

PCI GALAXY AUDIO SOUND CARD

User's Manual

Version 1.0

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Chapter



Setting up Your Sound Card

Thank you for buying the Aztech PCI Galaxy Audio Sound Card.

With its many high-fidelity features including Q3D™ Positional Sound, 128-Voice Software Wavetable Synthesis, PCI Bus Interface, AC'97 Architectural Design, Microsoft® PC'98 Advanced Audio and Sound Blaster® Pro compliance, the Aztech PCI Galaxy Audio Sound Card provides the ultimate PC audio performance.

In addition, your sound card package comes with a comprehensive set of software applications that allows you to add the impact of sound to virtually every computing tasks. From adding voice annotations to your documents to creating multimedia applications, your sound card and its bundled software will greatly enhance your office productivity and home entertainment.

1.1 Minimum System Requirements

- PC-based computer with Pentium® 166 MHz with MMX® technology processor (Pentium® 200 MHz with MMX® technology processor or better is highly recommended).
- PCI Bus slot.
- 16MB RAM (32MB RAM and above for computers Windows NT®).
- 20MB hard disk space (system files and audio drivers only).
- CD-ROM drive.
- Amplified/active speakers.
- Windows® 95/98 or Windows NT® 4.0.

1.2 Safety Precaution

- Do not remove your sound card from its protective bag until you are ready to install it.
- Always try to hold your sound card by its edges. Avoid touching any electronic components on your sound card.
- Static electricity can cause permanent damage to your sound card. To prevent such a damage, you must ground yourself while installing the card. You can do this in either of two ways :
 - » Use a grounding strap, which is a coiled wire with a clip at one end and an elastic strap at the other. Wear the strap around your wrist and attach the clip to any non-painted metal surface of the computer's chassis.
 - » If you do not have a grounding strap, touch any non-painted surface of the computer's chassis before you begin installation, and again every minute or so until the installation is completed.

1.3 Installation Notes

- Computers come in different shapes and sizes. Therefore, the installation procedures in this chapter apply generally and you should compare the illustrations here with your computer before you start the sound card installation.
- A Philips-type Screwdriver is required for the sound card installation.
- Your computer's documentation should come in handy during the sound card installation. Have it ready by your side when you start the sound card installation.
- If you have an existing sound card (that is non-plug-and-play-based) installed in your computer, you must first un-install its audio drivers before you remove the sound card. Refer to your existing sound card documentation for more details on this.

If your existing sound card is plug-and-play-based, then you can safely proceed to install your new sound card. It is recommended that any existing sound card be removed before installing your new sound card.

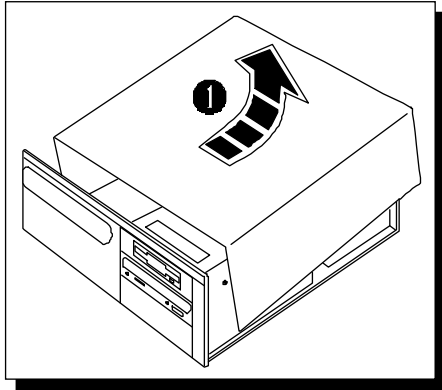
1.4 Installing the Sound Card



You need to remove any existing sound card installed in your computer. Note that if the sound card is non-plug-and-play-based, you need to un-install its audio drivers before you remove it. Check your existing sound card documentation for details on this.

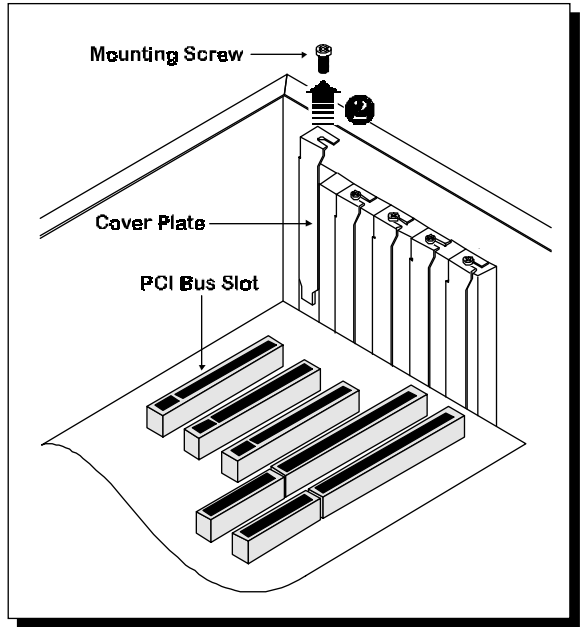
Remember to switch off your computer and any connected devices before proceeding with the installation of your sound card.

1. Remove your computer's chassis cover and set it aside, somewhere out of your way.

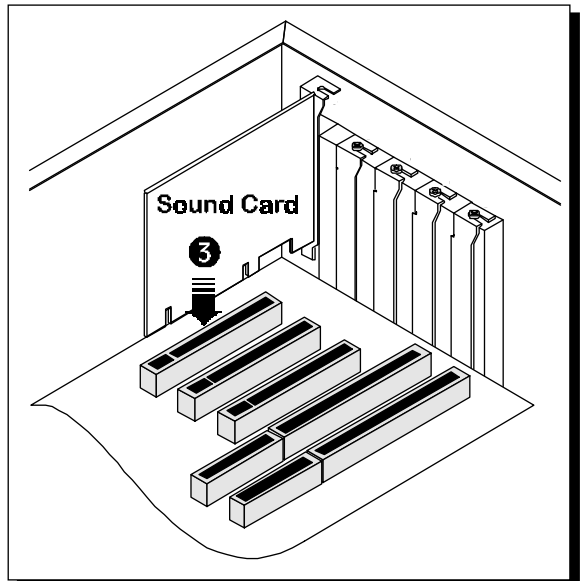


You need to remove any existing sound card installed in your computer.

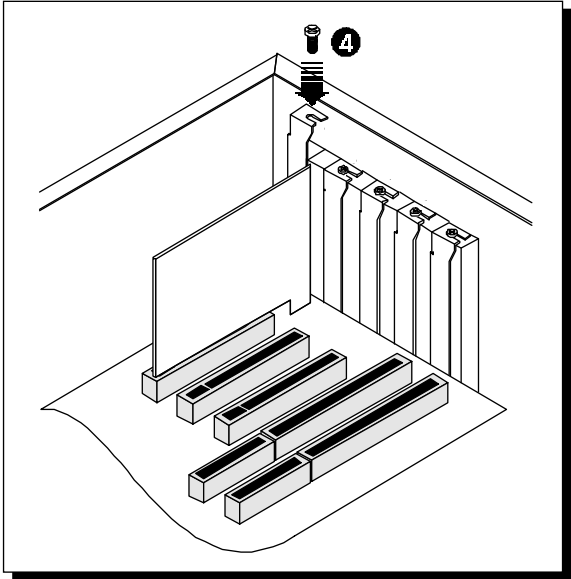
2. Select an available PCI Bus slot and if necessary, remove its cover plate. Keep the mounting screw to secure your sound card later.



3. Align your sound card with the selected PCI Bus slot and firmly push it into the slot. If the sound card cannot be slide in, do not force it. Make sure the sound card is lined up properly and try again.



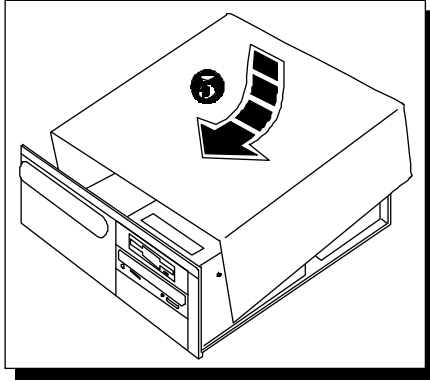
- Secure your sound card to the computer chassis with a mounting screw.



You may wish to connect your CD-ROM audio cable to the sound card (this cable should be supplied with the CD-ROM drive). However, as CD-ROM audio cables are not well standardized, you need to make sure that your CD-ROM audio cable is suited to the sound card.

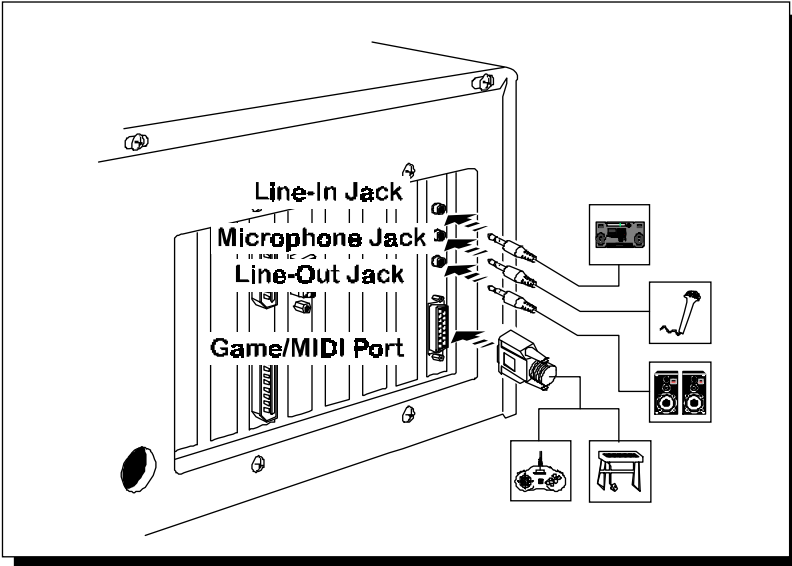
The location of the CD Audio connector on the sound card and its pin-out information can be found in Appendix C of this user's manual.

5. Replace your computer's chassis cover.



1.5 Connecting the Sound Card

You may connect a variety of audio equipment to your sound card as shown in the illustration below:



Chapter



Installing Drivers and Utilities

This chapter contains information on how to install your sound card drivers, DirectX™ Version 5.2a drivers, Yamaha software wavetable synthesizer drivers, Q3D™ demo program, Clef3 and the browser Internet Explorer.



You can always re-install the drivers by running the **D:\AZTSETUP.EXE** file (assuming your CD-ROM drive is D. If not, substitute the drive letter accordingly) when using Windows® 95/98.

2.1 If you are using Windows® 95

1. Turn on your computer to start Windows® 95.



Windows® 95 will detect the newly-installed sound card and an **Update Device Driver Wizard** window will appear.



*For earlier versions of Windows® 95, a **New Hardware Found** window will appear instead. Please refer to Section 2.2 for instructions on installing the sound card drivers.*

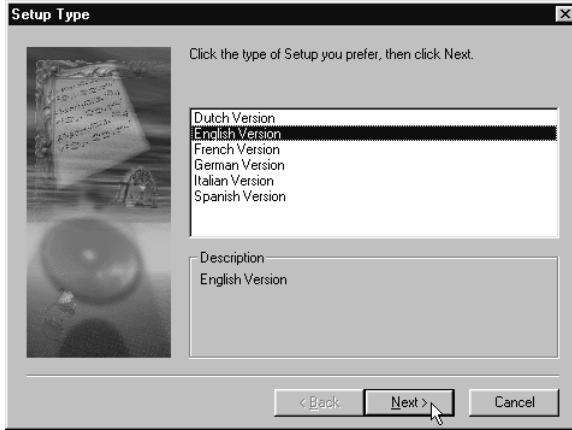
- 2. Place the **Multimedia Studio CD** in the CD-ROM drive and click the **Next** button.

Windows® 95 will now prompt you that the sound card drivers have been located.



Click the **Finish** button to continue with the installation.

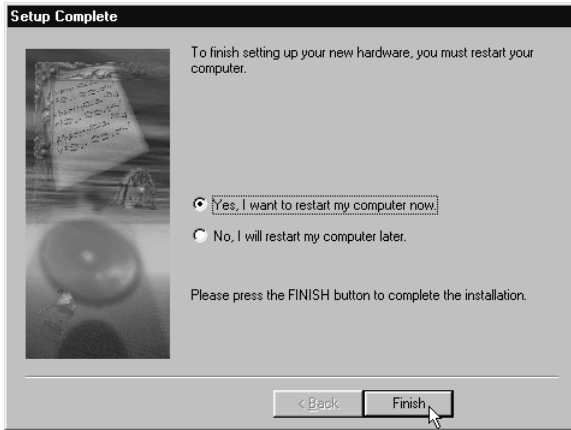
3. A **Setup Type** window will appear. Choose the language preferred and click **Next** to continue.



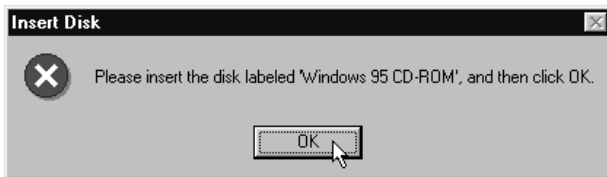
4. A **Multimedia Studio CD Installation** window will appear. Select the components you want to install and click **Next**.



- 5. If you had chosen to install **Clef3**, a **Clef Studio** program group containing the icons will be created during the installation. You will be prompted to restart your system when the installation of drivers is completed.
 - (i) Select the **Yes, I want to restart my computer now** option and click the **Finish** button.



- 6. After restarting, Windows® 95 will detect the sound card again. You may also be prompted for the **Windows 95 CD**. This usually happens if you did not install any Windows® 95 multimedia applications previously. If this occurs, follow the instructions below:
 - (i) Place the **Windows 95 CD** in the CD-ROM drive and then click the **OK** button.



- (ii) Specify where the required files can be found on the Windows 95 CD and click **OK**.

7. Restart your system when prompted. After restarting, if you had chosen to install Yamaha Soft Synthesizer, its installation will now commence. Follow all on-screen instructions to complete the installation of the multimedia software.



The serial number required during registration is: G5AAS3NC4013

After the software has been installed, a **Yamaha Soft Synthesizer S-YXG50** program group will be created.

2.2 If you are using Earlier Versions of Windows® 95

If you are using an earlier version of Windows® 95, follow the instructions below to install your sound card drivers:

1. Turn on your computer to start Windows® 95.

Windows® 95 will detect the newly-installed sound card and a **New Hardware Found** window will appear.

2. Place the **Multimedia Studio CD** in the CD-ROM drive and click the **OK** button.

The **Install From Disk** window will appear.

3. Type "D:\\" in the text box and then click **OK** (Assuming your CD-ROM drive is D. If not, substitute the drive letter accordingly).
4. Continue with the installation of the drivers by referring to Section 2.1 (step 3 onwards) of this manual.

2.3 If you are using Windows® 98

1. Turn on your computer to start Windows® 98.

Windows® 98 will detect the newly-installed sound card and an **Add New Hardware Wizard** window will appear. Click **Next** to install the drivers.

2. Select the **Search for the best driver for your device (Recommended)** option and click **Next**.
3. Place the **Multimedia Studio CD** in the CD-ROM drive and select the **CD-ROM drive** option.

Click the **Next** button to continue.

4. Windows® 98 will now prompt you that the sound card drivers have been located.

Click the **Next** button to install the drivers.

5. Continue with the installation of the drivers by referring to Section 2.1 (step 3 onwards) of this manual.

2.4 If you are using Windows NT® 4.0

1. Start Windows NT® 4.0.
2. Place the **Multimedia Studio CD** in the CD-ROM drive.
3. From Windows NT® taskbar, click the **Start** button.
4. Select **Settings** and click on **Control Panel**.
5. Double-click the **Multimedia** icon.

6. Click the **Devices** tab.
7. Select the **Audio Devices** option and click the **Add** button.
8. Select the **Unlisted or Updated Driver** option. Click **OK** to continue.
9. Direct Windows NT® to the **DRIVERS\NT40** directory on the CD and select the preferred language directory where the audio drivers can be found (this would be “D:\DRIVERS\NT40”, assuming your CD-ROM drive letter is D).
10. Select the **PCI Audio Device** option and click **OK**.
11. A **Wavetable Sample Setup** screen will appear. Click **OK** to proceed.
12. Do not restart your system when prompted.
13. Repeat steps 7-8 to install **PCI Audio Gameport**.
14. Choose **Restart Now** when prompted.

2.5 Installing Yamaha Software Synthesizer S-YXG50

1. Start Windows® 95/98 or Windows NT® 4.0.
2. Place the **Multimedia Studio CD** in the CD-ROM drive.
3. From the Windows taskbar, click the **Start** button, then **Run**.
4. Type “D:\SoftSynt\Win95†\<Language>\Setup.exe” in the text box, where <Language> =
 - English*
 - Dutch*
 - German*
 - French*
 - Italian*
 - Spanish*

† Substitute with “Nt40” if you are using Windows NT® 4.0.

(Assuming your CD-ROM drive is D, if not, substitute the drive letter accordingly). Click **OK**.

5. Follow all on-screen instructions to complete the installation of the multimedia software.



The serial number required during registration is: G5AAS3NC4013

After the software has been installed, a **Yamaha Soft Synthesizer S-YXG50** program group will be created.

2.6 Installing the Q3D™ Demo Program

1. Start Windows® 95/98.
2. Place the **Multimedia Studio CD** in the CD-ROM drive.
3. From the Windows taskbar, click the **Start** button, then **Run**.
4. Type "**D:\Apps\Qsound\Q3d_demo.exe**" in the text box (Assuming your CD-ROM drive is D, if not, substitute the drive letter accordingly) and click **OK**.
5. Follow all on-screen instructions to complete the installation of the multimedia software.

After the software has been installed, a **Q3D Demo** program group will be created.

2.7 Installing the Clef3 Multimedia Software

1. Start Windows® 95/98 or Windows NT® 4.0.
2. Place the **Multimedia Studio CD** in the CD-ROM drive.
3. From the Windows taskbar, click the **Start** button, then **Run**.
4. Type “**D:\Clef3\Setup.exe**” in the text box (Assuming your CD-ROM drive is D, if not, substitute the drive letter accordingly) and click **OK**.
5. Follow all on-screen instructions to complete the installation of the multimedia software.

After the software has been installed, a **Clef3** program group will be created.

6. The multimedia application comes with on-line Help which requires the use of a browser application (eg IE 3.x/4.0 or Netscape 3.x/4.0) to view.

2.8 Installing Internet Explorer 4.0 (IE4)

1. Start Windows® 95/98.
2. Place the **Multimedia Studio CD** in the CD-ROM drive.
3. From the Windows taskbar, click the **Start** button, then **Run**.
4. Type “**D:\IE40\<Language>\Setup.exe**” in the text box, where
 <Language> = *English*
Dutch
German
French
Italian
Spanish



IE4 will detect the language of the Operating System before installation. Selecting a different language from your Operating System would result in unsuccessful installation of the application.

(Assuming your CD-ROM drive is D, if not, substitute the drive letter accordingly). Click **OK**.

5. Follow all on-screen instructions to complete the installation of the browser.



Appendix



Frequently Asked Questions

You may encounter some problems or doubts while installing or using your sound card. This chapter highlights some of the more common issues concerning your sound card and their possible solutions. Reviewing this chapter can help you solve many problems and often eliminate the need for telephone assistance.

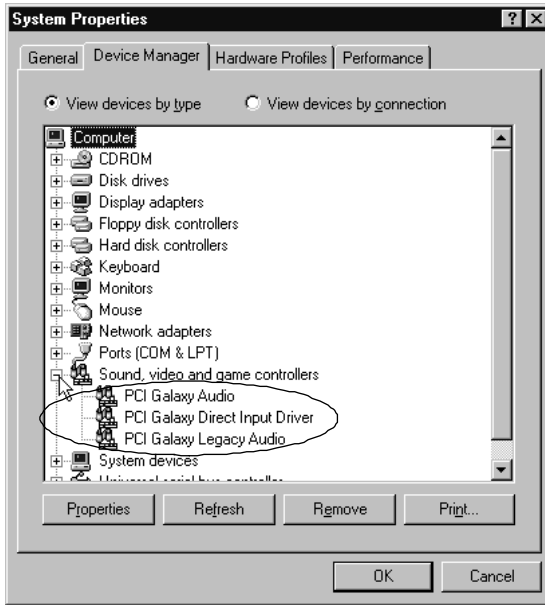


My system does not detect the sound card when I boot up for the first time. What's wrong?



Make sure your sound card is fully inserted into the PCI Bus slot. However, if the sound card has been properly installed, do the following:

1. From the Windows® 95 task bar, click the **Start** button.
2. Select **Settings** and then click on **Control Panel**.
3. Double-click the **System** icon.
4. Click the **Device Manager** tab.



5. Check whether there is any yellow exclamation mark (error) on each of the **PCI Galaxy Audio** devices. If yes, remove all devices and re-install the sound card drivers. Refer to Chapter 2 of this user's manual for details on installing the audio drivers.



There is a yellow exclamation mark (error) for the “PCI Galaxy Legacy Audio” device.



Certain motherboards with USB capability may sometimes encounter this problem. The USB port(s), when enabled, sometimes contends with the PCI Galaxy Legacy Audio device for the same IRQ resource resulting in a conflict.

The PCI Galaxy Legacy Audio device typically uses IRQ 5.

Depending on the type of motherboard you have, there may be 2 possible ways to solve this problem:

1. Reserve IRQ 5 for ISA slots (configurable in the BIOS).
2. Disable COM Port 2 (configurable in the BIOS).



After installation of the drivers, there is an error message about unloading the EMM386.EXE. What can I do?



On some motherboards, there might be a conflict between the DOS drivers and EMM386.EXE . Therefore, it is recommended that the EMM386.EXE line be remarked or removed from the CONFIG.SYS file that is located on C:\, for example, to remark a line, you can do the following:

```
REM      C:\WINDOWS\EMM386.EXE
```



I have installed the sound card drivers, but there is still no sound. What could be wrong?



There are a variety of possible causes. However, you can check the following:

- i) Have you connected a pair of active speakers or headset to the “Line-Out” jack? Make sure your speakers are turned on.
- ii) Is the volume playback level in the sound mixer at least half-way up?
- iii) The drivers may not have been properly installed. Un-install the drivers (refer to the following FAQ) and then run the “AZTSETUP.EXE” file from the **Multimedia Studio CD** to re-install the drivers.



How do I un-install my sound card audio drivers in Windows® 95/98?



1. From the Windows® 95/98 task bar, click the **Start** button.
2. Select **Settings** and then click on **Control Panel**.
3. Double-click the **Add/Remove Programs** icon.
4. Click the **PCI Galaxy Audio Uninstallation** option and click the **Add/Remove...** button.
5. Click the **OK** button.



When I tried to play games, there is an error message about the card sharing interrupt with other devices. What can I do?



The following solutions could be helpful:

- i) Reserve IRQ5 to PCI Galaxy Audio from the BIOS. Please refer to your motherboard manual for details.
- ii) Remove your sound card from its present PCI slot and plug it into another PCI slot. Boot up and try again.



I get a warning "You cannot use an IRQ greater than 9" when I setup some games. What should I do?



Please ignore the message and press **ESC** to continue. WaveTSR will relocate the IRQ and the game will run normally.



Some of my games do not seem to work with the Q3D™ Positional Sound feature.



Not all games, especially older ones, support the Q3D™ Positional Sound feature. However, Q3D™ Positional Sound is becoming a popular standard among game developers.

Appendix



Technical Specifications

Sound Standards Compatibility

- Sound Blaster™ 2.0 and Sound Blaster™ Pro II compliant
- AdLib compliant
- General MIDI compliant
- Roland MPU401 UART compliant
- PCI Bus Specification Rev 2.1 compliant
- PCI Bus Power Management Interface Specification Rev 1.0 compliant
- Audio Codec '97 compliant

Sound Standards Features

- Supports Microsoft DirectSound 3D Acceleration via PCI-bus
- High quality Sample Rate Converter
- Supports simultaneous full-duplex 16-bit record/playback at independent sampling rate
- Selectable sampling rate of up to 48kHz

- High Quality Codec
- Supports 64-voice hardware wavetable
- Virtual FM™ real time FM-to-wavetable conversion
- Supports Soft3D positional audio from QSound®
- Selectable 1,1.5, 2 or 6 MB General MIDI/General Sound Sample library
- Virtual GS™ gives General MIDI/GS command interpretation for wavetable & effect synthesis

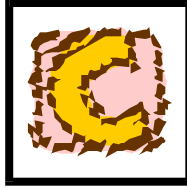
System Audio Sources

- Mono Microphone Audio
- Stereo Line-in Audio
- Stereo CD Audio
- Stereo Auxiliary Audio
- Mono Modem Audio
- Stereo FM Synthesized Music/Wavetable Music
- Stereo (PCM) Digital audio
- Stereo Wavetable Upgrade header

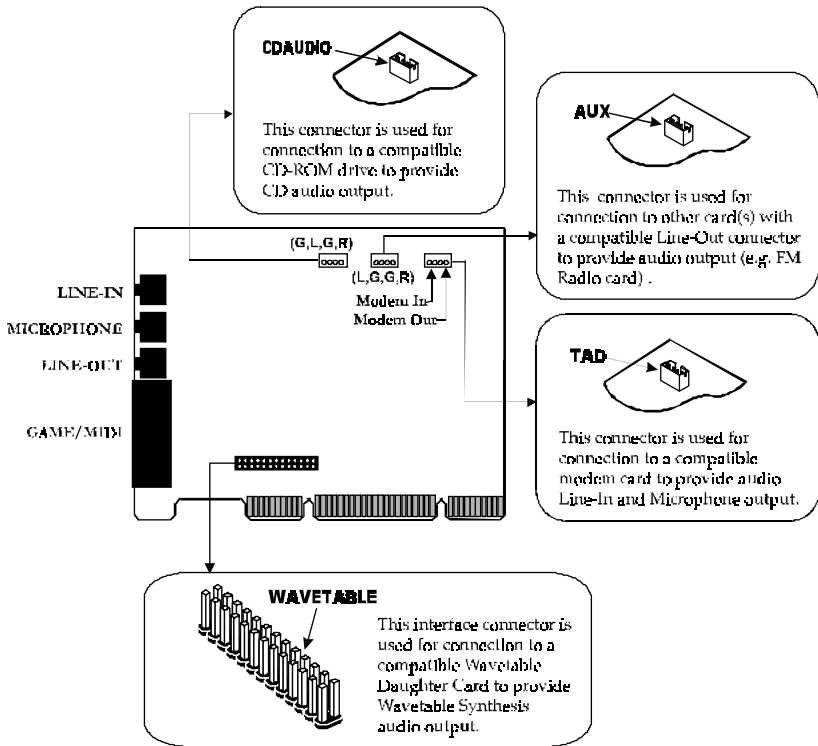


The product specifications herein are subject to change without prior notifications.

Appendix



Sound Card Layout



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