbar, and select *Settings* from the Start menu.
2. Select *Control Panel.* The Control Panel group appears.
3. Double-click the *Add New Hardware* icon. The Add New Hardware Wizard dialog appears.
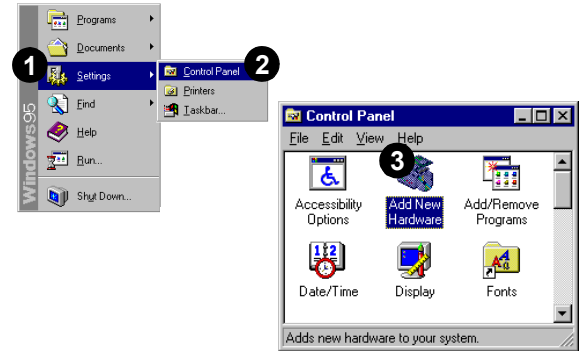
4. Select *Next* to continue.

5. Choose *Yes* to have Windows search for new hardware, then select *Next*.

6. Select *Next* to continue.

7. Select *Finish*, and follow the prompts to complete the new hardware installation.

CD does not automatically run when you insert it in the drive

To enable the "Auto insert notification" feature:

1. Right-click the *My Computer* icon on your desktop, and select *Properties*. The System Properties dialog appears.
2. Click the *Device Manager* tab. A list of devices appears.
3. Double-click *CD-ROM*, and select your CD-ROM drive.
4. Choose the *Properties* button. The CD-ROM drive properties dialog appears.

5. Choose the *Settings* tab.
6. Click the "Auto insert notification" option to enable.
7. Select OK until all Properties dialogs are closed, and restart Windows for the changes to take effect.
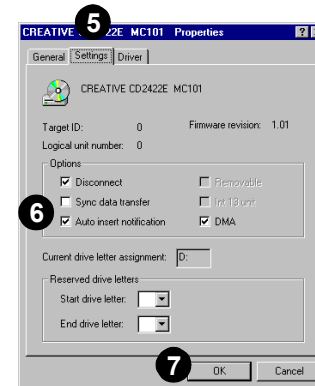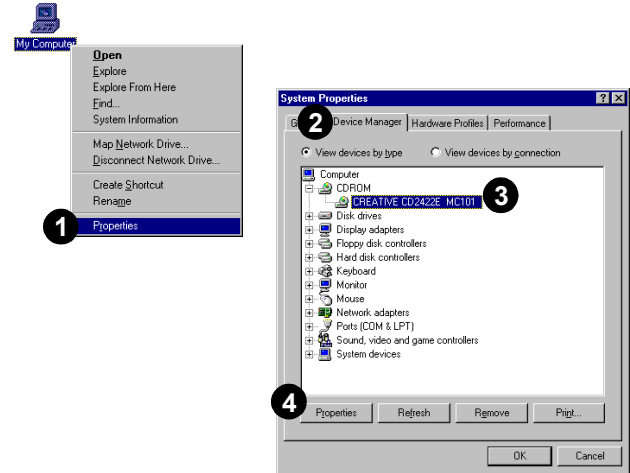
No sound is heard from speakers

To troubleshoot, please verify the following:

- Check the Creative Mixer or Microsoft Volume Control mute options and volume sliders. (Refer to the on-line Creative *User's Guide* or Help, or Windows on-line help for detailed information.)
- Ensure the speakers are properly connected to the audio card's output connector. (See the colored insert for detailed connection information.)
- Check the volume control and power connection of the speakers, if they are amplified. (Refer to the speakers documentation for detailed information.)
- Ensure a hardware conflict does not exist between your audio card and another device in your system. (Refer to "Resolving Hardware Conflicts" on page 11, or the Windows on-line help for detailed information.)
- PCI bus mastering devices may be interfering with the operation of the audio card. Temporarily remove non-essential PCI bus mastering devices. If the device is a display card, upgrade the display card drivers, or set the card to the default Windows 95/98 VGA mode.

If you are experiencing no sound only during audio CD playback, see "No sound is heard from audio (music) CDs" on page 15.

Static sounds are heard in wave files

Ensure the static sounds are heard in all wave files. If the difficulty occurs only with certain games, refer to the software manufacturer's documentation. To troubleshoot static sounds heard in all wave files:

- Try different resource settings for the audio card, or set the card to use low DMA (see "Resolving Hardware Conflicts" on page 11).
- Move the audio card to another PCI slot. Feedback from the power supply or another device may be responsible.