



hp pavilion home pc



i n v e n t

SoundBlaster Live!
5.1 Audio Card

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Table of Contents

Introduction..... 1

System Requirements 2

Federal Communications Commission Statement..... 3

Installation5

Installing the Audio Card 5

 What You Need 6

 To Install the Audio Card.....7

Installing the Software 10

Using Your Audio Card 11

Audio Connectors 11

 Analog/Digital Out..... 12

 Line In..... 12

 Microphone In..... 12

 Line Out..... 12

 Rear Out..... 13

 MIDI/Joystick 13

 Telephone Answering Device..... 13

 CD Audio 13

 AUX In 14

 CD SPDIF..... 14

 Audio Extension 14

Connecting Speaker Systems 15

 Analog Speakers 15

 Digital Speakers 15

 Enabling Digital Sound..... 16

 Selecting Speaker Setup Option 17

Getting More Information 19

 SoundBlaster Live! User's Guide 19

 SoundBlaster Live! Technical Support..... 20

Introduction

Thank you for purchasing this SoundBlaster® Live!™ 5.1 Sound Card from Hewlett-Packard.

The audio card kit contains:

- These instructions.
- The SoundBlaster Live! audio card.
- The driver installation CD with software that is compatible with the Microsoft® Windows® Millennium Edition (Me) and Windows XP operating systems.

Note: *This audio card can be installed only in motherboards with a PCI add-in card slot. All HP Pavilions have PCI slots.*

The SoundBlaster Live! audio card and software provides multidimensional sound and textured acoustical environments for realistic three-dimensional (3D) sound. The audio card delivers sound at the highest fidelity and with absolute clarity. Using it with four or five speakers gives you realistic 3D surround sound in supported games, movies, CDs, MP3 music, and Internet entertainment.

System Requirements

To use the SoundBlaster Live! audio card and the included software programs, your computer requires:

- Genuine Intel® Pentium® class processor:
166 MHz for Windows Me;
233 MHz (minimum) to 300 MHz
(recommended) for Windows XP

Or

- AMD K6 200 MHz for Windows Me;
AMD K6 233 MHz (minimum) to 300 MHz
(recommended) for Windows XP
- Intel, AMD, or 100 percent compatible
motherboard chipset

- Windows Me or Windows XP operating
system
- 16 MB RAM (minimum) to 32 MB RAM
(recommended) for Windows Me, or
64 MB RAM (minimum) to 128 MB RAM
(recommended) for Windows XP
- 80 MB of free hard disk space
- Open PCI compliant slot
- CD-ROM drive for program installation

During installation, SoundBlaster Live! estimates the required hard disk space.

Federal Communications Commission Statement

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.



Warning: This equipment has been tested and found to comply with the limits for a Class B 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 manufacturer's instructions, may cause harmful interference to radio communications. However, there is no guarantee 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 correct the interference by one or more of the following measures:

- **Reorient or relocate the receiving antenna.**
- **Increase the separation between the equipment and the receiver.**
- **Connect the equipment into an outlet that is on a circuit different from the receiver.**
- **Consult the dealer or an experienced radio/TV technician for help.**



Warning: The use of shielded cables for connection of the monitor to the audio card is required to assure compliance with FCC regulations. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Installation

Installing the Audio Card

Before beginning, read and follow all safety information and warnings provided in the *Upgrading and Servicing the PC* guide included with your HP Pavilion home PC.

To install the SoundBlaster Live! audio card, refer to “Installing Add-In Cards” in the *Upgrading and Servicing the PC* guide.



Warning: *Electrostatic discharge (ESD) can damage disk drives, add-in cards, and other components. If an ESD station is not available, wear a wrist strap attached to a metal part of the computer. Place cards on a conductive foam pad or inside the card wrapper, if possible, but never on the card wrapper.*



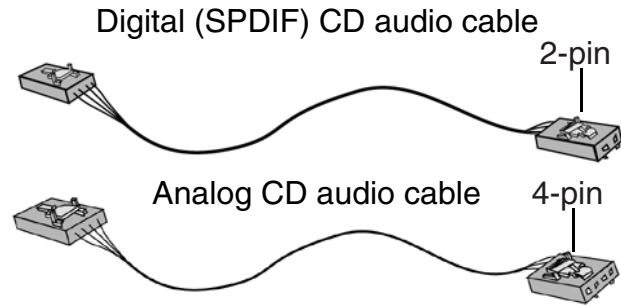
Warning: *The HP Pavilion is heavy; be sure to use ergonomically correct lifting procedures when moving the computer.*

Note: *If your PC has a motherboard that contains a combination modem/audio card, the sound may not work properly with the SoundBlaster Live! audio card also installed. If you remove this modem/audio card, you will need a new modem to use the SoundBlaster Live! audio card.*

What You Need

- SoundBlaster Live! audio card
- Phillips screwdriver
- Digital (2-pin) and/or analog (4-pin) CD audio cable(s)

If you have one or more CD-ROM or DVD-ROM drives, these cables may be included with your PC. If not, you can purchase them at a local retailer. You need one cable for each CD-ROM or DVD-ROM drive included with your HP Pavilion.



To Install the Audio Card

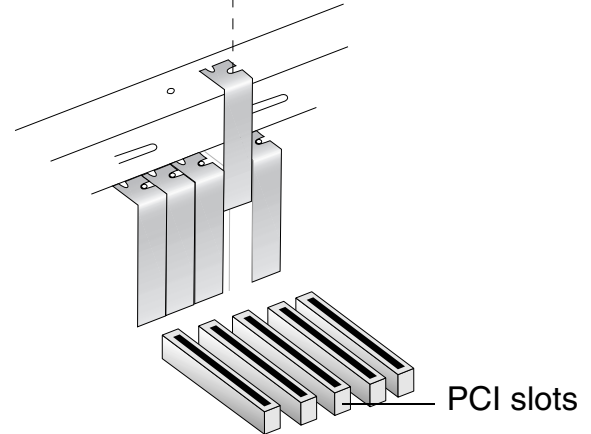
- 1 Turn off the computer and all peripherals.
- 2 Disconnect the power cord and all other attached cables from the computer.



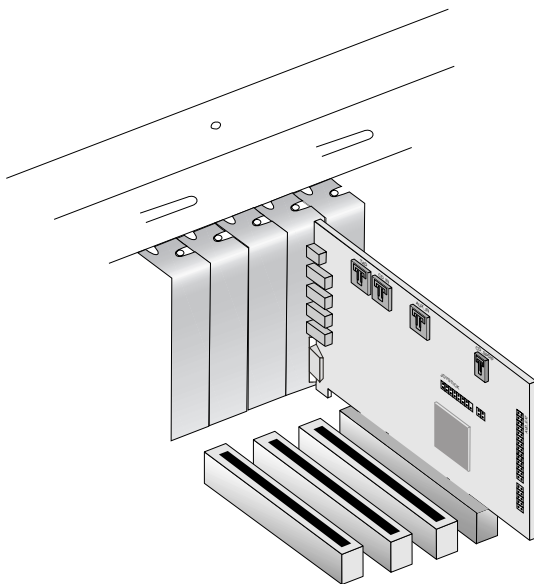
Caution: *The audio card can be damaged if power is supplied to the PCI slot when the card is inserted.*

- 3 Open the computer. Refer to the instructions in the "Installing Add-In Cards" section of the *Upgrading and Servicing the PC* guide.

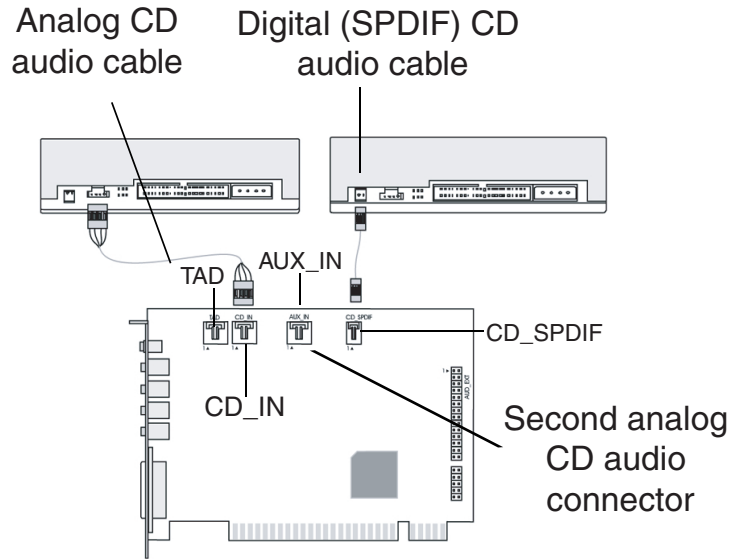
Screw for bracket/
audio card



- 4 Remove the bracket of an unused PCI slot if you do not already have an audio card installed, or remove the existing audio card. Put the screw aside.



- 5** Align the SoundBlaster Live! audio card with the PCI slot, and press the card gently but firmly into the slot. Do not force the audio card into the slot. Make sure that the gold finger PCI connector on the SoundBlaster Live! audio card is aligned with the PCI bus connector on the motherboard before you insert the card into the PCI expansion slot. If it does not fit properly, gently remove it and try again.
- 6** Secure the SoundBlaster Live! audio card with the screw removed in step 4.
- 7** Connect the analog CD audio cable from the analog audio connector on your CD-ROM or DVD-ROM drive to the CD_IN connector on the SoundBlaster Live! audio card. If you have two drives that have analog audio capability, you can connect the second analog CD audio cable from the analog audio connector on your second CD-ROM or DVD-ROM drive to the AUX_IN connector.



8 For digital CD audio output that has an MPC-to-MPC, 2-pin digital CD audio connector (SPDIF), connect the digital (SPDIF) CD audio cable from the digital audio connector on your CD-ROM or DVD-ROM drive to the CD_SPDIF connector on the SoundBlaster Live! audio card.

9 Close the computer.

10 Connect the power cord and the cables to the computer.

Installing the Software

To use SoundBlaster Live! on the Windows Me and Windows XP operating systems, install the device drivers and software included on the driver installation CD. Follow these steps to install the driver software that came with your SoundBlaster Live! audio card.

- 1 After you have installed the SoundBlaster Live! audio card, turn on your computer. The Windows Plug and Play feature automatically detects the audio card and device drivers. If the New Hardware Found dialog box appears, click the **Cancel** button.
- 2 Insert the driver installation CD into the CD-ROM or DVD-ROM drive.
- 3 Click **OK** when the SoundBlaster Live! screen appears. Follow the onscreen instructions to install the driver software.

Note: *In the Speaker Preset Setup screen, select the number of speakers you will be using to hear proper sound from all speakers.*

If this SoundBlaster Live! screen does not appear automatically, open **My Computer** and right-click the CD-ROM or DVD-ROM drive icon that contains the driver installation CD, and then click **AutoPlay**. Follow the onscreen instructions to install the driver software.

For more information about the SoundBlaster Live! software, refer to the onscreen *SoundBlaster Live! User's Guide*.

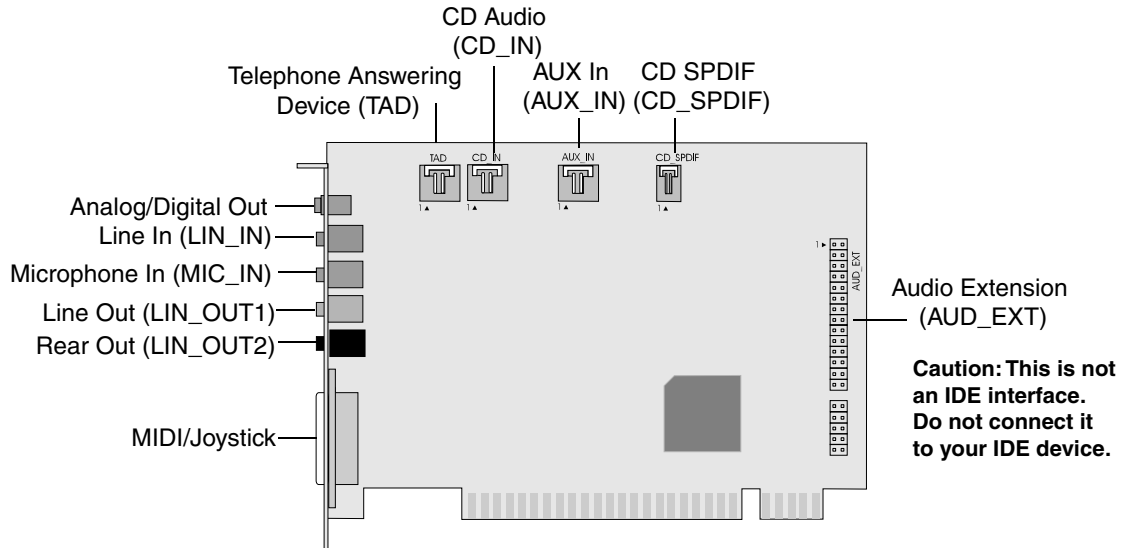
To access the *SoundBlaster Live! User's Guide*:

- 1 Click **Start**.
- 2 Choose **Programs** in Windows Me, or choose **All Programs** in Windows XP.
- 3 Choose **Creative** and **SoundBlaster Live!** and then click **User's Guide**.

Using Your Audio Card

Audio Connectors

Your audio card connectors listed here allow you to attach the card to other devices.



Analog/Digital Out

Analog/Digital Out (orange jack) uses a 6-channel or compressed AC-3 SPDIF output for connection to external digital devices or to digital speaker systems. For Windows Me systems, the default for the Analog/Digital Output connector is analog output. For Windows XP systems, the default for the Analog/Digital Output connector is digital. You must select the digital output in the SoundBlaster software to produce digital output. For instructions on how to do this, refer to the *SoundBlaster Live! User's Guide*.

In analog mode, the Analog/Digital Out connector can be used for center and subwoofer (LFE) channels for 5.1 analog speaker systems. In digital mode, it connects to 5.1 digital speakers.



Line In

Line In (LIN_IN) (blue jack) connects to an external device such as a cassette or CD player, or a synthesizer.



Microphone In

Microphone In (MIC_IN) (pink jack) connects to an external microphone for voice or live sound input. Microphones may be used to record music, make voice annotations, or turn your PC into a speakerphone.



Line Out

Line Out (LIN_OUT1) (green jack) connects to powered speakers or to an external amplifier for audio output. Line Out also supports headphones.



In analog mode, Line Out and Rear Out connectors can be used simultaneously for 4.1 channel or quadraphonic speaker systems.

Rear Out

Rear Out (LIN_OUT2) (black jack) connects to powered speakers or to an external amplifier for audio output.



In analog mode, Line Out and Rear Out connectors can be used simultaneously for 4.1 channel or quadraphonic speaker systems.

MIDI/Joystick

MIDI (Musical Instrument Device Interface)/Joystick (gold, 15-pin connector) connects to a game port joystick or to a MIDI device, such as a MIDI keyboard. A MIDI device allows you to connect external electronic musical instruments to your PC.



The joystick connector is a standard computer game control adapter. You can connect any analog joystick with a 15-pin D-shell connector or any device compatible with the standard PC joystick to the connector. To use two joysticks, use a Y-cable splitter.

To play games in MS-DOS mode:

- Connect the CD_IN connector to the analog CD audio connector on the CD-ROM or DVD-ROM drive.
- If the sound is distorted, do not connect the CD_SPDIF connector to the digital audio connector on the CD-ROM or DVD-ROM drive.

Telephone Answering Device

The Telephone Answering Device (TAD) provides a connection from a standard voice modem and transmits microphone signals to the modem. The TAD connects to a telephone answering device.

CD Audio

CD Audio (CD_IN) connects to the analog audio output on a CD-ROM or DVD-ROM drive through a CD audio cable. In analog mode, CD Audio connects to the center and subwoofer channel speakers. In digital mode, it connects to digital speakers, such as 5.1 surround sound speakers.

AUX In

AUX In (AUX_IN) connects to internal audio sources such as TV Tuner, MPEG, or other similar cards.

CD SPDIF

CD SPDIF (CD_SPDIF) connects to the SPDIF (digital audio) output on a CD-ROM or DVD-ROM drive. This is an MPC-to-MPC (2 pin) digital audio CD connector.

Audio Extension

Audio Extension (AUD_EXT) connects to the optical digital I/O card or Live! drive.

Connecting Speaker Systems

To watch DVD movies, play games, or to listen to music on your computer, connect analog or digital speakers to the SoundBlaster Live! audio card.

When using an external Dolby digital (AC-3) decoder speaker system, disconnect the audio card AUX_IN connector from the decoder card Audio Out connector. However, if an external Dolby Digital (AC-3) decoder speaker system is not available, do not disconnect the audio card AUX_IN connector.

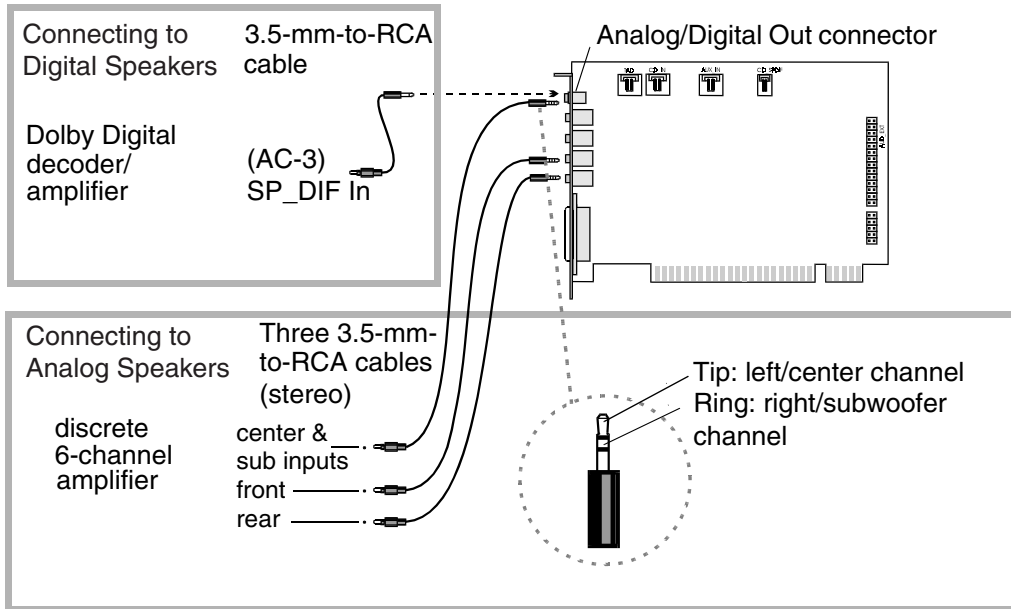
Analog Speakers

When connecting analog speakers, you may have a triple stereo audio cable or three pairs of 3.5-mm-to-RCA (stereo) cables. These three cables connect to the front, rear, and center/subwoofer inputs.

Additional information for advanced users: For connection to center and subwoofer channels using a 3.5-mm-to-RCA (stereo) cable, connect the white RCA connector to the center input and the red RCA connector to the subwoofer input of the amplifier.

Digital Speakers

When connecting digital speakers, you can use a 3.5-mm-to-RCA cable to plug the digital speakers into your SP_DIF connector.



Enabling Digital Sound

If your sound is not clear or you have any static, you may need to enable the digital sound option from within the SoundBlaster Live! program.

To do this:

- 1 Click **Start**.
- 2 Select **Creative**.
- 3 Select **SoundBlaster Live!**
- 4 Click **AudioHQ**.
- 5 Double-click **Speaker**.
- 6 Check the *Digital output only* box.

Selecting Speaker Setup Option

The PC is automatically set up to produce sound through two desktop stereo speakers. If your PC has four or five surround sound speakers, set up the surround sound option for four or five speakers to hear sound from all speakers.

To set up speakers in Windows Me:

- 1 Click **Start**.
- 2 Choose **Settings**.
- 3 Click **Control Panel**.
- 4 Double-click **Sounds and Multimedia**.
- 5 Click the **Audio** tab.
- 6 In Sound Playback, click the **Advanced** button.
- 7 Under Speaker setup on the Speakers tab, select **Quadraphonic speakers** for four speakers or select **5.1 surround sound speakers** for five speakers.
- 8 Click **Apply** and then click **OK**.

To set up speakers in Windows XP:

- 1 Click **Start**.
- 2 Click **Control Panel**.
- 3 Click **Sounds, Speech, and Audio Devices**.
- 4 Click **Sounds and Audio Devices**.
- 5 Select the **Volume** tab.
- 6 Under the Speaker settings, click the **Advanced** button.
- 7 Click the arrow under Speaker setup, and select **Quadraphonic speakers** for four speakers or select **5.1 surround sound speakers** for five speakers.
- 8 Click **Apply** and then click **OK**.

If you lose sound from your 5.1 speakers after you restart your PC, you may need to re-enable the 5.1 speakers using the procedures listed above.

Most speaker setup options are for two stereo speakers. For example, the surround sound speakers option produces surround sound for two speakers only.

To prevent sound problems, make sure the speakers are connected to the correct audio connectors on the back of the PC.

Important: In the unlikely event that you must recover the operating system, as described in the *Quick Start Guide*, you must reactivate the installation of the SoundBlaster Live! audio programs. If you have more than two speakers, you also need to reselect your speaker setup option.

Getting More Information

SoundBlaster Live! User's Guide

After you install the SoundBlaster Live! driver installation CD, you can access the *SoundBlaster Live! User's Guide*. This guide includes information about:

- How to use your SoundBlaster Live! audio card and the included programs in your audio package.
- MIDI specifications.
- Connector pin assignments.

- Diagnostics to test the Wave, MIDI, or CD audio playback as well as test the recording function and speaker output of your audio card.
- Advanced configurations on positioning your speakers and connecting a variety of devices.
- Recording and authoring content.
- Troubleshooting.

To access the *SoundBlaster Live! User's Guide*:

- 1 Click **Start**.
- 2 Choose **Programs** in Windows Me, or choose **All Programs** in Windows XP.
- 3 Choose **Creative** and **SoundBlaster Live!**, and then click **User's Guide**.

SoundBlaster Live! Technical Support

Go to the Creative Web site at
<http://www.creative.com>
for more information about SoundBlaster Live! 5.1.

You can also go to
<http://www.soundblaster.com>
for the latest software and driver updates. If
you want to contact Creative by telephone, this
Web site lists technical support numbers for your
country or region.

