User's Guide

Creative Sound Blaster Live! Digital Entertainment 5.1 Creative Audio Software

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Introduction

The All-Round Audio Solution for Internet and Digital Home Entertainment

Sound Blaster Live! Player 5.1 is the top audio solution for your games, movies, CDs, MP3 songs and other Internet entertainment. With its support for today's leading audio standard—EAX— Sound Blaster Live! Player 5.1 creates real-life, multi-dimensional sound and multi-textured acoustical environments for the most realistic 3D audio experience. Its powerful EMU10K1 audio processor delivers audio at optimum CPU performance with the highest fidelity and absolute clarity. Combine it with a four- or five-speaker setup and you'll experience realistic 3D audio, EAX in supported games, and enjoy your movies with true surround sound. The Live!Ware upgrade program will keep your Sound Blaster Live! card up to date with continual upgrades supporting future technologies, functionality, and features.

If you wish to create your own music or audio content in the future, your Sound Blaster Live! card also offers you many upgrade options which will allow you to connect multiple digital and analog devices simultaneously, including keyboards and other music gear, as well as optical connection to MiniDisc and DAT recorders.

System Requirements	 For Creative software, your card requires at least: Genuine Intel® Pentium® class processor: 166 MHz for Windows 95/98 or Windows Millennium Edition, 200 MHz for Windows NT 4.0 or Windows 2000 Intel or 100% compatible motherboard chipset Windows 95, 98 or Millennium Edition, Windows NT 4.0 or Windows 2000 16 MB RAM for Windows 95/98 or Millennium Edition (32 MB RAM recommended), 32 MB RAM for Windows NT 4.0, 64 MB RAM for Windows 2000 160 MB of free hard disk space Open half-length PCI 2.1 compliant slot Headphones or amplified speakers (available separately) CD-ROM drive required for software installation Sound Blaster Live! Player 5.1 gives you an estimate of the hard disk space required when you select it on the installation screen. Included applications may need higher system requirements or microphone for basic functionalities. Refer to the documentation for individual applications for
Live!Ware Benefits	 Your Investment Is Protected as you have less of a likelihood of finding your audio card obsolete shortly after purchasing it. Through Live!Ware, new features and applications are always made available for you to experience the latest technology and to extend the life of your card. The Value and Experience Increases Over Time as Live!Ware continues to deliver new capabilities and enhancements. Each upgrade will "rejuvenate" your audio card, allowing you to experience new functionality. It is as if your audio card is "reborn". Your Hardware Is Up To Date because the latest Live!Ware upgrades are only a download away. When new standards and capabilities emerge, your hardware is ready for it—just download the functions and your hardware becomes up-to-date!

Getting More Information See the online User's Guide for MIDI specifications and connector pin assignments, as well as instructions on using the various applications in your audio package. Where To Go From □ For hardware and software installation instructions, refer to Chapters 1 and 2. Here ... □ To learn about the bundled applications, refer to Chapters 3 and 4. Other Recommendations □ View the contents of the Demo CD for additional demonstrations, libraries and other software. □ Visit the *www.soundblaster.com* site for more information, content and Live!Ware updates. **Document Conventions** The following typographical conventions are used throughout this document: bold Text that must be entered exactly as it appears. italic Title of a book or a placeholder, which represents the information you must provide. UPPERCASE Directory name, file name, or acronym. The notepad icon indicates information that is of particular importance and should be considered before continuing.



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Installing Sound Blaster Live! Player 5.1

This chapter is organised as follows:

- Your Audio Card
- □ Installing the Card
- **Connecting Related Peripherals**
- □ Enhancing Your Sound Blaster Live! Experience
- □ Positioning Your Speakers

Your Audio Card

Your audio card has these jacks and connectors which allow you to attach other devices:



A jack is a one-hole connecting interface whereas a connector consists of many pins. Some connectors here may not be available on your card. Refer to the online *User's Guide*, "Hardware Information", for details on connector pin assignments.



Line Out and Rear Out jacks can be used simultaneously to power 4.1 channel speaker systems. In addition, the Analog/Digital Out jack can be used to power the Centre and Subwoofer (LFE) for 5.1 channel speaker systems.



Figure 1-1: Jacks and connectors on the Sound Blaster Live! card.

Installing the Card



Do not force the audio card into the slot. If it does not fit properly, gently remove it and try again.

- 1. Switch off your system and all peripheral devices.
- 2. Touch a metal plate on your system to ground yourself and to discharge any static electricity, and then unplug the power cord from the wall outlet.
- 3. Remove the cover from your system.
- 4. Remove the metal plate from one unused PCI expansion slot in your system and put the screw aside, to be used later.
- 5. Align the Sound Blaster Live! card with the vacant PCI expansion slot. Press the card gently and evenly into the slot as shown in Figure 1-2. Ensure that the card is seated firmly inside the PCI expansion slot.
- 6. Secure the card to the expansion slot with a screw.
- 7. Replace the cover onto your system.
- 8. Plug the power cord back into the wall outlet, and switch on the system.



Figure 1-2: Securing the audio card to the PCI expansion slot.

Connecting Related Peripherals



- □ If you are playing games in Windows 95/98 MS-DOS mode (pure DOS mode), you must:
 - Make sure the CD In connector and the Analog Audio connector of the CD-ROM or PC-DVD drive are connected.
 - In addition, if you get distorted audio, do not connect the CD SPDIF connector to the Digital Audio connector of the CD-ROM or PC-DVD drive.

speakers

 If you connect to the Digital Audio and Analog Audio connectors of the same CD-ROM or PC-DVD drive, do not unmute CD Audio and CD Digital at the same time in Surround Mixer.





Enhancing Your Sound Blaster Live! Experience

Playing Games and Music, and Watching Movies The Sound Blaster Live! card alone will most undoubtedly give you endless hours of listening pleasure. To further enhance your SB Live! experience, there are several upgrade options (available separately). The following information and diagrams on the next few pages show how you can connect these options to your SB Live! card.

- With FourPointSurround Digital speakers from Cambridge SoundWorks, you can experience crystal clear gaming sequences or music from the Digital DIN connection. If you want an even more immersive surround experience while watching movies, get the Playworks DTT3500 5.1 Digital speakers. A minijack-to-DIN cable is bundled with the speaker set for this connection.
- Alternatively, you can also connect an analog 5.1 channel speaker system (such as the DeskTop Theater 5.1 DTT2200 speakers from Cambridge SoundWorks) or even your 6-channel home theatre speaker system. Besides the Front and Rear outputs, the SB Live! card has an Analog/Digital Out jack which allows you to connect to your Centre & Subwoofer channels.

For instructions on how to switch between the analog and digital modes of the Digital/Analog jack, see "Switching between analog and digital output modes" on page 3-4

Watching DVD Movies or Playing DVD Games

□ To watch DVD movies on your PC, why not get Creative's PC-DVD kit which comes with a PC-DVD drive and Encore MPEG2 decoder card? You can connect your Encore Dxr2, Dxr3 or MPEG2 decoder card to an external Dolby Digital (AC-3) decoder such as the DeskTop Theater speaker systems. In this case, disconnect the audio card's Aux In connector from the decoder card's Audio Out connector. However, if an external Dolby Digital (AC-3) decoder speaker system is not available, this connection is necessary.

* Information continues on page 1-9.



Figure 1-4: Connecting peripherals to the Sound Blaster Live! card.





**e.g., FourPointSurround or DeskTop Theater 5.1 Digital Speaker Systems*

Note: FourPointSurround and Desktop Theater 5.1 speaker systems, Digital I/O Module, Digital I/O card, Live! Drive IR and cables are available separately.

Recording and Content Authoring

- □ If you are a musician with semi-professional requirements, you may want to upgrade your Sound Blaster Live! card with either the Optical Digital I/O card (plus Digital I/O Module), or the Live! Drive IR.
- □ For either options, you will be given:
 - A set of SPDIF (RCA) and Optical input/output jacks for recording to and from external digital devices;
 - MIDI input/output connectors for connection to MIDI devices;
 - A Digital DIN connector for connection to digital speakers such as the FourPointSurround or DeskTop Theater 5.1 Digital Speaker Systems;
 - A second analog Line In allows you to connect to an additional input device (e.g. a CD player) for recording.
- □ The Live! Drive IR fits into the standard 5¼" drive bay of your computer and thus allows you easy access to these connectors from its front panel. The Headphones and Microphone inputs utilise ¼" jacks for high-quality connectivity.

If you are using four speakers, place them so that they form the corners of a square with you exactly in the centre (as in Figure 1-5) and that they are angled toward you. Make sure the computer monitor is not blocking the path of your front speakers. If you have a centre speaker, place it on top of your monitor, also angled toward you. You may want to adjust the relative positions of the speakers until you get the audio experience you like best. If you have a subwoofer, place the unit in a corner of the room for the best bass experience.



Figure 1-5: Recommended speaker positions for the 4-speaker configuration.

Positioning Your Speakers

Installing Software

This chapter shows you how to install the audio software in the various Windows operating systems. It consists of the following sections:

- □ Installing Audio Drivers and Applications
- □ Using Sound Blaster Live! Player 5.1
- □ Uninstalling the Applications
- □ Reinstalling the Audio Drivers
- □ Playing Legacy Games

Installing Audio Drivers and Applications You need device drivers to control the components on your audio card. To install these drivers as well as the bundled applications, use the following instructions. The instructions are applicable to all Windows operating systems.

After you have installed the card and switched on your system, Windows automatically detects the card.

- 1. If you are prompted for the drivers, click the Cancel button. Otherwise proceed to step 2.
- Insert the installation disc into your CD-ROM drive. The disc supports Windows AutoPlay mode and starts running automatically. If not, see "Problems Installing Software" on page C-1.
- 3. Follow the instructions on the screen to complete the installation.

Setting Up Joystick Drivers in Windows NT 4.0



In Windows 2000, the joystick drivers are automatically set up.

- 1. Log on to your computer as Administrator.
- 2. Click Start -> Settings -> Control Panel.
- 3. Double-click the **Multimedia** icon, click the **Devices** tab, and then click the **Add** button.
- 4. In the List of Drivers box of the **Add** dialog box, select **Unlisted Or Updated Driver**, and then click the **OK** button.
- 5. Insert the Windows NT 4.0 CD-ROM into the CD-ROM drive.
- 6. In the Install Driver dialog box, type
 E:\DRVLIB\MULTIMED\JOYSTICK\X86
 if E:\ is the CD-ROM drive letter, and then click the OK button.
- 7. In the **Add Unlisted Or Updated Driver** dialog box, click **Analog Joystick Driver**, and then click the **OK** button.
- 8. In the Microsoft Joystick Configuration dialog box, click the OK button.
- 9. Restart your computer when prompted.

Using Sound Blaster Live! Player 5.1

Congratulations! You have successfully installed Sound Blaster Live! Player 5.1. For more information on how you can get the most out of your audio card, refer to the other chapters in this manual.

Uninstalling the Applications

Use the following steps to cleanly remove applications before you reinstall them to correct problems, change configurations, or make version upgrades. These instructions are applicable to all Windows operating systems.

- 1. Close the audio card's applications if they are open. This includes Creative Launcher and the SB Live! icon on the taskbar. Applications that are still running during the uninstallation will not be removed.
- 2. Click Start -> Settings -> Control Panel.
- 3. Double-click the Add/Remove Programs icon.
- 4. In the Add/Remove Programs Properties dialog box, select Sound Blaster Live! Player 5.1, and then click the Add/Remove button.
- In the Creative Uninstaller dialog box, select the check boxes of the items you want to delete and then click the Next button. The selected applications will be uninstalled.
- 6. Click the **OK** button to close the **Add/Remove Programs Properties** dialog box.
- 7. Restart the computer if prompted.

Reinstalling the Audio Drivers	 You may want to reinstall only the audio drivers if you think they have been corrupted. 1. Insert the installation disc into your CD-ROM drive. The disc supports Windows AutoPlay mode and starts running automatically. If not, see "Problems Installing Software" on page C-1.
	2. Follow the instructions on the screen until the Setup Options dialog box appears.
	3. Click the Drivers only button.
	4. Follow the instructions on the screen to complete the installation of the audio drivers.
Playing Legacy	For more information, see Appendix B, "SB Emulation in MS-DOS/ Windows 95/98/ME".

Games

Using Sound Blaster Live! Player 5.1

Sound Blaster Live! Player 5.1 is supported by a full range of applications to help you get the absolute most from the audio card. The software most important to the operation of your audio card is the Sound Blaster Live! group:

- □ Creative Sound Blaster Live! Tour
- □ Creative Diagnostics
- □ Creative Launcher
- Surround Mixer
- □ AudioHQ
- □ Wave Studio
- □ Creative PlayCenter 2
- □ Creative Recorder
- □ Creative LAVA!
- □ Creative MediaRing Talk
- Creative Keytar
- □ Creative Rhythmania

To locate and run these programs, click **Start** -> **Programs** -> **Creative** -> **Sound Blaster Live!** For more information and usage details for these applications, refer to their respective online help.

Creative Sound Blaster Live! Tour	This is a good place to start to learn more about the features of Sound Blaster Live! and to experience its awesome capabilities. The tour uses PixAround's technology to immerse you in a panaromic "walk-through" experience which encompasses a number of closely-related interactive and informative demos, each featuring a different aspect of Sound Blaster Live!.
Creative Diagnostics	Use Creative Diagnostics to quickly test your audio card's Wave, MIDI or CD Audio playback, recording function and speaker output.
Creative Launcher	Creative Launcher allows you to organise your desktop and open Creative applications quickly.



Creative Launcher resides at the top of your screen. The software installation creates a number of group tabs in Launcher that may contain shortcuts to Creative applications such as PlayCenter 2 and Surround Mixer. It may also contain shortcuts to other applications for your hardware settings, volume control, help files, or demonstration programs by Creative.

The **Live!Task** tab in the Launcher offers a "one-touch" setting which you can use to perform a task easily. An application can also be launched automatically with its associated audio preset.

Surround Mixer

Creative Surround Mixer is the nerve centre for setting and controlling the various aspects of your audio card. It consists of two "detachable" decks: the **Main deck** and the **Mixer deck**.



Main deck

The top area of the Main deck allows you to:

• Select tasks or save, delete, import and export **audio presets**. You can save endless combinations of these settings as audio presets for the selected speaker output. An audio preset, when selected, is your passport to a one-step automatic configuration of speakers, mixer and effects for whatever you want to do: play a particular game, record to a particular medium, record or play in a particular style—each style having its unique set of positions of audio input sources. These presets can then be configured for use in Creative Launcher's Live!Task.

The three buttons at the left side of the Main deck allows you to switch between three different views: • In the EAX view, you can select and create your audio presets and position audio sources within the speaker configuration space. • In the Speaker view, you can select your speaker setup and perform a speaker output test. • In the **Spectrum** view, you can select and display the spectrum analyzer during playback or recording. Mixer deck The Mixer deck allows you to: • Mix sounds from various audio input sources when playing or recording; • Adjust the volume level for the audio input sources; Adjust the treble and bass level, front/rear or left/right balance. Tip □ If you are not sure what the icons on the Surround Mixer represent, place the pointer over any icon or area to display the tooltip. Switching between analog By default, the Analog/Digital Out jack of the audio card outputs analog centre and subwoofer channels. To allow it to give digital 6-channel or compressed AC-3 SPDIF output (digital output and digital output modes mode), do the following: 1. In the Main deck of the Surround Mixer, click the Speaker button. 2. In the Speaker view, click the **Digital Output only** check box to select it. (This is available for all speaker modes except for the Headphones mode). Alternatively, you can do the following: 1. In the Mixer deck of Surround Mixer, click the red plus sign above the **VOL** control. 2. In the dialog box that appears, click the Digital Output only check box to select it. To switch back to analog output mode, clear this check box. Changes made will be reflected in the Speaker view.

Enabling Bass Redirection



Some subwoofers may not be able to reproduce excessive bass. We recommend that you set the subwoofer volume slider to a low level before you enable bass redirection. Thereafter, increase the volume level to a comfortable level.

Enabling Dolby Digital (AC-3) Decoding

Dolby Digital delivers five full range channels and one bass-only effects channel. However most multimedia speaker systems have satellite speakers that usually do not reproduce low frequency content. Enabling bass redirection allows low frequency source content from the front, rear and centre channels to be redirected and added to the low frequency source effects (LFE) channel to produce deeper subwoofer output. This feature is useful for producing bass in games or applications that have only front and rear channel content. To enable bass redirection:

- 1. In the Main deck of the Surround Mixer, click the **Speaker** button.
- 2. In the Speaker view, click the **Speaker Selection** button to select the 5.1 speaker mode if it is not selected.
- 3. Click the **Advanced** button.
- 4. In the dialog box that appears, click the **Bass Redirection** button. When enabled, the button is orange.



By enabling Dolby Digital decoding, the SB Live! card will decode Dolby Digital stream to six discrete analog channels. The Cambridge SoundWorks DeskTop Theater DTT2200 speaker system is an ideal match for this usage. Thus, an external Dolby Digital decoder is not required for you to enjoy multi-speaker surround sound. To enable Dolby Digital (AC-3) decoding:

- 1. In the Speaker view, clear the **Digital Output only** check box.
- 2. Follow the steps 1 to 3 described in the previous section and then click the **AC-3 Decode** button if it is not yet enabled.

However, if you wish to use an external Dolby Digital decoder, do not enable this feature. This setting will pass through compressed Dolby Digital (AC-3) PCM SPDIF output from the Analog/Digital Out jack. Remember to set the SB Live! card to the **Digital Output** mode. In addition, you will need a separate 3.5mm-to-RCA jack cable to connect to your decoder.

AudioHQ

AudioHQ contains several control utilities that allow you to view, audition, or set up the audio properties of one or more audio devices on your computer.



AudioHQ can be accessed using any of the following methods:

- Click Start -> Programs -> Creative -> Sound Blaster Live! -> AudioHQ;
- Click or double-click the AudioHQ icon located at the bottom right corner of your Windows desktop.

SoundFont Control

Creative SoundFont Control allows you to configure MIDI banks with SoundFont files and instruments, as well as set the caching algorithm and space.

Configure a MIDI Bank

To configure a MIDI bank:

- 1. In SoundFont dialog box, click the **Configure Bank** tab.
- 2. In the **Select Bank** list, select the MIDI bank to configure.
- Click the Load button and load the SoundFont file you want to the MIDI bank. The latest file loaded always appears at the top of the Bank Stack box.

The top of the stack is indicated by an arrow.

- 4. To replace a SoundFont file, click the file and then click the **Replace** button.
- 5. To clear a bank from the stack, select the bank and then click the **Clear** button.

A variation bank can only be cleared by clearing its main bank.

6. Repeat Steps 3, 4 or 5 as required.

By stacking a SoundFont file instead of replacing one with the other, you may return to the original sounds or use the new selection.

You can "spot" hide particular instruments by loading one or more SoundFont files on top of the original.

When you clear a SoundFont file, you remove the latest configuration of the main bank and any variation banks, including the latest configuration of instruments on the Configure Instrument tabbed page.

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Configure an Instrument

To configure an instrument:

- 1. In the SoundFont dialog box, click the **Configure Instrument** tab.
- 2. In the **Select Bank** list, select the bank whose instruments you want to configure. You can select any bank.
- In the Select Instrument list, select the instrument to configure. In the Instrument Stack, you may see an instrument entry although you did not load an instrument on this page. The instrument can be found in a bank loaded on the Configure Bank tabbed page.
- 4. Click the **Load** button and load a SoundFont or single-instrument (for example, .WAV) file.

The last file loaded always appears at the top of the **Instrument Stack** with an arrow pointing to it.

- 5. To clear an instrument from the stack, select the instrument and then click the **Clear** button.
- 6. For faster processing of SoundFont files, the files are loaded into memory. You need to set the maximum amount of cache memory your SoundFont files can occupy, so that your system performance does not suffer from insufficient memory. You can also set the caching algorithm for a balanced system performance.

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Setting the maximum amount of cache memory for SoundFont files does not mean setting aside or reserving the space. The space can still be used by your computer or other files, if needed.

SoundFont Options	You change the following options on the Options tabbed page of the SoundFont Control dialog box:	SoundPart-Audo/ND Distant Bartises
	<i>To specify the caching algorithm:</i>Select an algorithm from the SoundFont Cache list.	2 (1000) (10
	<i>To set the amount of cache for SoundFont files:</i>Drag the SoundFont Cache slider to set the amount of cache.	Same
	 To change the SoundFont device Select the new device from the SoundFont Device list. 	P Recentering discover 1 Minit Alacement Chose Mass
Device Controls	Device Controls allows you to configure for audio playbac simultaneous Wave playback sessions. For example, you time and enjoy the sounds from them all. This feature is c 2000.	ck the audio devices that allow multiple can play five Wave tracks at the same urrently not supported under Windows
Playback Sessions	 To set maximum simultaneous Wave playback sessions: On the Wave tabbed page, drag the Maximum Simultaneous Wave Playback slider to the right to shigher number of Wave playback sessions, or to the lato set a lower number of simultaneous playback session 	et a eft a eft a eft a a a b a b a b a b a b a b a b a b a b a
Sound Device	 To select the sound device to configure: On the Options tabbed page, click the device you wan configure from the Sound Device list. The device is immediately selected. 	t to

Creative Keyboard

Creative Keyboard is a virtual keyboard which allows you to audition or play musical notes produced through MIDI devices. To edit the sound, use Vienna SoundFont Studio or another sound editor.



MIDI Input	To select a MIDI input device:	Options
	1. In the Select MIDI In box in the Options dialog box, click the correct MIDI port.	Select Midi In
	2. Click the OK button.	Audition Device
	You can use external MIDI input devices to audition	SB Livel [6800]
	your MIDI banks and instruments. First, connect a	Setting
	MIDI input device to your audio card and then select	Show Bank and Instrument Names
	that device in Creative Keyboard.	
Test an Instrument	To test an instrument:	
	1. In Creative Keyboard, click the bank and the ins	trument you want.
	2. Click the keys on the keyboard to test the sound. I you will probably find it easier to use it instead.	f you have an external MIDI input device,

Tips

EAX Control

- □ To select multiple notes to play simultaneously, use your right mouse button to click the keys, which will be marked by black dots.
- □ To release the keys, right-click them one by one, *or* click the **All Notes Off** button for simultaneous release.
- \Box To slide across the keyboard, drag the mouse.
- □ If the playback's sustain is too long, click the **All Notes Off** button.

EAX Control allows you to configure the EMU10K1 effects engine. It allows you to specify the components that make up the audio elements that in turn make up an audio effect. An audio effect is the modeling of a real-world experience. We have provided some entertainment, gaming and various audio effects to get you started with. EAX Control can be also be accessed from Creative Surround Mixer.

Learn from the online help how to:

- □ Configure master effects
 - Add or remove effects
 - Specify the effect type
 - Specify the degree or amount of the effect
 - Edit an effect all the way down to its parameters or building blocks
- □ Configure source effects, that is, set the amount of the effects to apply on an audio source.
- □ Configure MIDI playback effects
- □ Export an audio effect to a file
- □ Import an audio effect

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AutoEAX	AutoEAX allows you to specify for any audio application which audio preset to automatically associate with the currently active speaker output. For the automatic audio presets to work, AutoEAX must be active or at least minimised.
Associating an Audio Preset	For each audio application on your computer, you can specify the audio preset that will be automatically associated with it, for each speaker output configuration. For example, when playing an audio CD using Creative PlayCenter 2, you may want to associate different audio presets for the speaker outputs "Live!Surround" and "4 Speakers".
	1. In the Application list, select the audio application with which to associate an audio preset for a particular speaker output. If the application is not in the list, click the Browse button to browse for and open the application.
	2. In the Speaker Output box, click the speaker output to configure.
	 In the Linked Audio Preset box, click the audio preset you want to associate with this application/speaker-output combination. This combination trio are automatically set.
	4. If you want AutoEAX to monitor this application's activity, clear the Do not monitor this application check box. If you check it, AutoEAX will not configure the audio preset for that application even when the application is started.
	For other functions, refer to its online help.
Wave Studio	Wave Studio allows you to perform the following sound editing functions easily:
	Play, edit, and record 8-bit (tape quality) and 16-bit (CD quality) Wave data. Enhance your Wave data or create unique sounds with various special effects and editing operations such as rap, reverse, echo, mute, pan, cut, copy, and paste.
	• Open and edit several Wave files at the same time.
	□ Import and export raw (.RAW) data files.

Creative PlayCenter 2

Creative PlayCenter 2 is a revolutionary audio CD and digital audio (such as MP3 or WMA) player. Besides managing your favourite digital audio files on your computer, it is also an integrated MP3/WMA encoder for ripping audio CD tracks into compressed digital audio files. It can encode tracks at speeds of up to 8x faster than normal play speed and up to 320 kbps.



Creative Recorder

Recorder allows you to record sounds or music from various input sources like the microphone or Audio CD, and save them as Wave (.wav) files.



Creative LAVA!

Creative LAVA! (Live! Audio-Visual Animation) gives your music visual expression that enhances the emotional depth of your music experience.

Through LAVA!, 3D graphical objects interact with the music and intelligently dance to the sound cues from sources such as CD and MIDI.

Explore the various animation scenarios provided by LAVA! or create your own environments and scenarios for your animation.

Creative MediaRing Talk

Creative MediaRing Talk is an award-winning Internet voice communication software. It allows you to make long distance and international calls over the Internet, from your PC to another PC with Internet access and MediaRing Talk installed. It also allows you to make calls to a regular telephone if you subscribe to MediaRing's ValueFone service. All you need to do is start MediaRing Talk; dial the number; and let MediaRing Talk establish a connection for you.



Furthermore, with Sound Blaster Live! Player 5.1's EAX, your voice can be modified as you take on different "personas" (for example, a male or female person, chipmunk etc.) when you talk to the other party. Disguise you voice and your friend on the other end may think he's talking to another person! To make use of these voice effects, just click the Voice Effects button (also known as the EAX button) and select the desired persona from the list.

Creative Keytar	With Creative Keytar, an easy-to-use and highly interactive edutainment software for beginners, you can turn your multimedia computer into a virtual rhythm guitar system immediately. Click a picture at the top of the screen to choose your favorite guitar. Press a function key (F1,, F12) to activate a chord, and you can start strumming or plucking your favorite tunes. Just hold the chord with one hand until it is time to change the chord and use the other hand to strum or pluck the strings according to a tune's rhythmic variation. You don't need to worry about notes, all you need is a sense of rhythm and to remember your chord keys.
Creative Rhythmania	 Creative Rhythmania lets you create a MIDI file, choosing from a professional set of backup rhythms and instruments. Creative Rhythmania allows you to: Perform with auto-accompaniment in Rhythm mode: Four-part Rhythm section Preset backing styles Interactive backing arrangement Chord Palette system SoundFont support Choose between two Keyboard types: PC (QWERTY) keyboard or MIDI keyboard connected to your PC. Rhythmania is essentially a pattern-based software: You play a Pattern to provide auto-accompaniment for your melody playing. You create or modify a Pattern by building or changing it Section by Section in Rhythm mode.

To Do This ... Use These Applications

Sound Blaster Live! Player 5.1 offers you digital and internet entertainment, multimedia playback, and gaming. The following reference tables point you to the bundled applications that will help you achieve your goals.

Multimedia Playback

Multimedia Playback	Applications
DVD Movies	To play back DVD movies on your Sound Blaster Live! Player 5.1, you must first have a DVD-compatible drive. Next, you must have a software DVD solution that is available from Creative. For the full DVD experience, you may want to purchase Cambridge SoundWorks' DeskTop Theater 5.1 or a Dolby Digital (AC-3) decoder.
MP3/WMA	Creative PlayCenter 2 supports/plays MP3 and WMA files.
Wave/CD Audio	Use Creative PlayCenter 2 to play back files in both Wave and CD Audio formats. WAV is the format for digital audio files on the Windows operating platform. CD Audio is played back from an audio compact disc on your CD-ROM drive.

Multimedia Playback	Applications
MIDI	MIDI (*.MID) is a music format used by musicians that is played back from the internal synthesiser on the Sound Blaster Live! Player 5.1 card. Use Creative PlayCenter 2 to play back MIDI files or use the MIDI sequencer bundled with your card. To achieve the best quality, load the 8MB GM bank in the SoundFont applet found in the AudioHQ group.
SoundFont MIDI	Many musicians have created music files that use exotic or non-regular instrument (non General MIDI compliant). These instruments are stored in SoundFont banks. Such MIDI files can be played back from Creative PlayCenter 2. The bundled CD contains many examples of MIDI demos that use high quality SoundFont banks.
Dolby Digital (AC-3) audio	Sound Blaster Live! Player 5.1 offers Dolby Digital (AC-3) decoding so there's no need for an external Dolby Digital decoder. Just configure your speaker setup to 5.1 Speaker systems in Surround Mixer.

Digital Entertainment

Digital Entertainment	Applications
Watch Surround Movies	If you want to enjoy high quality movie entertainment, ensure you have good speakers. If you have 4 or 5 speakers connected to your Sound Blaster Live! Player 5.1 card, configure your respective speaker setup in Surround Mixer. For DVD movies, it is recommended that you purchase Creative PC-DVD Encore's solution as well as the Cambridge SoundWorks' DeskTop Theater 5.1 Speaker systems.

Digital Entertainment	Applications
Play Customised Albums	You can compile your own albums containing your favorite music using the bundled Creative PlayCenter 2; whether they are in CD Audio, WAV or MIDI format.
Play Guitar	Sound Blaster Live! Player 5.1 lets you play the guitar on your PC. With Creative Keytar, you can literally transform your computer keyboard into a guitar. And strum, using your mouse!
Play Keyboard Music with Auto-Accompaniment/One- Man Band	You need not invest in a musical keyboard to be a one- man-band. Creative Rhythmania lets you play music on your computer keyboard.

Internet Entertainment

Internet Entertainment	Applications
Experience Music with Visual Animation	With LAVA!, your MP3 songs can now be associated and distributed over the Internet with a customised "music video" (called MV3) containing high quality 3D animation that gives dynamic visual expression to your songs. Watch the animation dance to the beat of your music! To enjoy the LAVA! experience, you will also need any 3D accelerated graphics card.
Encode CD Songs to MP3 / Download and Play MP3 Songs	With PlayCenter 2, you can encode and record all your favorite CD songs into your PC hard drive, creating a database for playing customised song lists. You can also add songs to your database by downloading them from various sites in the Internet.

Internet Entertainment	Applications
Play MP3 Songs with EAX	Use Creative PlayCenter 2 to create your own MP3 renditions with multi-dimensional and multi-textured realism by adding environments such as concert hall or bathroom! You can share these enhanced MP3 songs even with someone who does not own an SB Live! card.
Chat over the Internet using another Voice	Take on another personality or life-form while talking over the Internet! You can do this with Creative MediaRing Talk and its Voice Personas feature, which uses Sound Blaster Live! Player 5.1's EAX to modify your voice in real-time as you chat.
Create 360° Interactive PixAround Web Pages with Audio Hotspots	Use PixMaker to create immersive and interactive 360° web pages or postcards easily. You can even add audio hotspots in your panaromic pictures that will play audio files when clicked.

Gaming Reference

Games	Applications
EAX Support	Enjoy the many EAX titles by top game developers that immerse you in realistic environments. Go to www.sblive.com for a full list of compatible titles.
DirectSound3D Support	DirectSound3D (DS3D) games are supported on your Sound Blaster Live! Player 5.1 card. You can hear sounds positioned in 3D space that enhance your game experience.
A3D 1.0 Support	Your card translates A3D calls into DirectSound3D, meaning that you can enjoy A3D games.
Sound Blaster Compatibility	Your card provides you with exceptional Sound Blaster compatibility so that you can continue to play the thousands of popular DOS games already in the market.
Audio Presets For Legacy/ Existing Games	You can still enjoy audio effects even if your game does not have EAX support. You card bundles over 50 presets for use with existing games. These can be accessed from Creative Launcher. You can also associate effects individually with your favorite games. Launch the AutoEAX applet.
Customised environments for non-3D audio games	You can create customised environments for your non EAX games using the EAX Control panel, which can be accessed from Creative Surround Mixer.

A

General Specifications

This section lists the specifications of your card.

Features

PCI Bus Mastering		PCI Specification Version 2.1 compliant
		Bus mastering reduces latency and speeds up system performance
EMUIOKI		Advanced hardware accelerated digital effects processing
		32-bit digital processing while maintaining a 192 dB dynamic range
		Patented 8-point interpolation that achieves the highest quality of audio reproduction
		64-voice hardware wavetable synthesizer
		Professional-quality digital mixing and equalization
		Up to 32 MB of sound RAM mapped to host memory
Stereo Digitized Voice Channel		True 16-bit Full Duplex operation
		16-bit and 8-bit digitizing in stereo and mono modes
		Playback of 64 audio channels, each at an arbitrary sample rate
		ADC recording sampling rates: 8, 11.025, 16, 22.05, 24, 32, 44.1 and 48 kHz
		Dithering for 8-bit and 16-bit recording

AC '97 Codec Mixer		Mixes EMU10K1 audio sources and analog sources such as CD Audio, Line In, Microphone, Auxiliary and TAD		
		Selectable input source or mixing of various audio sources for recording		
		16-bit Analog-to-Digital conversion of analog inputs at 48 kHz sample rate		
Volume Control		Software record and playback control of Master, Digitized Voice, and inputs from MIDI device, CD Audio, Line, Microphone, Auxiliary, TAD, SPDIF, Wave/DirectSound device, CD Digital (CD SPDIF)		
		Separate bass and treble control		
		Front and Rear Balance control		
		Muting and balance control for individual playback sources		
Dolby Digital (AC-3) Decoding		Decodes Dolby Digital (AC-3) to 5.1 channels or pass-through compressed Dolby Digital (AC-3) PCM SPDIF stream to external decoder		
		Bass Redirection: Enhances bass output to subwoofer for small satellite speaker systems		
Creative Multi Speaker		Multi-speaker technology		
Surround™ (CMSS™)		Professional-quality panning and mixing algorithm		
		Upmixes mono or stereo sources to 5.1 channels		

Connectivity

Sound Blaster Live! Player

5.1 card

Audio Inputs	 One line-level analog Line input via stereo jack on rear bracket One mono Microphone analog input via stereo jack on rear bracket CD_IN line-level analog input via 4-pin Molex connector on card AUX_IN line-level analog input via 4-pin Molex connector on card TAD line-level analog input via 4-pin Molex connector on card CD_SPDIF digital input via 2-pin Molex connector on card, accepting sampling rates of 32, 44.1 and 48 kHz
Audio Outputs	 ANALOG/DIGITAL OUT via 4-pole 3.5mm minijack on rear bracket ANALOG OUT: Center and Subwoofer channels DIGITAL OUT: Front, Rear, Center and Subwoofer SPDIF digital outputs Three line-level analog outputs via stereo jacks on rear bracket, Line-Outs 1, 2 and 3 Stereo headphone (32-ohm load) support on Front Line-Out
Interfaces	 D-Sub MIDI interface for connection to external MIDI devices. Doubles as Joystick port AUD_EXT 2x20 pin header for connection to Live! Drive

SB Emulation in MS-DOS/ Windows 95/98/ME

Background

Legacy games in the market have been designed for only MS-DOS. SB Live! supports MS-DOS games. There are two ways to play MS-DOS games:

□ From the MS-DOS box in Windows 95/98/ME (recommended)

To open the box:

• Click Start -> Programs -> MS-DOS Prompt.

□ In the Windows 95/98 MS-DOS mode

There may be times when you do not want to or cannot run a game from the MS-DOS box. The game may be incompatible with Windows 95/98, or there are insufficient system resources to play the game with Windows 95/98 loaded. In such cases, use the MS-DOS mode, in which only the real-mode portions of Windows 95/98 are loaded.

To restart the system in MS-DOS mode when you are already in Windows 95/98:

- 1. Click Start -> Shut Down.
- 2. Click the **Restart the computer in MS-DOS mode** option button, and then click the **OK** button.

To start the system in MS-DOS mode at system startup:

- 1. At startup as Windows 95/98 is loading, hold the F8 key.
- 2. At the startup menu, choose the Command Prompt Only option, and then press <Enter>.

Understanding the Installation Program

The installation program modifies your AUTOEXEC.BAT and CONFIG.SYS files.

The AUTOEXEC.BAT File Settings

The installation program adds the following statements to the AUTOEXEC.BAT SET CTSYN=C:\WINDOWS SET BLASTER=A220 I5 D1 H5 P330 T6 C:\PROGRA~1\CREATIVE\SBLIVE\DOSDRV\SBEINIT.COM	file:
The first two statements set up the environment variables for your audio card. For of the variables, see "Environment Variables" on page B-5.	or an explanation
The third statement runs SBEINIT.COM which is the SB Live! MS-DOS drive for the SB Live! card to function properly under MS-DOS mode.	r. It is required
SBEINIT.COM requires the HIMEM.SYS and EMM386.EXE files to be loade installation program adds the necessary HIMEM.SYS and EMM386.EXE lines CONFIG.SYS file, creating the file if it is not present.	d. If needed, the s to your
On the rare occasion a program does not work with expanded memory, simply parameter to your memory manager. For example: DEVICE=C:\WINDOWS\EMM386.EXE_NOEMS	add the NOEMS
You may load this driver into high memory in the AUTOEXEC.BAT file, even default is not. For example: LOADHIGH=C:\PROGRA~1\CREATIVE\SBLIVE\DOSDRV\SBEINIT.COM	though the
Do not remove the memory manager altogether. Do not attempt to load SBEIN high memory when using the NOEMS option if SBEINIT.COM fails to run SB SBECFG.EXE. In the rare case that an MS-DOS game will not work with a me you will not be able to use the SB Live! card with the game.	IT.COM into ELOAD.EXE or emory manager,

The CONFIG.SYS File Settings

System Resource Settings



In the following tables, the preferred values are in bold.

Input/Output (I/O) Addresses

The installation program adds the following statements to the CONFIG.SYS file: DEVICE=C:\WINDOWS\HIMEM.SYS DEVICE=C:\WINDOWS\EMM386.EXE

This section explains the following software SB emulation resources—not hardware resources of your card:

□ Input/Output (I/O) Addresses

- □ Interrupt Request (IRQ) Line
- Direct Memory Access (DMA) Channel

If your card encounters a conflict with a peripheral device, you may need to change its resource settings. For details, see "Resolving I/O Conflicts" on page C-7. When any resource setting is changed, make sure that the environment variables (see "Environment Variables" on page B-5) reflect the changes as well. You can view your system environment by typing **SET** at the DOS prompt.

I/O addresses are communication areas used by your computer's central processor to distinguish among various peripheral devices connected to your system when sending or receiving data.

Table B-1: Possible default input/output (I/O) addresses.

Device	Default I/O Address Range
SB interface	220H to 22FH 240H to 24FH 260H to 26FH 280H to 28FH
MPU-401 UART MIDI interface	300H to 301H 310H to 311H 320H to 321H 330H to 331H

Table B-1: Possible default input/output (I/O) addresses.

Device	Default I/O Address Range
Stereo music synthesiser	388H to 38BH

Interrupt Request (IRQ) Line

An IRQ line is a signal line that a device uses to notify your computer's central processor that it wants to send or receive data for processing.

Table B-2: Possible default interrupt request (IRQ) line assignment.

Device	Default IRQ Line
SB interface	5 , 7, 9, 10

Direct Memory Access (DMA) Channel A DMA channel is a data channel that a device uses to transfer data directly to and from the system memory.

Table B-3: Possible default direct memory access (DMA) channel assignment.

Usage	Default DMA Channel
First DMA channel	0, 1, 3
Second DMA channel	5 , 6, 7

Environment Variables	Environment your system. CTSYN H BLASTE	variables are used to pass hardware configuration information to the software in For MS-DOS, your audio card includes the following: Environment Variable R Environment Variable
CTSYN Environment Variable	The CTSYN environment variable points to the location of the CTSYN.INI file, which usually resides in the Windows directory. The syntax for this variable is as follows: CTSYN=path	
	where path is	the location of the CTSYN.INI file.
BLASTER Environment Variable	The BLASTER environment variable specifies the base I/O address, IRQ line, and DMA channels of the SB interface. Its syntax is: BLASTER=A220 I5 D1 H5 P330 T6 The parameters in the command are as follows.	
	Parameter	Specifies
	Axxx	SB interface's base I/O address.
	Ix	IRQ line used by the audio interface.
	Dx	First DMA channel used by the audio interface.
	Hx	Second DMA channel used by the audio interface.
	Pxxx	MPU-401 UART interface's base I/O address.
	Tx	Card type. x must be 6.

Determining Resources

To find the current SB Live! SB16 Emulation resources in Windows 95/98:

- 1. Click Start -> Settings -> Control Panel.
- 2. In the Control Panel window, double-click the System icon.
- 3. In the System Properties dialog box, click the Device Manager tab.
- 4. Double-click **Creative Miscellaneous Devices**, and then double-click **Creative SB Live! SB16 Emulation**.
- 5. Click the **Resources** tab.

You can use the information in the resource list to help you configure MS-DOS games for use with the SB Live! card.

The resource list may show three entries of "Input/Output Range" and two entries of "Direct Memory Access". They correspond to the sequence of entries in Table B-1 and Table B-3. If the number of entries do not match, a good estimate of the identity of the device is its I/O address or DMA channel.

To find the current SB Live! SB16 Emulation resources in MS-DOS mode:

- 1. Switch to your SB Live! DOS driver directory, that is: C:\PROGRA~1\CREATIVE\SBLIVE\DOSDRV
- 2. Type **SBECFG** and then press <Enter>.

Some older games may have difficulty detecting the SB Live! card at certain resource settings. Typically, these games expect the card to be at a fixed set of resources and would fail to load if those resources are not detected. If you have older MS-DOS games that do not work properly, try changing the SB Live! SB16 Emulation configuration. Use the following as a guide:

Problem: Sound Blaster emulation is not recognised.

Solution: Try switching the SB Emulation IRQ between 5 and 7, use DMA channel 1, use SB interface port 220.

Problem: The MPU-401emulation is not recognised. **Solution:** Try using Port address 330.



The MS-DOS driver SBEINIT.COM must be running for SBECFG.EXE to work properly.

Selecting the Best Audio Options in a Game

Most MS-DOS-based games that provide sound have some procedure for audio setup. These procedures generally allow you to choose from a list of popular audio cards or audio devices.

Games may present audio options differently. Some may present a single choice that corresponds to a particular audio device; for example, Sound Blaster 16, Roland Sound Canvas, etc. Others provide an option for music and digital audio separately; for example, General MIDI music with Sound Blaster digital audio. In such a case, there are often two separate menus to configure.

Some games allow you to set the MIDI port address and IRQ for music and sound. Make sure that these settings correspond to the values displayed by SBECFG.EXE or the Resources tabbed page of the Creative SB Live! SB16 Emulation Properties dialog box.

There are games that offer MPU-401/Roland (General MIDI or MT-32/LAPC-1) as an option. Often these games allow you to set the MIDI port address. Make sure that they match the MIDI address in the Resources list on Resources tabbed page of the Creative SB Live! SB16 Emulation Properties dialog box. The same values can be found under "MPU-401 (General MIDI, Roland MT-32/LAPC-1) Emulation", displayed by SBECFG.EXE in MS-DOS mode. Remember to enable the MT-32 MIDI patch with the SBEMIXER program if you select Roland MT-32 or LAPC-1 for music.

Music OptionsMost MS-DOS games offer a menu choice for sound when they start up. If you have a choice
between General MIDI and MT-32, always choose General MIDI, since it will provide you with
the best sound quality. If you need to use MT-32, you must first switch from the General MIDI
instrument set (the default) to the MT-32 instrument set using SBEMIXER. Be sure to switch
back to the General MIDI set when you are finished using the MT-32 instrument set.

Digital Audio Options

ns SB Live! supports Sound Blaster, Sound Blaster Pro, Sound Blaster 16, and Adlib digital audio emulation. If an application provides all these as options, specify the choices in this order:

- 1. Sound Blaster 16
- 2. Sound Blaster Pro
- 3. Sound Blaster
- 4. Adlib

The SB Live driver SBEIN	! card includes a few MS-DOS utilities. These utilities require the SB Live! DOS NIT.COM to be loaded.
 Use the SBECFG.EXE utility to obtain the hardware settings and the status of the SB Live! card.Typing SBECFG.EXE at the command prompt displays the following hardware settings: PCI Hardware Settings: Port, IRQ Sound Blaster Emulation: Port, IRQ, DMA MPU-401 Emulation (GM, Roland MT-32/LAPC-1) Emulation: Port Adlib Emulation: Port The emulation settings appear only if they are enabled. 	
 Use SBEMIXER.EXE to change the volume levels of the MPU-401 instrument set used on the SB Live! card. You can use SBEMIXER.EXE from the command line—useful for advanced users who want to set up batch files with particular volume levels—or within the SBEMIXER screen. The settings for SBEMIXER.EXE are independent of the Creative Mixer settings in Windows 95/98. <i>To set SBEMIXER values in the command line:</i> At the DOS prompt, type the SBEMIXER command in a single line. Its syntax is: SBEMIXER [/S:x] [/W:x] [/C:x] [/M:x] [/?] where square brackets [] denote optional parameters, and: 	
	The SB Live driver SBEIN Use the SBE card.Typing 3 PCI Hard Sound Bl MPU-400 Adlib Em The emulation Use SBEMIN SB Live! car users who was screen. The s Windows 95. <i>To set SBEMI</i> At the DOS 1 SBEMI where square This Parameter /S:x /W:x /C:x /M:x /?

	An example of an SBEMIXER command is		
	SBEMI	XER /S:64 /W:120 /C:50 /M:0	
	which corresponds to "set the synth volume to 64, the Wave volume to 120, the CD audio volume to 50, and turn off the Synth MT-32/LAPC-1 mode".		
	To set SBEMIXER values within the Mixer screen:		
	At the DOS prompt, type SBEMIXER		
	The interactive editor mode allows you to change the mixer settings with the mouse, <tab>, <pgup>, <pgdn>, or arrow keys.</pgdn></pgup></tab>		
	Use the Save button to save the settings for the next session.		
SBESET.EXE	Use SBESET.EXE to manually configure SB resources or disable SB Emulation. By default, SB Emulation in DOS follows the Windows settings. For example, if you disable SB Emulation in Windows, in the next boot to DOS, SB Emulation in DOS disabled. Under rare circumstances you may need to manually reconfigure DOS SB Emulation, for example, if there is conflict in DOS before it can boot to Windows. SBESET.EXE is run from the command line.		
	To set SBESET values in the command line:		
	At the DOS prompt, type the SBESET command in a single line. Its syntax is:		
	SBESET [-Axxx] [-Ix] [-Dx] [-Hx] [-Pxxx] [-dx] [-wx]		
	where square brackets [] denote optional parameters, and:		
	This		
×	Parameter	Specifies	
	-Axxx	SB interface's base I/O address.	
See "System Resource	-Ix	IRQ line used by the audio interface.	
Settings" on page B-3 for a list	$-\mathbf{D}x$	First DMA channel used by the audio interface.	

-H*x* Second DMA channel used by the audio interface.

of the possible values.

-Pxxx	MPU-401 UART interface's base I/O address.
-dx	SB Emulation mode. For x , 1 is Off, 0 is On.
-wx	Set x to 1 to use the Windows-assigned resource configuration. Set x to 0 to use (your) user-assigned resource configuration.

An example of an SBESET command is

SBESET -A240 -I5 -D3 -w0

which corresponds to "set the SB interface's base I/O address to 240, the IRQ line used by the audio interface to 5, the First DMA channel used by the audio interface to 3, and use the Windows-assigned resource configuration".

Use this to confirm whether SB16 Emulation is properly installed and working.

SBEGO.EXE

C

Troubleshooting

This appendix provides tips for solving problems you may encounter during installation or normal use.

Problems Installing Software

In Windows, the installation does not start automatically after the CD-ROM is inserted.

The AutoPlay feature in your Windows system may not be enabled.

To start the installation program through the My Computer shortcut menu:

- 1. Double-click the My Computer icon on your Windows desktop.
- 2. In the My Computer window, right-click the CD-ROM drive icon.
- 3. On the shortcut menu, click AutoPlay and follow the instructions on the screen.

To enable AutoPlay through Auto Insert Notification:

- 1. Click Start -> Settings -> Control Panel.
- 2. In the Control Panel window, double-click the System icon.
- 3. In the **System Properties** dialog box, click the **Device Manager** tab and select your CD-ROM drive.
- 4. Click the Properties button.
- 5. In the Properties dialog box, click the Settings tab and select Auto Insert Notification.
- 6. Click the **OK** button to exit from the dialog box.

Problems With Sound

There is unexpected excessive environmental sound or effects when an audio file is played.

The last selected preset is an inappropriate environment for the current audio file.

To switch to an appropriate environment:

- 1. Open the Environmental Audio control applet in AudioHQ.
- 2. In the Environment list, select "No effects" or an appropriate environment.

No sound from the headphones.

Check the following:

- □ The headphones are connected to the Headphones jack.
- □ Under the **Speaker** view in the Main deck of Surround Mixer, make sure that the Speaker selected is "Headphones".
- □ In the Mixer deck of Surround Mixer, the recording source selected is "What U Hear".

In a 4-speaker configuration, there is no sound from the rear speakers.

Check the following:

- □ The rear speakers are connected to the audio card's Rear Out jack.
- □ If you are playing sound from one of these sources:
 - CD Audio
 - Line In
 - TAD
 - Auxiliary (AUX)
 - Microphone

To solve the problem:

- 1. In Surround Mixer's Mixer deck, make sure the source being played is selected, that is, enabled.
- 2. Select the same source as the record source.



If your record source is "What U Hear", then at any one time, you can only select one of the five sources and mute the others. Therefore, you can get sound from the rear speakers only from the selected source. For example, if you are playing DVD games or movies, make sure that you select the Auxiliary device and select the Auxiliary device as your record source in Surround Mixer.

□ If you have changed environments, make sure that your active sources are selected in Surround Mixer.

No sound from the speakers.

Check the following:

- □ You have connected your speakers to your card's output.
- \Box You have selected the correct source in the Mixer deck.
- □ If both the above conditions have been met and you still do not get any sound, click the **red plus sign** above the **VOL** control and check whether the **Digital Output Only** check box is selected. If it is, you are in the Digital Output Only mode and so must connect to digital speakers to hear the sound from your audio card. See the section on Digital Output Only in Surround Mixer's online help for more information.

No audio output when playing digital files such as .WAV, MIDI files or AVI clips.

Check the following:

- □ The speakers' volume control knob, if any, is set at mid-range. Use Creative Mixer to adjust the volume, if necessary.
- □ The powered speakers or external amplifier are connected to the card's Line Out or Rear Out jack.
- □ There is no hardware conflict between the card and a peripheral device. See "Resolving I/O Conflicts" on page C-7.
- □ The Speaker selection in the Main deck of Surround Mixer corresponds to your speaker or headphone configuration.
- □ The **Original Sound** sliders in either or both the **Master** and **Source** tabbed pages of the Environmental Audio applet are set to 100%.

No audio output when playing CD-Audio or DOS games that require a CD-ROM.

To solve this problem:

• Make sure the Analog Audio connector on the CD-ROM drive and the CD In connector on the audio card are connected.

Panning a source sometimes turns off its sound.

This occurs when you are in the Digital Output Only mode and the source's left-right balance in a software mixer application other than Surround Mixer (for example, the Windows Volume Control application) is at the opposite end compared to the position to which you have panned the source in the Main deck of Surround Mixer. For example, the CD Audio balance in Windows Volume Control is on the left but in Surround Mixer you have panned the CD Audio to the right.

To solve this problem:

• Open that other mixer, and center the balances for all the audio input sources. This ensures that your analog sources will not turn silent when you pan them in Surround Mixer.

The mixer settings change unexpectedly every time the audio preset is changed.

To solve this problem:

- Dissociate the mixer settings.
 - 1. Click the Audio Preset Options icon in the upper right corner of Surround Mixer.
 - 2. To dissociate mixer settings, make sure that **Dissociate Mixer Settings** is checked on the menu that appears.

Problem with Surround Mixer

Insufficient SoundFont Cache



The trade-off of a smaller SoundFont file is its lower sound quality.

Problems With Joystick

There is insufficient memory to load SoundFonts.

This may occur when a SoundFont-compatible MIDI file is loaded or played while insufficient memory has been allocated to SoundFonts.

To allocate more SoundFont cache:

• On the **Options** tabbed page of the SoundFont Control applet, move the SoundFont Cache slider to the right.

The amount of SoundFont cache you can allocate depends on the system RAM available.

If there is still insufficient system RAM available:

 On the Configure Banks tabbed page of the SoundFont Control applet, select a smaller SoundFont bank from the Select Bank box. The smallest SoundFont bank available is 2 MB (2GMGSMT.SF2).

The joystick port is not working.

The audio card's joystick port may be conflicting with the system's joystick port. *To solve this problem:*

- Disable the audio card's joystick port and use the system port instead. Do the following:
 - 1. Click Start -> Settings -> Control Panel.
 - 2. In the Control Panel window, double-click the System icon.
 - 3. In the System Properties dialog box, click the Device Manager tab.
 - 4. Double-click **Sound**, **Video And Game Controllers**, and then select **Creative Gameport Joystick**.
 - 5. Click the **Properties** button.

6. In the Properties dialog box:

If you have an Original Configuration (Current) check box:

• Clear the check box to disable it.

If you have a **Disable In This Hardware Profile** check box:

- Make sure that the check box is selected to disable it.
- 7. Click **OK** to restart Windows and for the change to take effect.

When the Gameport Joystick interface is disabled, the entry in Device Manager has a red cross.

The joystick is not working properly in some programs.

The program may use the system processor timing to calculate the joystick position. When the processor is fast, the program may determine the position of the joystick incorrectly, assuming that the position is out of range.

To solve this problem:

• Increase your system's 8 bit I/O recovery time of the BIOS setting, usually under the Chipset Feature Settings section. Or, if available, you may adjust the AT Bus speed to a slower clock. If the problem persists, try a different joystick.



Do not attempt to make changes to the BIOS unless you have experience with system software.

Resolving I/O Conflicts



You can also refer to the Troubleshooting section in the Help file of Windows 95/98.

Problems in Windows NT 4.0

Conflicts between your audio card and another peripheral device may occur if your card and the other device are set to use the same I/O address.

To resolve I/O conflicts, change the resource settings of your audio card or the conflicting peripheral device in your system using Device Manager in Windows 95/98.

If you still do not know which card is causing the conflict, remove all cards except the audio card and other essential cards (for example, disk controller and graphics cards). Add each card back until Device Manager indicates that a conflict has occurred.

To resolve hardware conflicts in Windows 95/98:

- 1. Click Start -> Settings -> Control Panel.
- 2. In the Control Panel window, double-click the System icon.
- 3. In the System Properties dialog box, click the Device Manager tab.
- 4. Under the Sound, Video And Game Controllers entry, select the conflicting audio card driver—indicated by an exclamation mark (!)—and click the **Properties** button.
- 5. In the Properties dialog box, click the **Resources** tab.
- 6. Make sure that the Use automatic settings check box is selected, and click the OK button.
- Restart your system to allow Windows 95/98 to reassign resources to your audio card and/ or the conflicting device.

A Service Control Manager error message appears with one or more other error messages at system restart.

This occurs after you remove an audio card from your computer after you have successfully installed the Sound Blaster Live! Player 5.1 card. Windows is trying to match the drivers to the removed audio card.

To solve this problem:

1. Log on to your computer as Administrator.

- 2. Click Start -> Settings -> Control Panel.
- 3. Double-click the Multimedia icon, and then click the Devices tab.
- 4. In the list, remove from under these entries
 - Audio Devices
 - MIDI Devices And Instruments

the items other than

- Audio for Creative SB Live!
- MIDI for Creative SB Live!
- MIDI for Creative S/W Synth
- 5. Click the **OK** button to close the dialog box. The drivers are removed.

Problems with Encore DVD Player

The Encore DVD Player is not launched when a DVD disc is inserted into the drive.

To solve this problem:

- 1. In the Windows system tray, right-click the Disc Detector icon, and then click Properties.
- 2. On the **General** tabbed page of the **Creative Disc Detector** dialog box, make sure that **Enable Disc Detector** check box is selected.
- 3. Click the **Players** tab.
- 4. Select the DVD Disc entry and then click the Select Player button.
- 5. In the Players Properties dialog box, click the Browse button.
- Browse to C:\Program Files\Creative\PC- DVD Encore and double-click the entry ctdvdply The Name box now displays the entry *ctdvdply*.
- 7. Click the OK button twice.

Now when you double-click the Disc Detector icon, the Encore DVD Player is launched.