

Xtreme Sound®

USB External Sound Card Digital HD 7.1



External USB 7.1 Channel Sound Box User's Manual

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ABOUT THIS MANUAL

This manual is designed for use with the External USB 7.1 Channel Sound Box. Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. The manufacturer does not make any representations or warranties (implied or otherwise) regarding the accuracy and completeness of this document and shall in no event be liable for any loss of profit or any commercial damage, including but not limited to special, incidental, consequential, or other damage.

SAFETY INSTRUCTIONS

Always read the safety instructions carefully:

- ◆ Keep this User's Manual for future reference.
- ◆ Keep this equipment away from humidity.
- ◆ If any of the following situation arises, get the equipment checked by a service technician:
 - The equipment has been exposed to moisture.
 - The equipment has been dropped and damaged.
 - The equipment has obvious sign of breakage.
 - The equipment has not been working well or you cannot get it to work according to the User's Manual.

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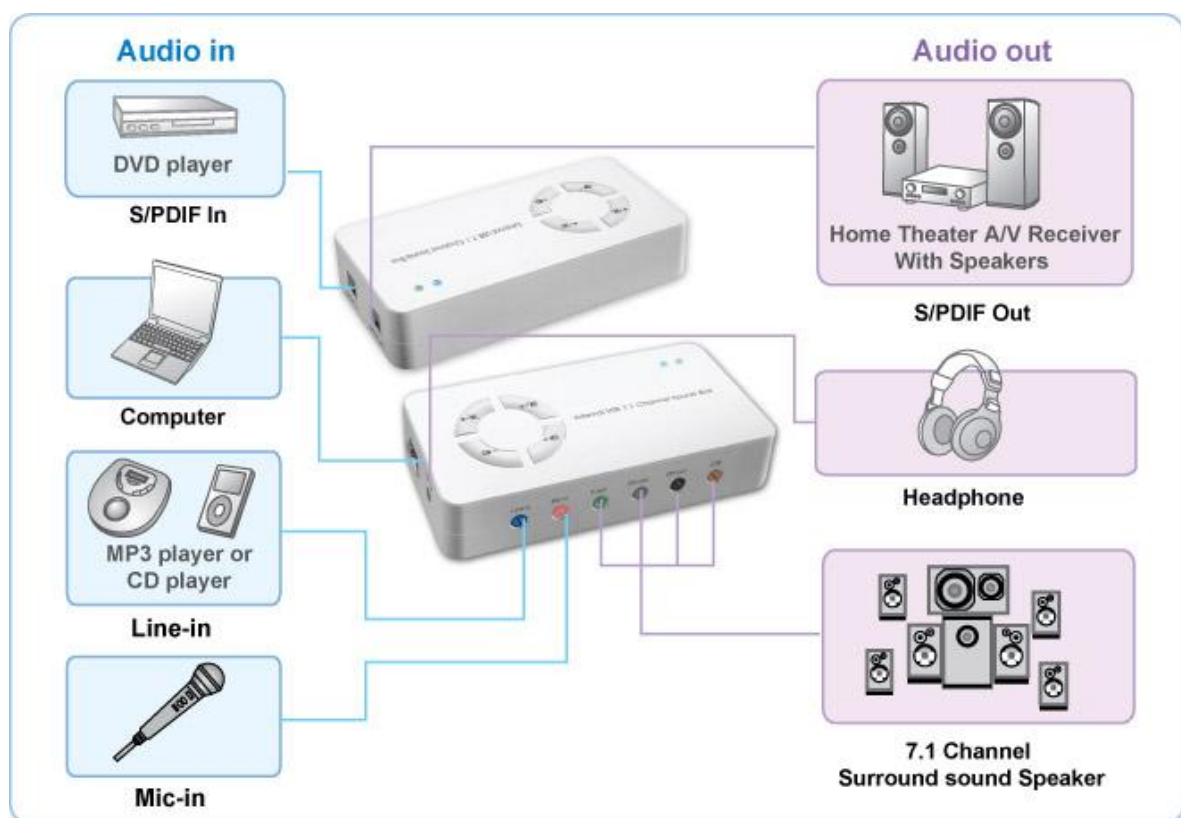
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1. Introduction

The external USB 7.1 Channel Sound Box provides an amazing audio accessory for computer with a USB port. It is equipped with standard input and output connectors to add great stereo performance. The sound box not only combines high quality audio recording and playback capabilities but also allows the connection of most popular audio gear such as microphones, home stereos, musical instruments, amplifiers and powered speakers to your computer with USB ports. It is easy to add stereo 7.1 Channel sound effects to your computer by simply installing plug-and-play operation for PC and Mac.

Note: For Windows® XP, Windows® Vista, Windows® 7 and Windows® 8 users only. The valued driver can support Xear 3D™ to enhance your video gaming experience with improved sound quality. Furthermore, the fantasy magic voice and karaoke functions provide you with additional fun in karaoke parties. You can change the atmosphere by choosing environment sound and the room size can be also selected.



Features

- ◆ Dramatically improves your PC/Computer/Notebook audio quality
- ◆ Auxiliary inputs for microphone, stereo, and other analog sources
- ◆ Volume controlled through your computer or by manually on the adapter
- ◆ USB remote wake-up support
- ◆ Volume up/ Volume down/Playback mute/Record mute HID button
- ◆ Virtual speaker shifter support
- ◆ Plug-and-play operation with Microsoft® OS/ Mac® OS default drivers
- ◆ Full-duplex playback/recording audio stream without sound card in PC
- ◆ Supports suspend/ resume and remote wake-up

Package Contents

- | | |
|--|----|
| ◆ External USB 7.1 Channel Sound Box | x1 |
| ◆ CD (Driver and User's Manual included) | x1 |
| ◆ Quick installation Guide | x1 |
| ◆ USB Type A to Type B Cable | x1 |
| ◆ S/PDIF cable(optional) | |

System Requirements

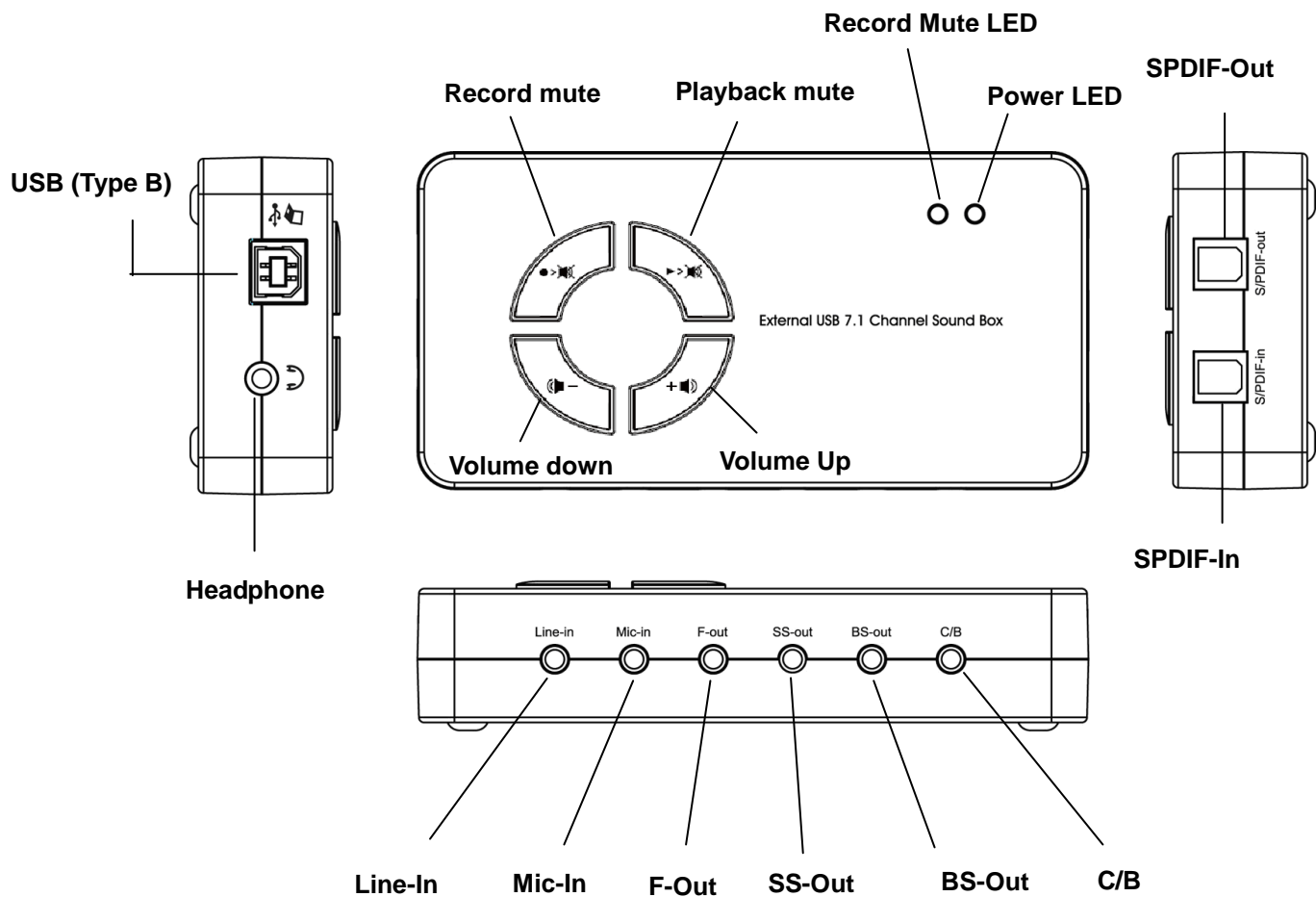
The minimum requirements for the PC are:

- ◆ Intel® Pentium® III or AMD K6 500 CPU above
- ◆ At least 128MB RAM
- ◆ At least 50 MB hard disk space
- ◆ PC or Mac with one USB port
- ◆ With one of the following operation systems :
 - ◆ Windows® 2000, Windows® XP, Windows® Vista, Windows® 7 and Windows® 8
 - ◆ Mac® OS X v10.x or later

2. Using the Adapter

How to Use Your Audio I/O Devices

No external driver installed under OS support of Windows[®] 8, Windows[®] 7, Windows[®] Vista, Windows[®] XP, Windows[®] 2000, and Mac[®]. Simply use a cable line to connect the External USB 7.1 Channel sound box and the available USB port of your PC or MAC and get the External USB 7.1 Channel Sound Box effects directly.



1. 7.1 Channel Speaker

Plug the speaker cable into the speaker/line-out jack as F-out (Front), SS-out (Surround), BS-out (Back) and C/B (Center/Subwoofer) on the USB 7.1 Channel Sound Box.

Notice for Mac® users:

The speaker/line-out jack of 7.1 Channel Rear Surround and 7.1 Channel Surround are F-Out (Front), SS-Out (Back), BS-Out (Surround) and C/B (Center/Subwoofer) respectively.

2. Microphone

Plug the *MONO* microphone into the Mic-in jack on the *USB Audio Adapter*.

3. Stereo Audio Input

Plug the *STEREO* line into the Line-in jack on the *USB Audio Adapter*.

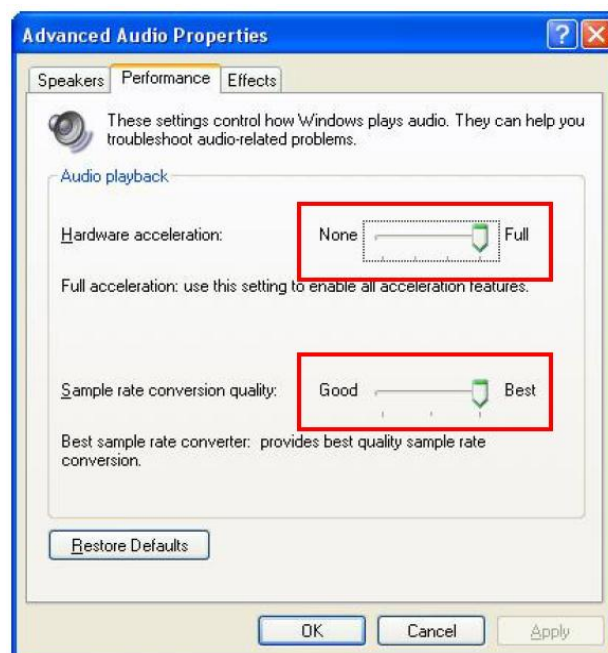
4. Headphone

Plug the Headphone line into the headphone jack on the Sound Box.

5. Power LED Indicator: Lights up when powered on; flash when operation.

Record Mute LED Indicator: Lights up for recording muted, lights off for recording function can be used.

6. To enhance your audio performance, set your audio properties to the **full hardware acceleration** and the best **sample rate conversion quality**.



Note :

Some USB Host Controllers may encounter data stream package loss. And in extreme cases it affects audio output data with discontinuous sound. However, it rarely occurs.

Sometimes, when plugging USB Personal Multimedia Device into PC system the OS cannot auto change audio device to USB audio; please switch the audio device to USB audio sound and audio devices properties in control panel.

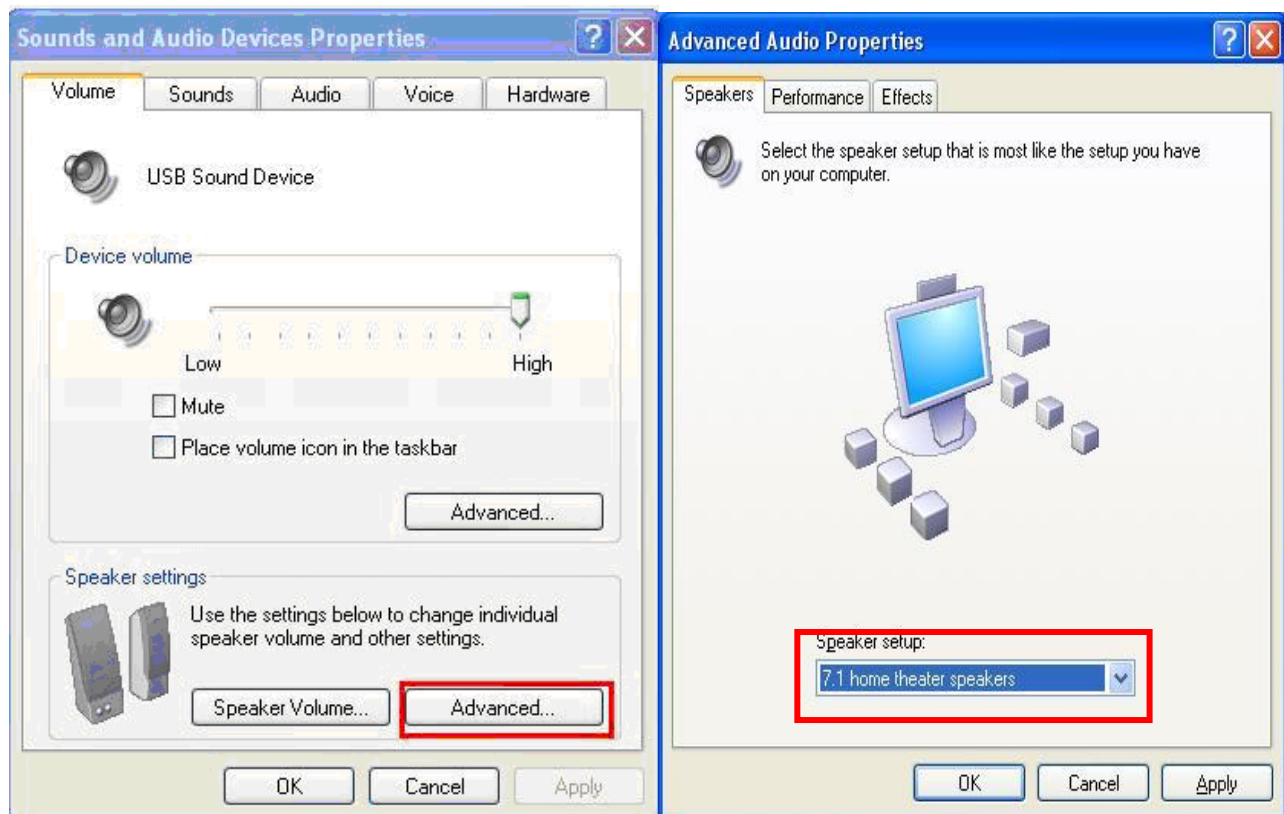


How to Setting 7.1 Surround Sound Speakers

On Windows® 2000 and Windows® XP

Please follow the steps and complete the 7.1 surround sound speakers setting.

My computer > Control Panel > Sounds and Audio Devices > Volume > Speaker Settings > Advanced > Speaker setup > 7.1 surround sound speakers.

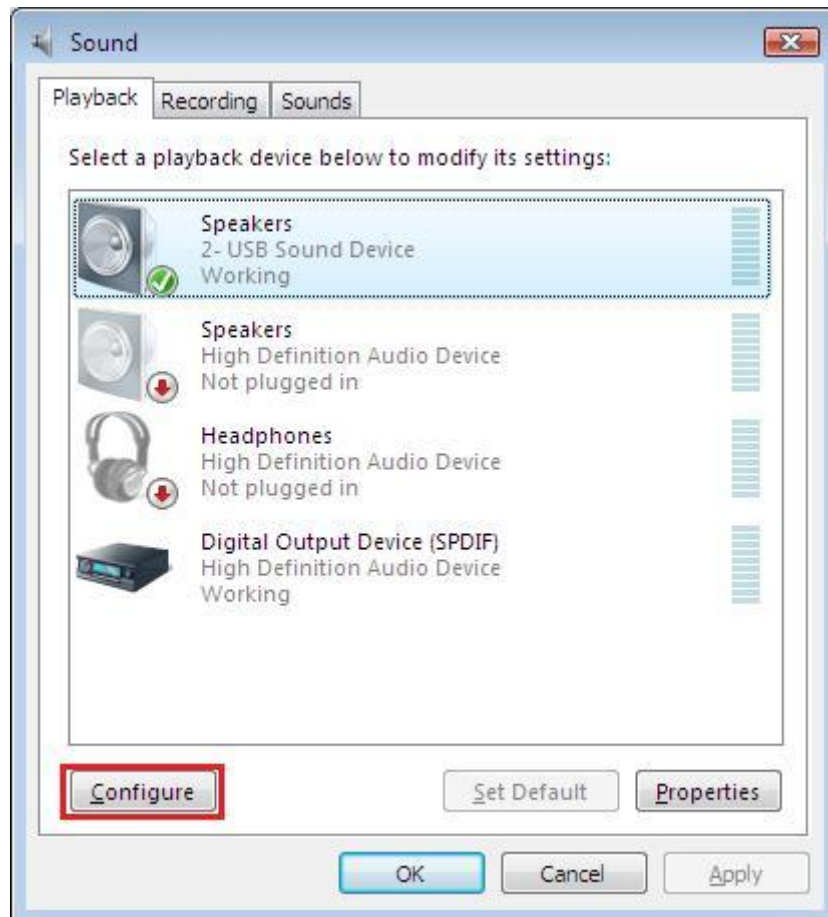


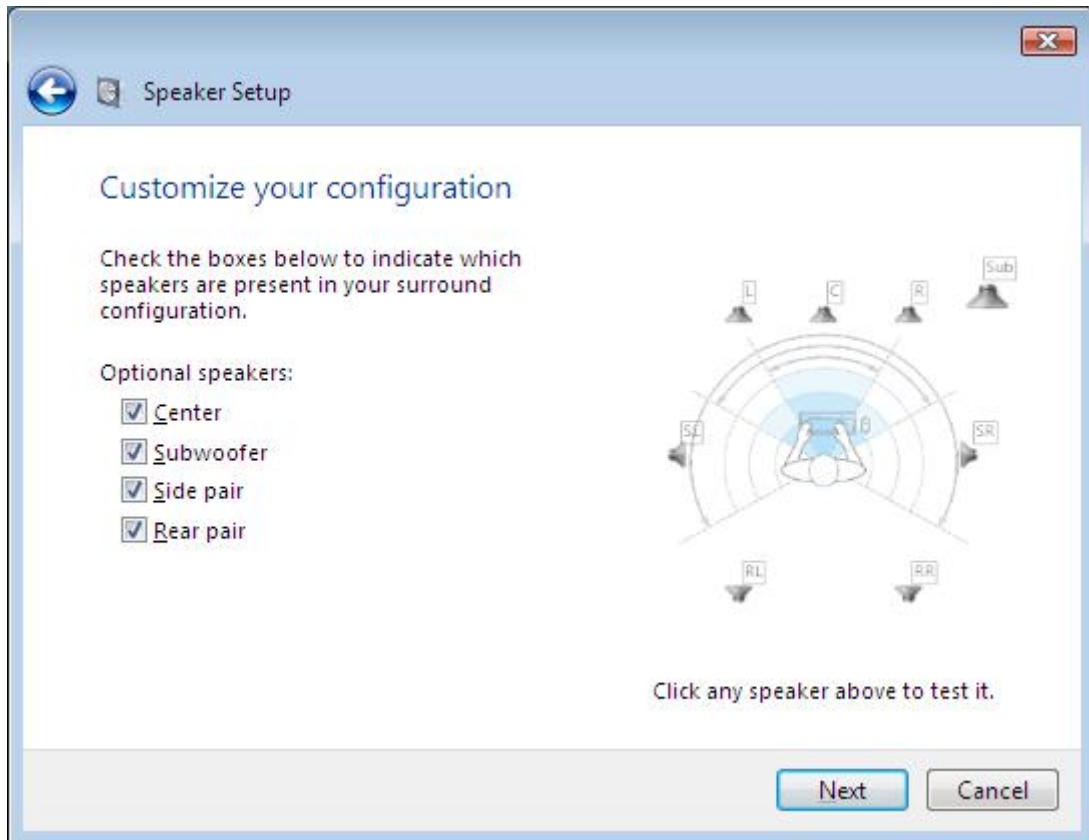
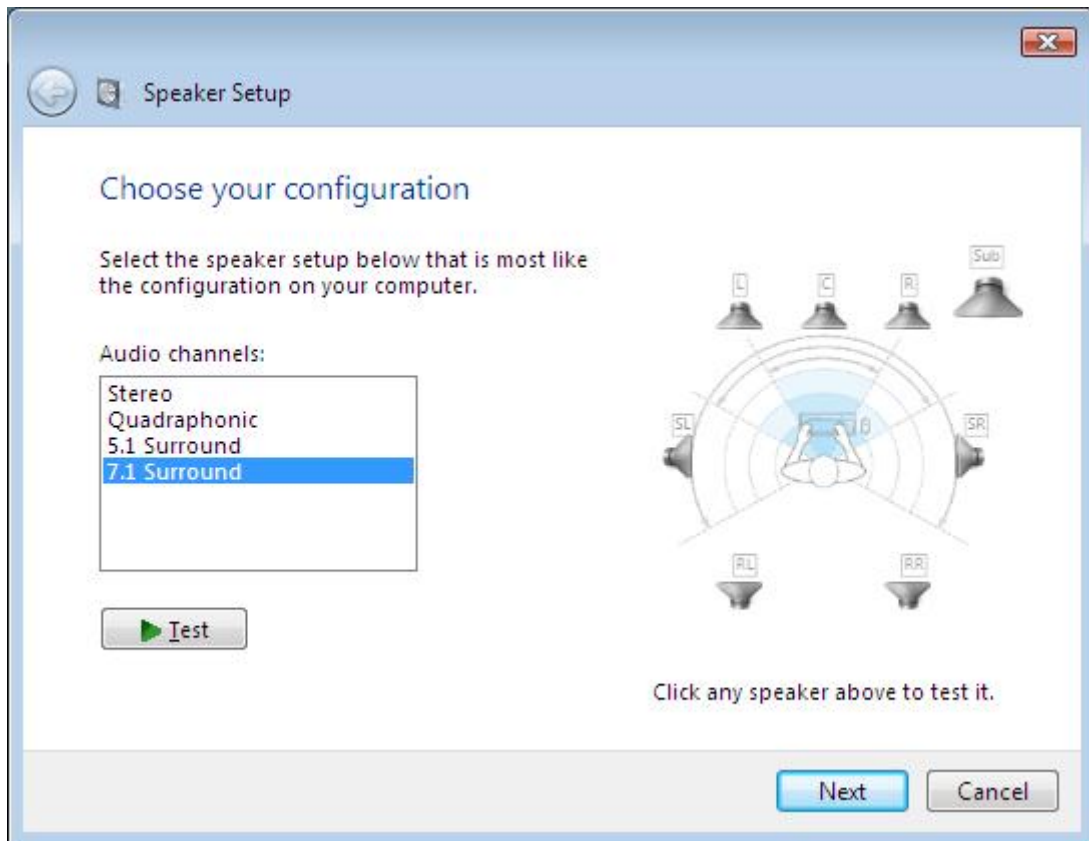
**Actual strings depend on your operation system. These screen shots are from Windows® XP and might vary slightly for each operation system.*

On Windows® Vista

Please kindly follow the steps and complete the 7.1 surround sound speakers setting.

Settings > Control Panel > Hardware and Sound > Playback > Configure > Speaker setup
> 7.1 surround sound speakers.

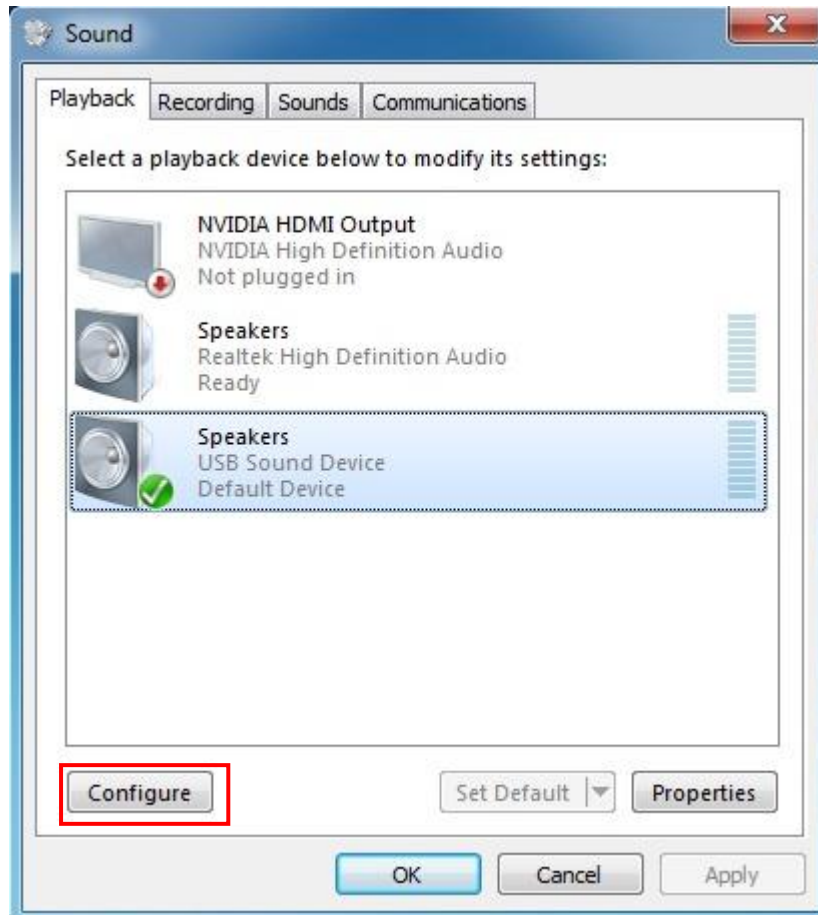


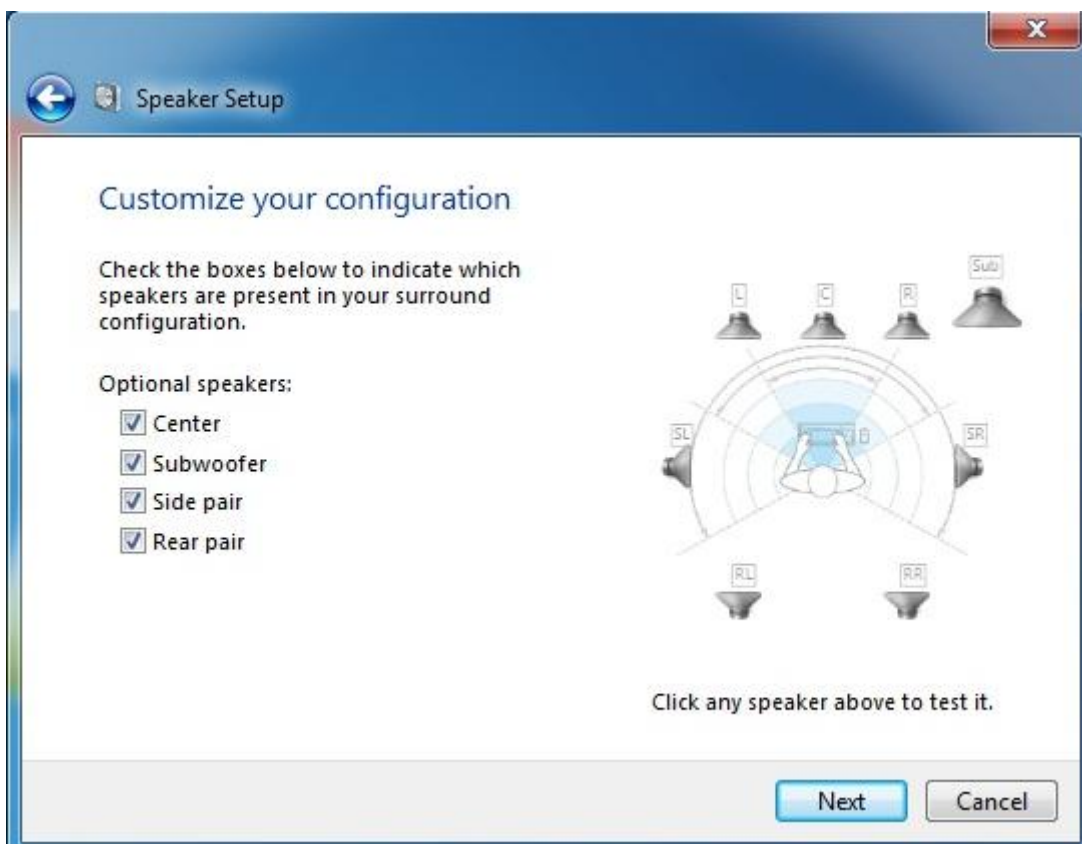
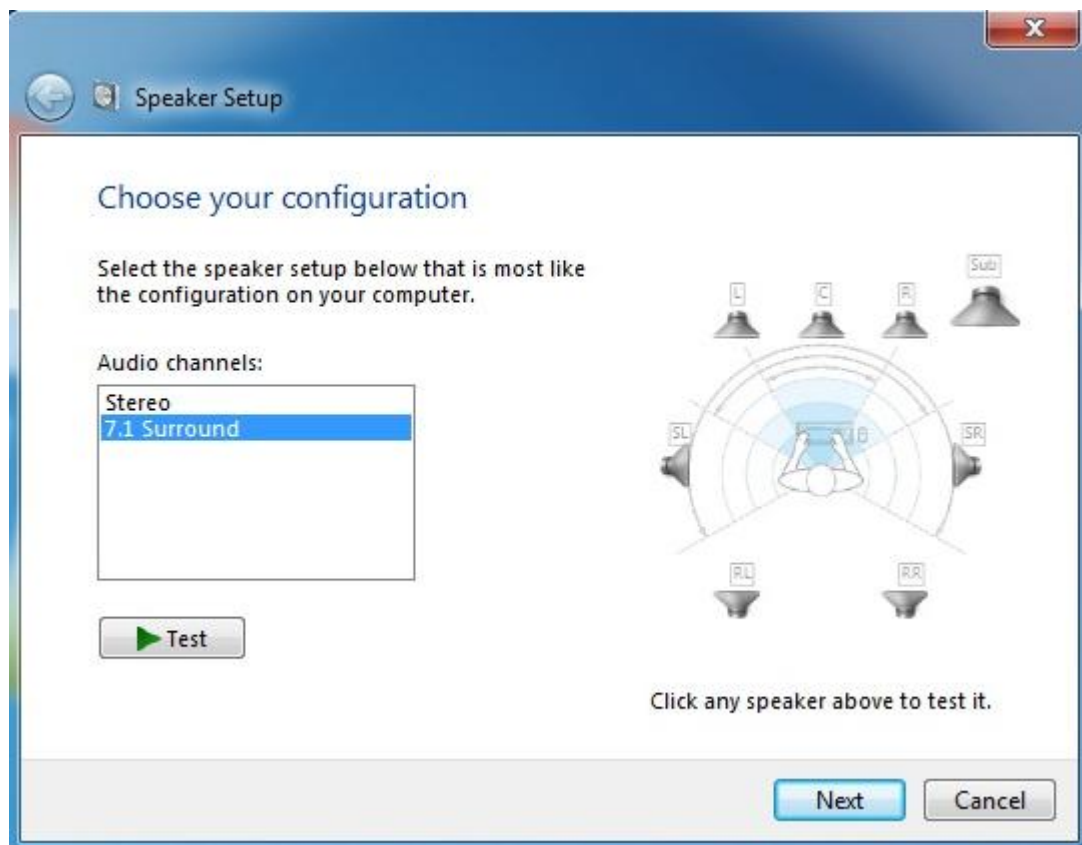


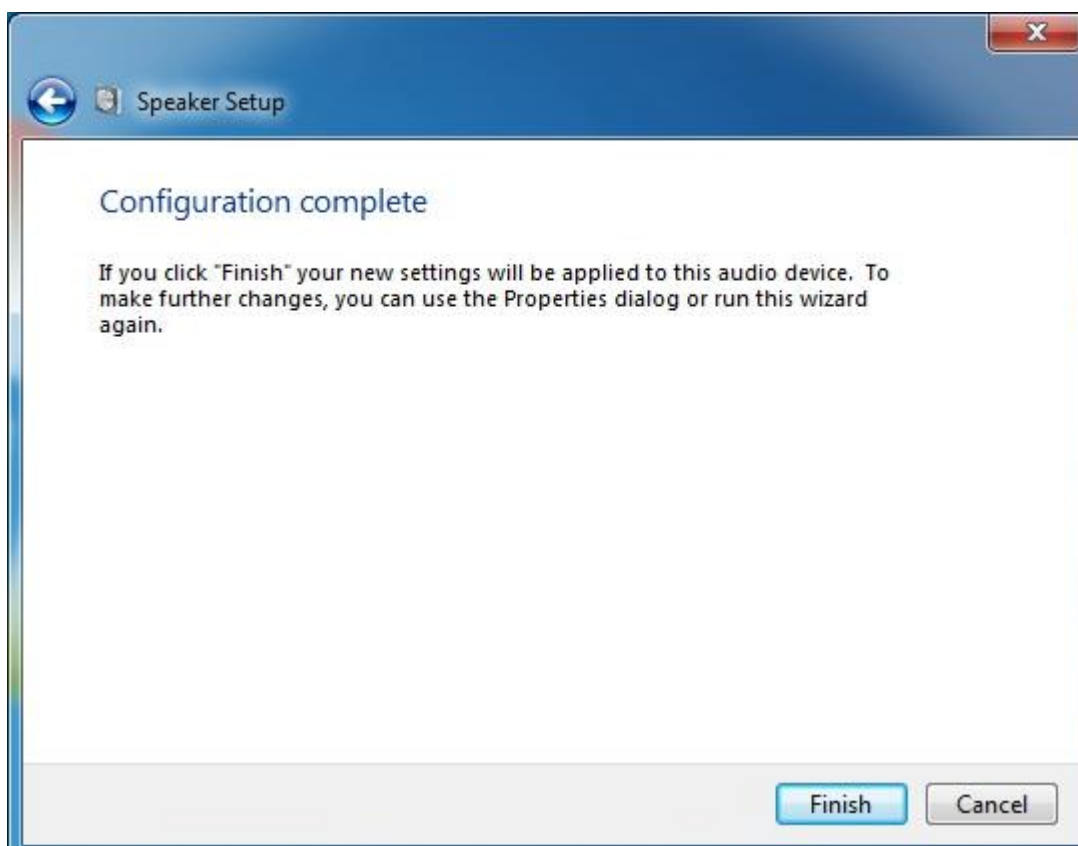
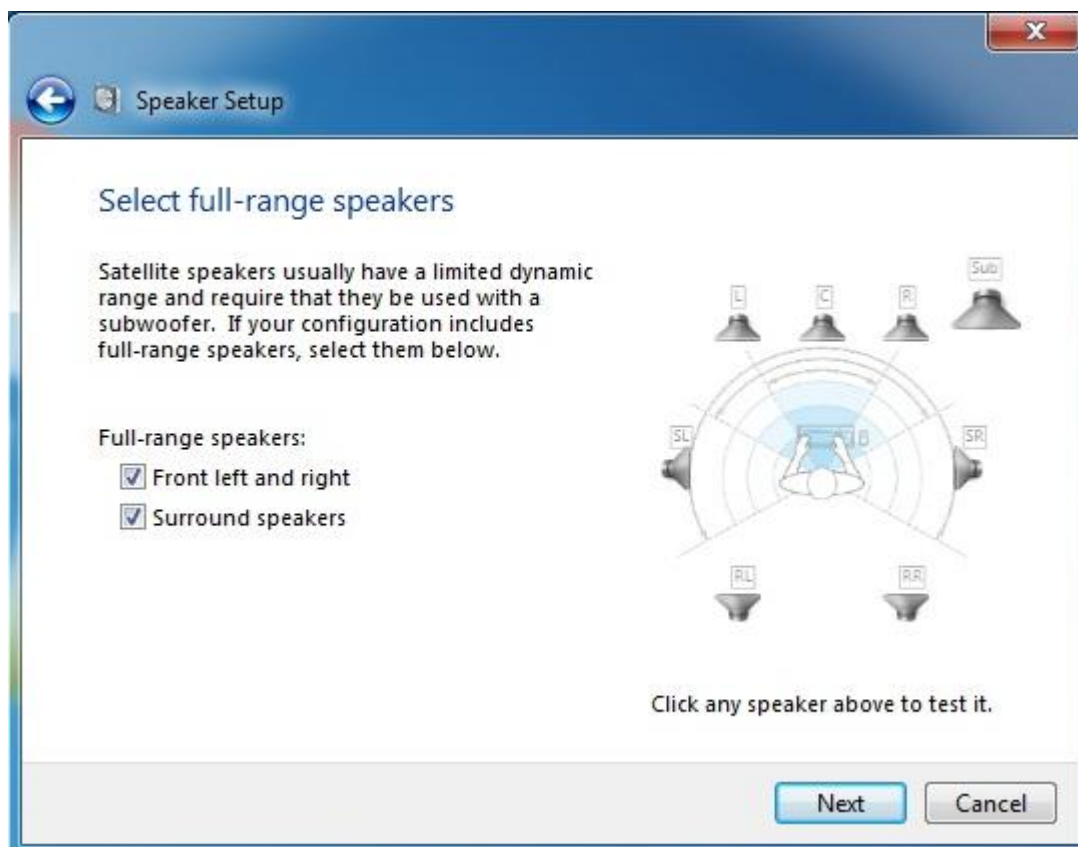
On Windows® 7 / Windows® 8

Please kindly follow the steps and complete the 7.1 surround sound speakers setting.

Settings > Control Panel > Hardware and Sound > Playback > Configure > Speaker setup
> 7.1 surround sound speakers.







On Mac® OS X v10.x or later

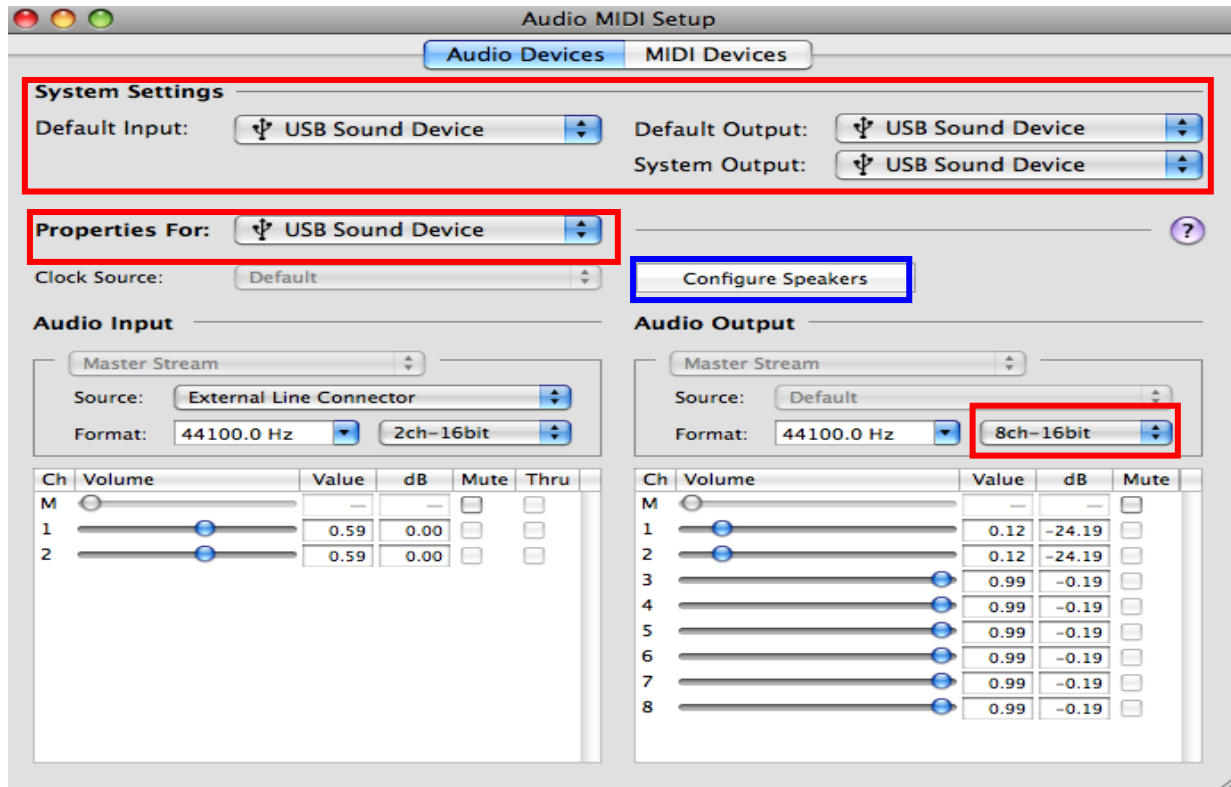
Please kindly follow the steps and finished the 7.1 surround sound speakers setting.

1. Select **Go** first and then chose **Utilities** after, keep select **Audio MIDI Setup** as below screen.

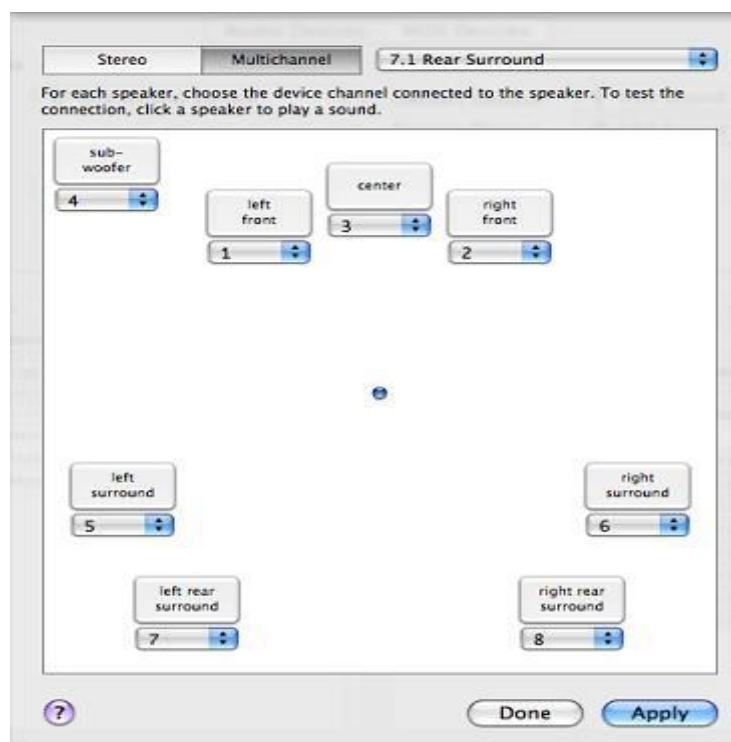


- Under Audio MIDI Setup, open **Audio Devices**, and make sure to choose **USB Sound Device** under **System Settings** and **Properties For**. Also please check that the Audio Output setting's **Format** is set to: **8ch-16bit**.

After the above settings, please select **Configure Speakers** to follow to the next step.

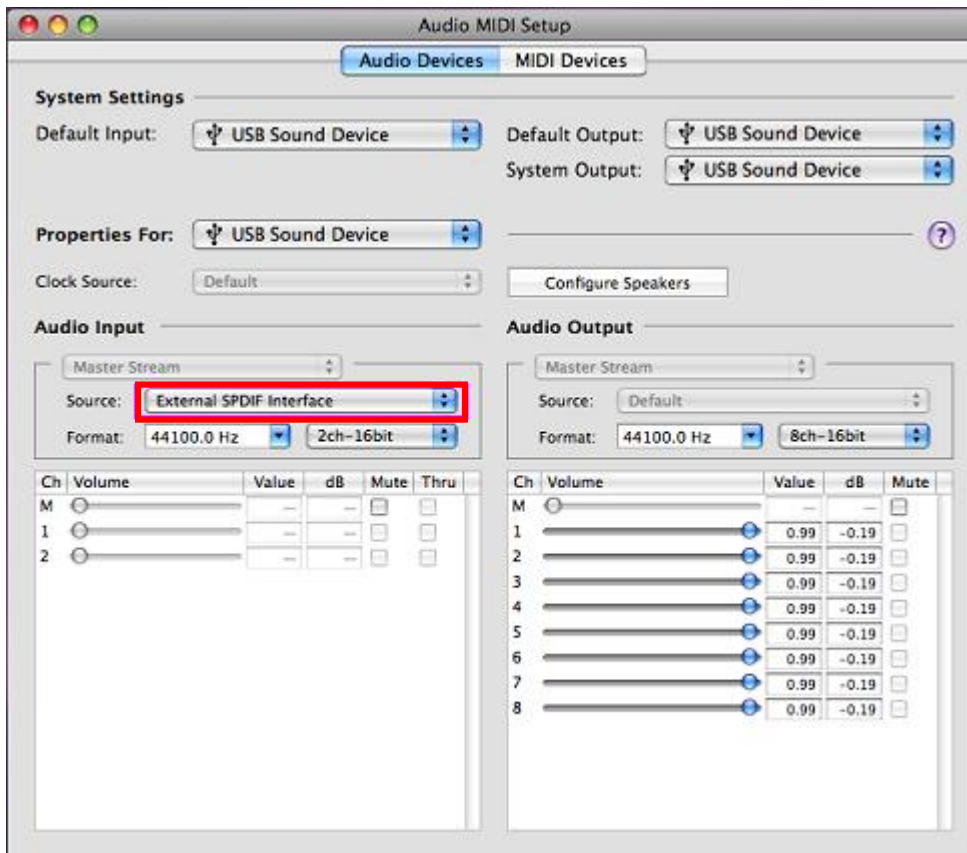


- Select **Multichannel** then chose **7.1 Rear Surround**, and now the setting has finished.



4. Recording Function in SPDIF IN.

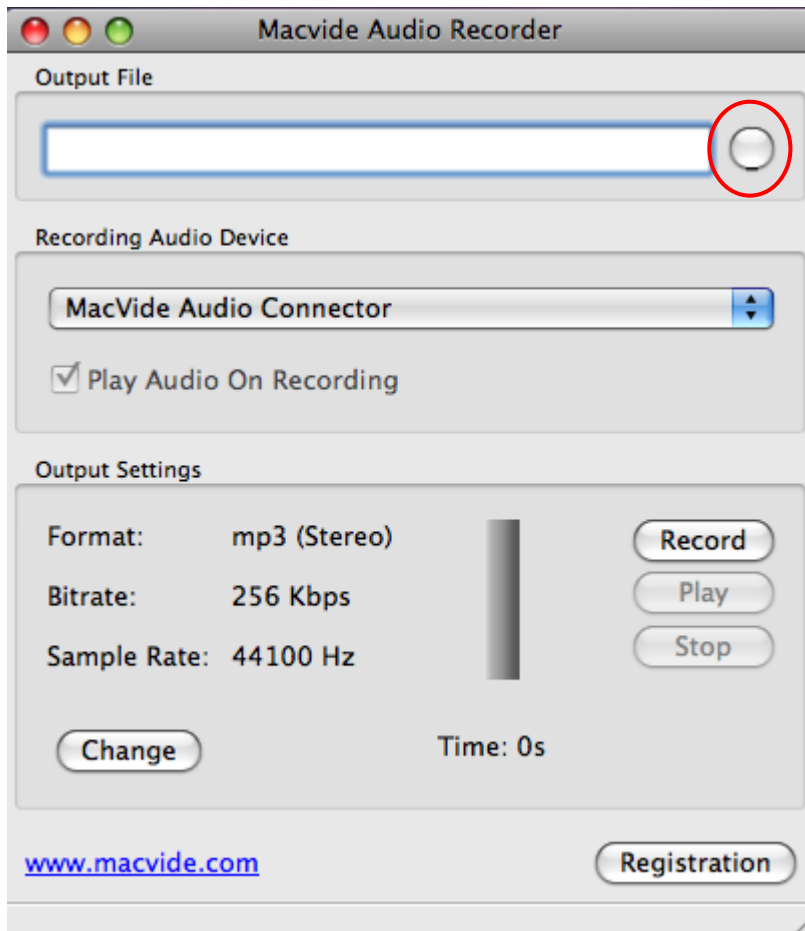
After settings as above, please select **External SPDIF Interface** under source.



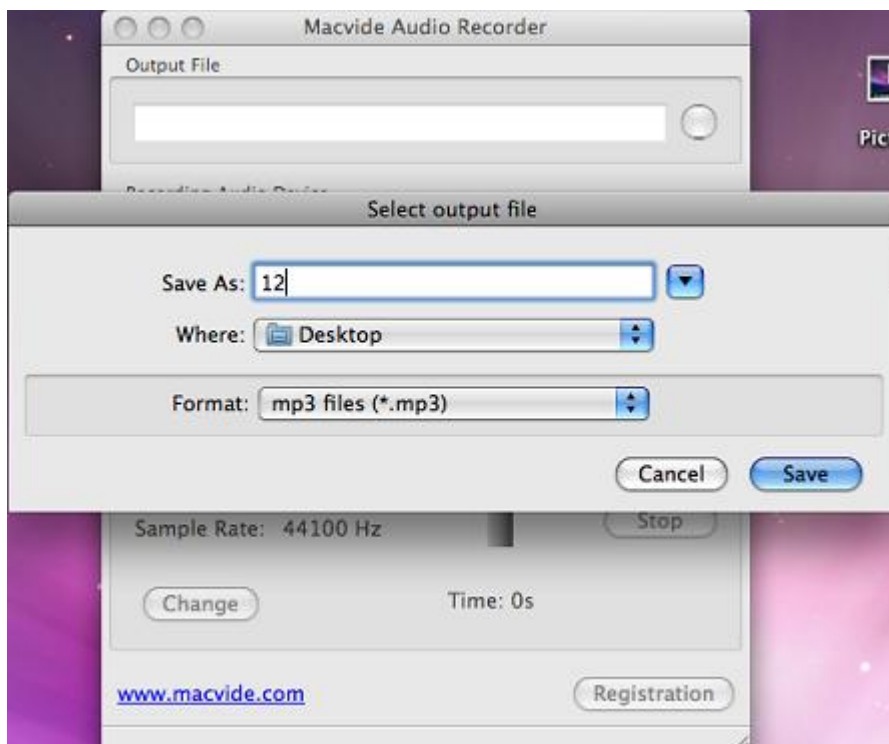
5. Please open Audio Recorder, and double click Audio Recorder.
(The Audio Recorder may vary by different System)。



6. Please click the red circle next to Output File to choose which file you want to save to.



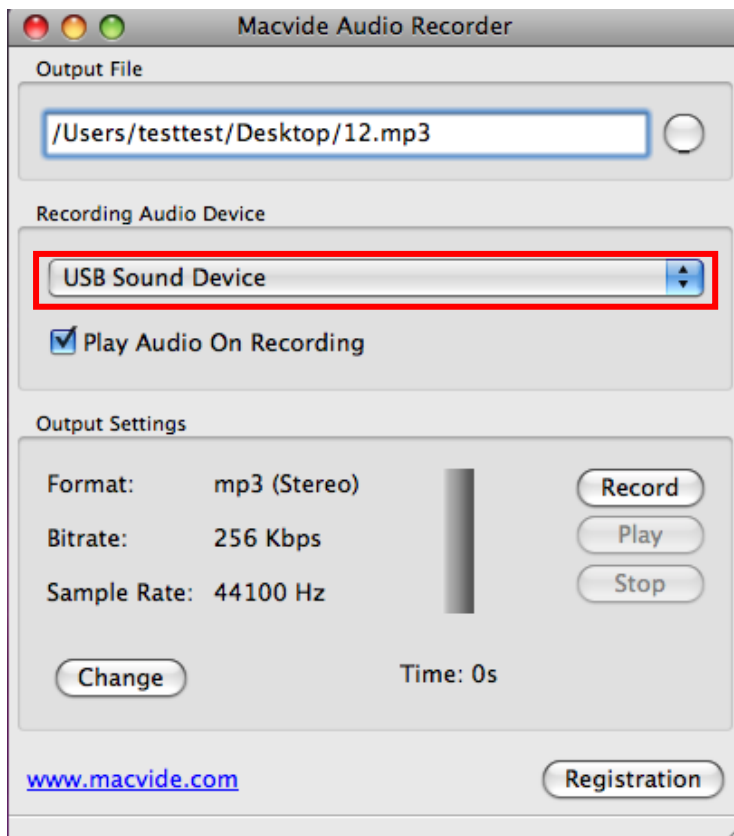
7. Please name the file.



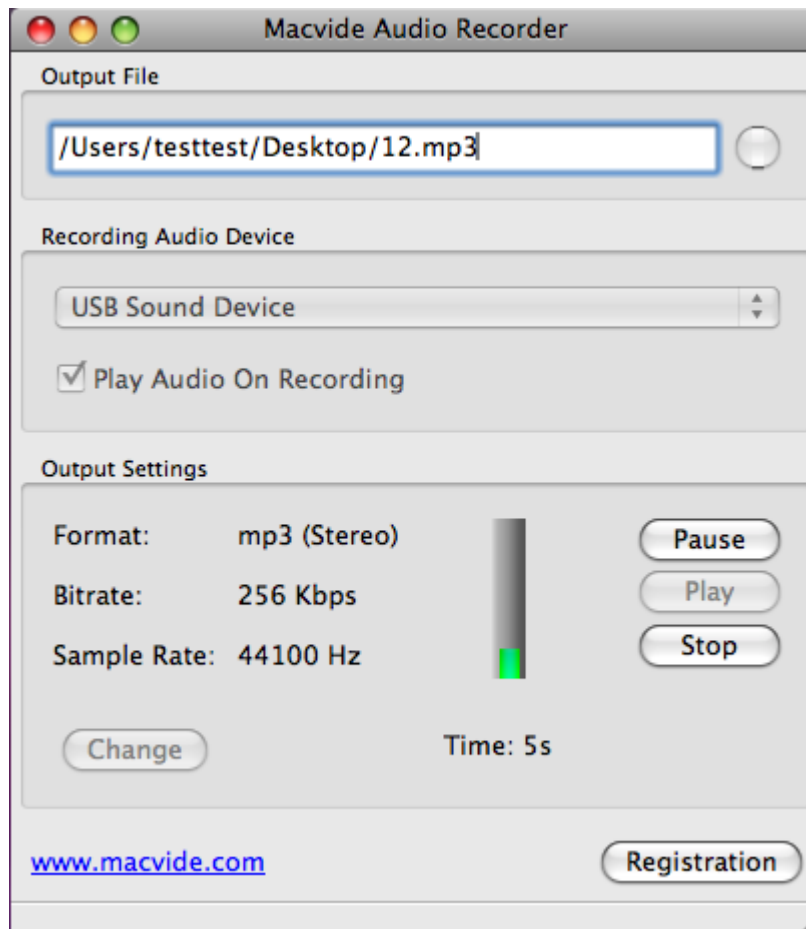
8. Please click save and the following screen will show up.



9. Please choose USB Sound Device under Recording Audio Device.



10. Please click Record to start recording.



3. Application Software Installation

For Windows® XP, Windows® Vista and Windows® 7

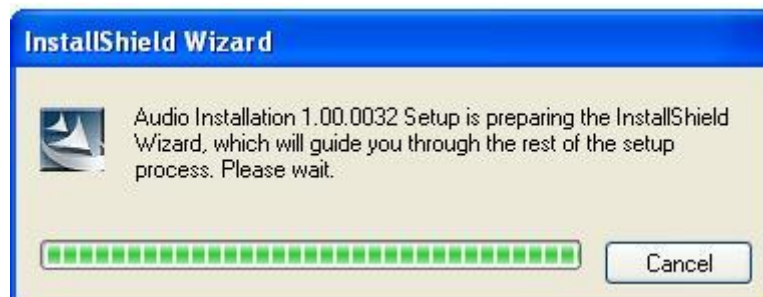
Notice : This application software allows you have extra functions such as Karaoke, microphone echo, magic voice, key shifting and vocal canceling...etc. Supports only Windows® XP, Windows® Vista, Windows® 7 and Windows® 8.

Connect the adapter first and then follow the procedures below to install the driver.

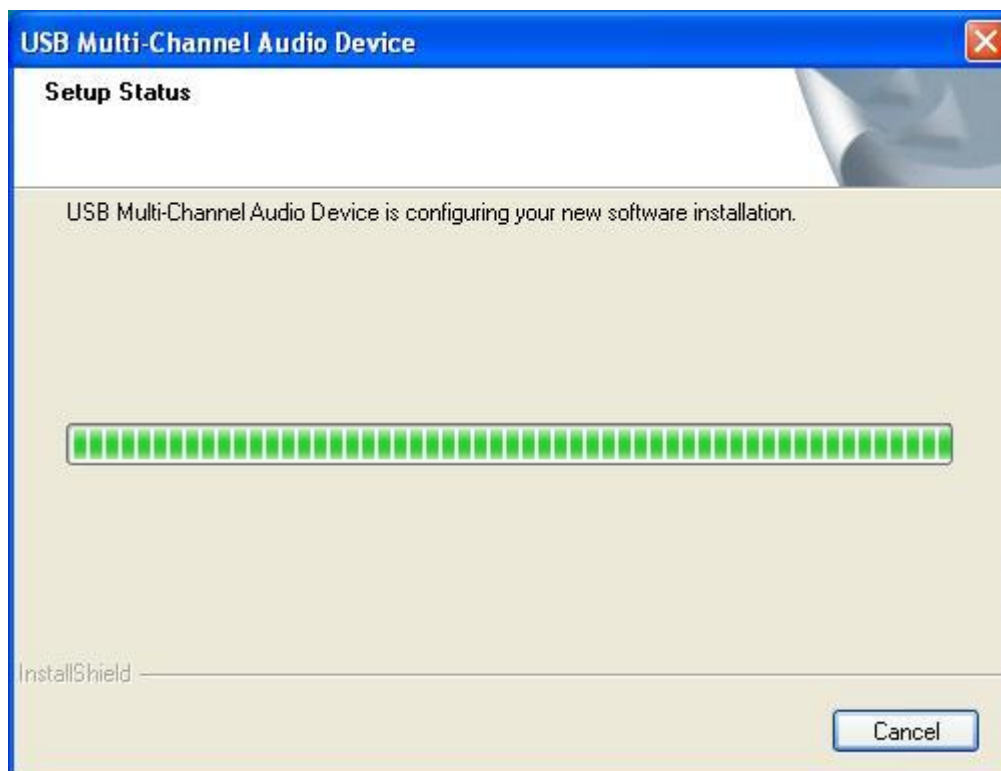
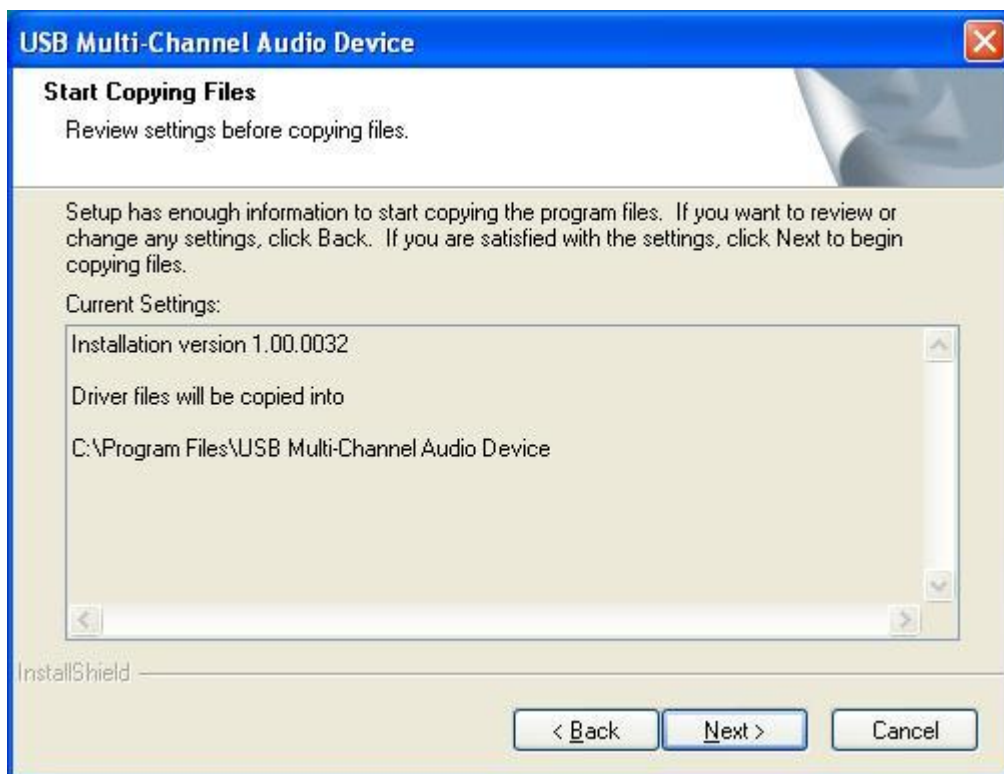
1. Connect the USB 7.1 Channel Adapter to your USB port of computer first, and insert provided CD into CD-Rom. You may find the screen pop up as below. You may find the **USB Audio Device** screen pop in the notification area as below.



2. Please follow the steps and proceed with the installation.



- When the USB Multi-Channel Audio Device screen appears, Click on **Next**, and you may find the **Setup Status** process automatically as below screen.



4. After the USB Multi-Channel Audio Device Driver installation is complete, please select **Yes**, and reboot the computer to effect the driver install.



5. After reboot and system running up again, a pop-up message will appear in the notification area indicating the installation is complete. You may click it to open and for functions control.



**Actual strings depend on your operation system. These screen shots are from Windows® XP and might vary slightly for each operation system.*

For Windows® 8

Notice : This application software allows you have extra functions such as Karaoke, microphone echo, magic voice, key shifting and vocal canceling...etc. Supports only Windows® XP, Windows® Vista, Windows® 7 and Windows® 8.

Connect the adapter first and then follow the procedures below to install the driver.

1. Connect the USB 7.1 Channel Adapter to your computer's USB port first, then insert the provided CD into your CD-Rom. You may find the **USB Multi-Channel Audio Device** screen pop up as below.

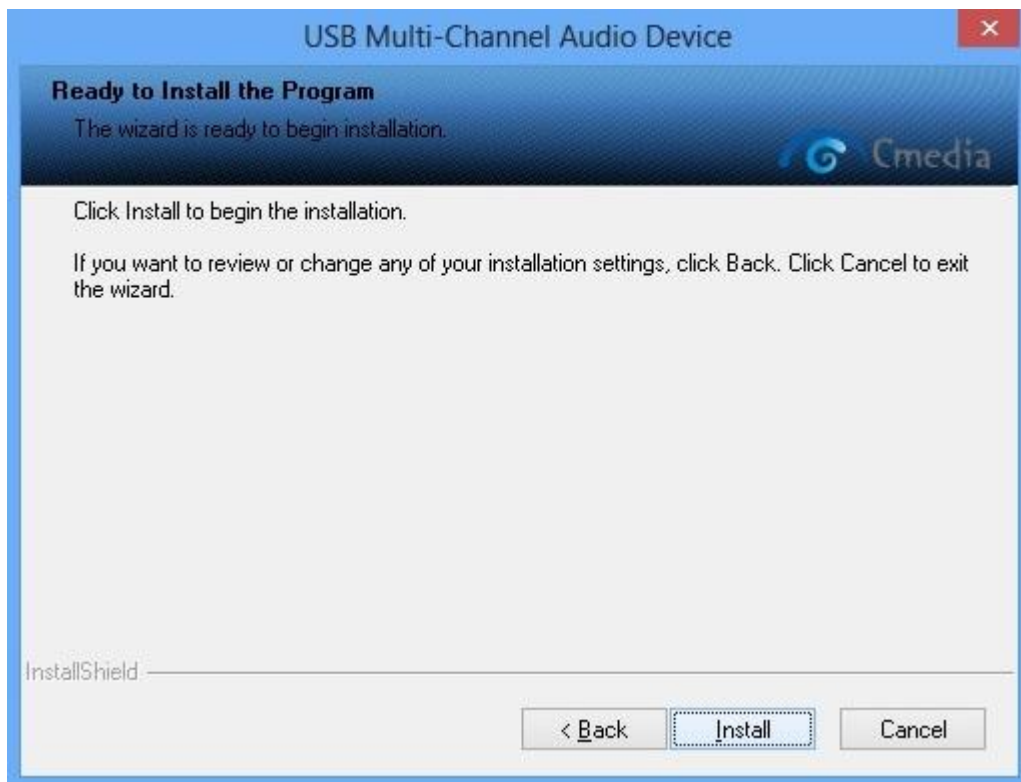


Follow the InstallShield Wizard and click **Next** to continue.

- Please read the following license agreement carefully. Select "I accept the terms of the license agreement" and press **Next**.



- Click Install to begin the installation.



4. After the USB Multi-Channel Audio Device driver installation is complete, please select **Yes**, and reboot the computer to effect the driver install.



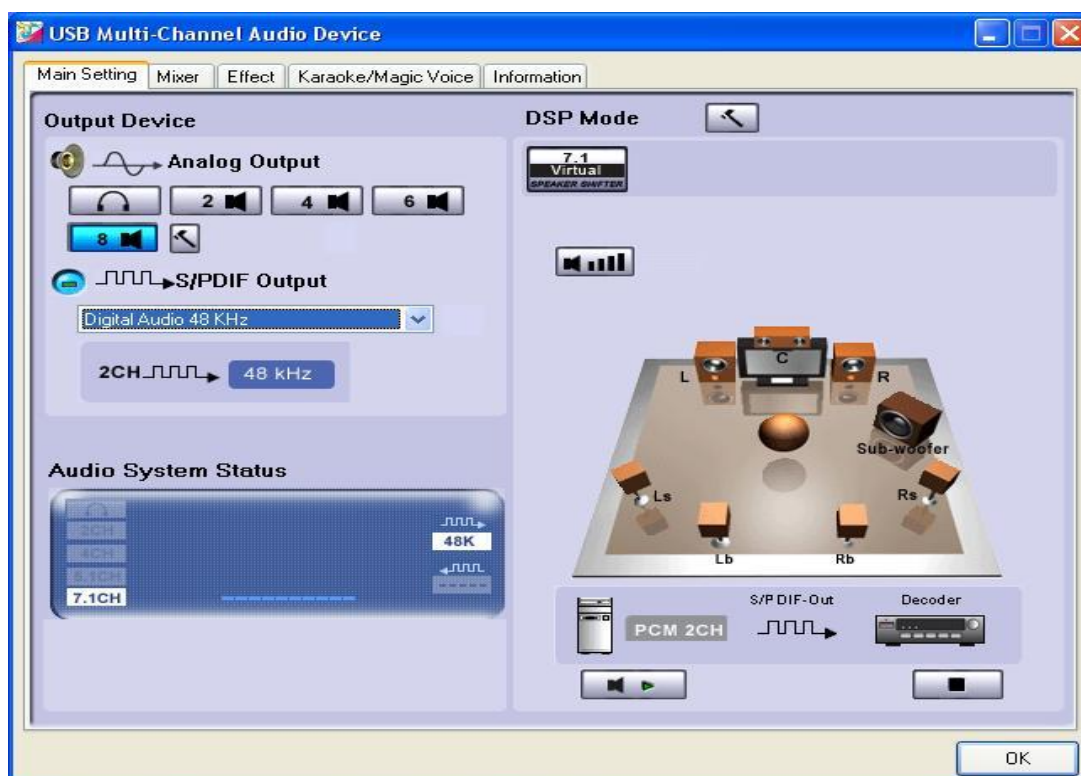
Using Interface and Function Control

This section will show you the using Interface and function control.



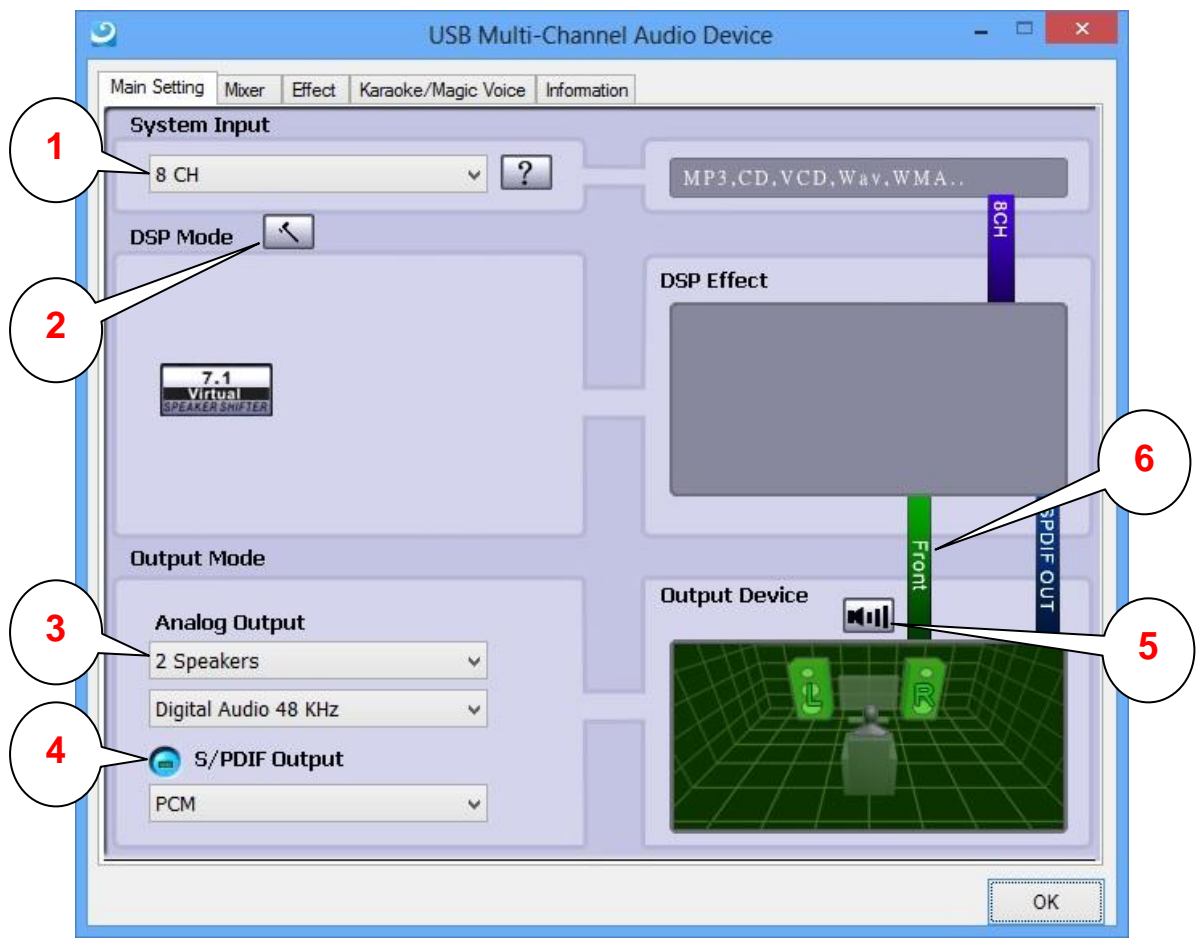
Please **Right click** the **USB Multi-Channel Audio Device icon** to use the function as Volume Control, Windows Media Player, Sound Recorder and Multimedia Properties.

To open the Using interface, please **Left click** the USB Multi-Channel Audio Device icon and select **Open**, or **double click** the USB Multi-Channel Audio Device icon to enter the Using Interface.



**Actual strings depend on your operation system. These screen shots are from Windows® XP and might vary slightly for each operation system.*

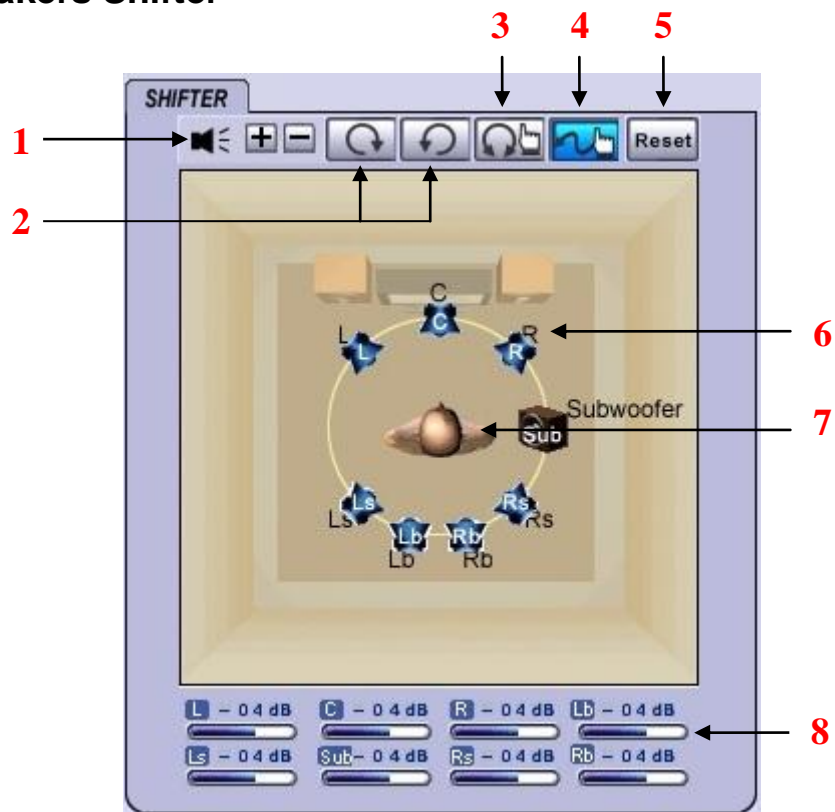
Main Setting



Using Analog Output

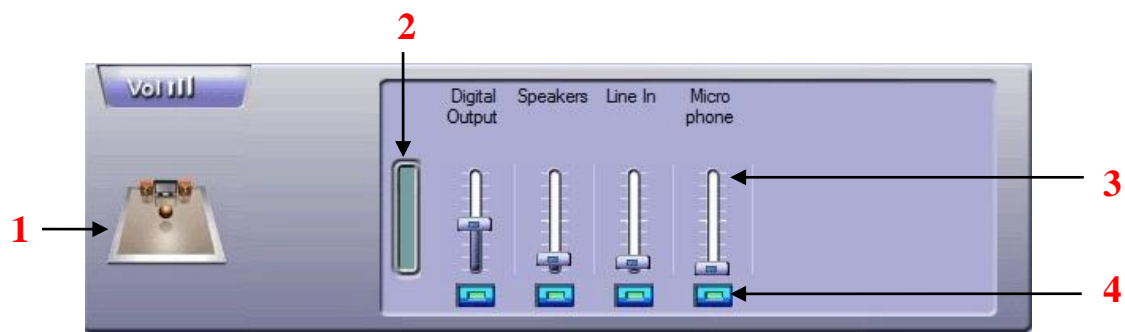
1. **System Input selector** : 2CH, 4CH, 6CH and 8CH selection.
2. **Analog Output – DSP Mode** : Allows users to switch DSP Effect Advanced Setting on or off.
3. **Analog Output – Speaker Configuration** : Turn this button ON to select analog output channels mode.
4. **S/PDIF Output – S/PDIF switch and options** : Click “S/PDIF Enable” button to enable S/PDIF Output function.
5. **Analog Output – Digital Volume control** : Click the “Digital Volume” button to enable the volume control bar and adjust sound value for individual speaker.
6. **Audio System Status Bar** : Status bar to indicate the audio system status.

Virtual Speakers Shifter



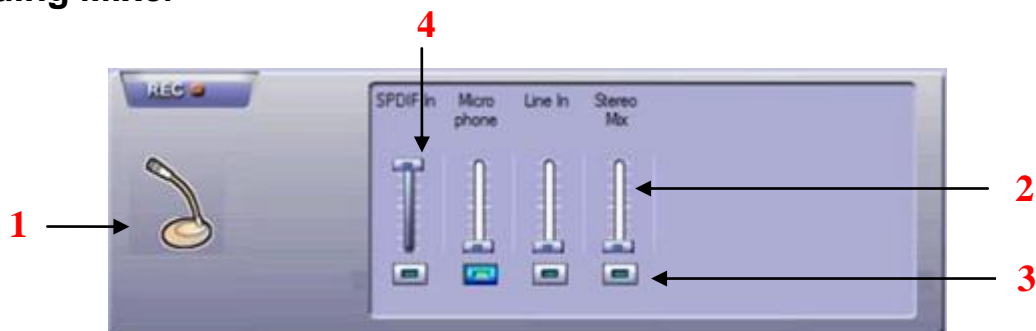
1. Volume Up / Volume Down
2. Auto Rotation
3. Manual Rotation
4. Manual Shifting
5. Reset Button
6. Virtual Speaker
7. Virtual Listener
8. Volume Indicator

Playback and A-A Path Mixer



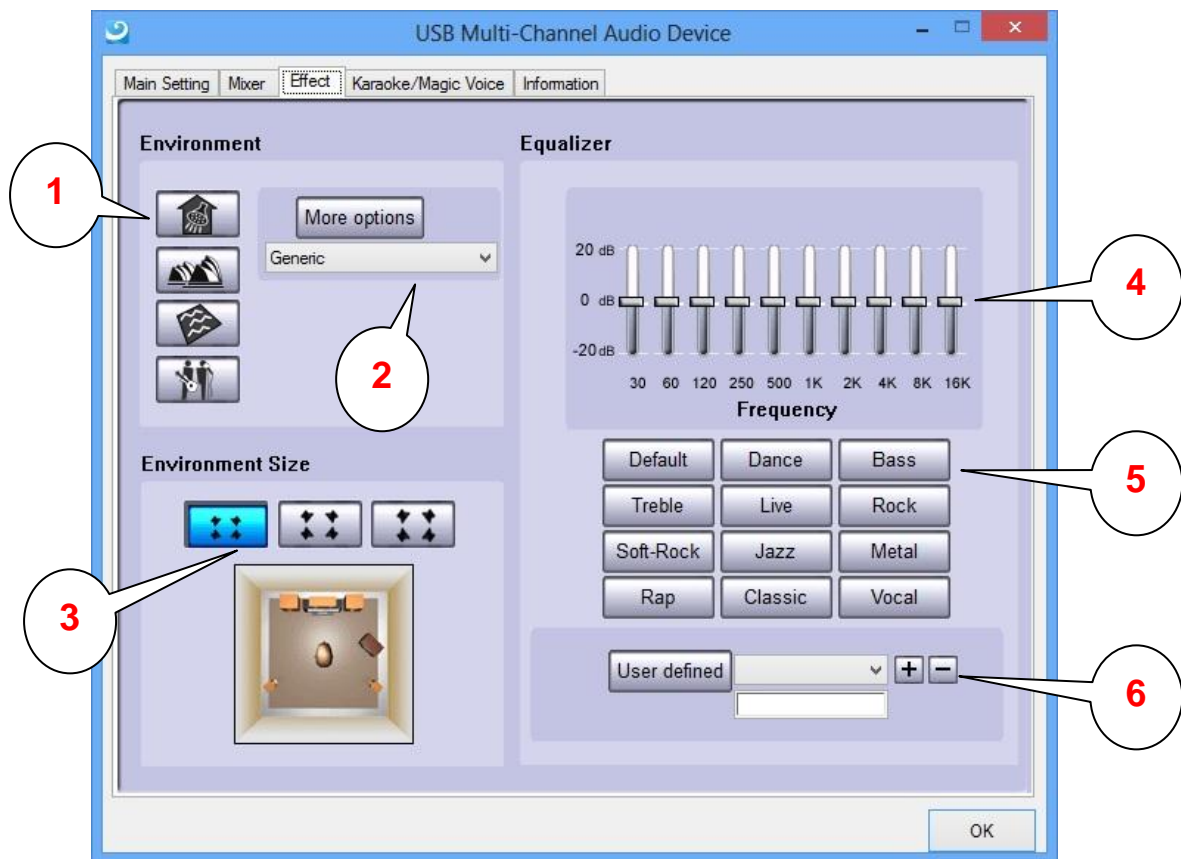
1. **Speaker Configuration:** Indicate the speaker numbers or headphone.
2. **Peak Meter:** Indicate the instantaneous level of an audio signal.
3. **Volume Control:** User can control individual playback device sound volume or A-A path volume.
4. **Mute / Un-Mute Control:** User can control individual playback device into mute/un-mute.

Recording Mixer



1. **Active Recording Device:** Indicate the recording resource device.
2. **Volume Controller:** User can control recording value by individual recording device.
3. **Recording Device Selector:** User can click selector to set the Recording source.
4. **S/PDIF-Input Device:** User can record digital audio directly.

Effects

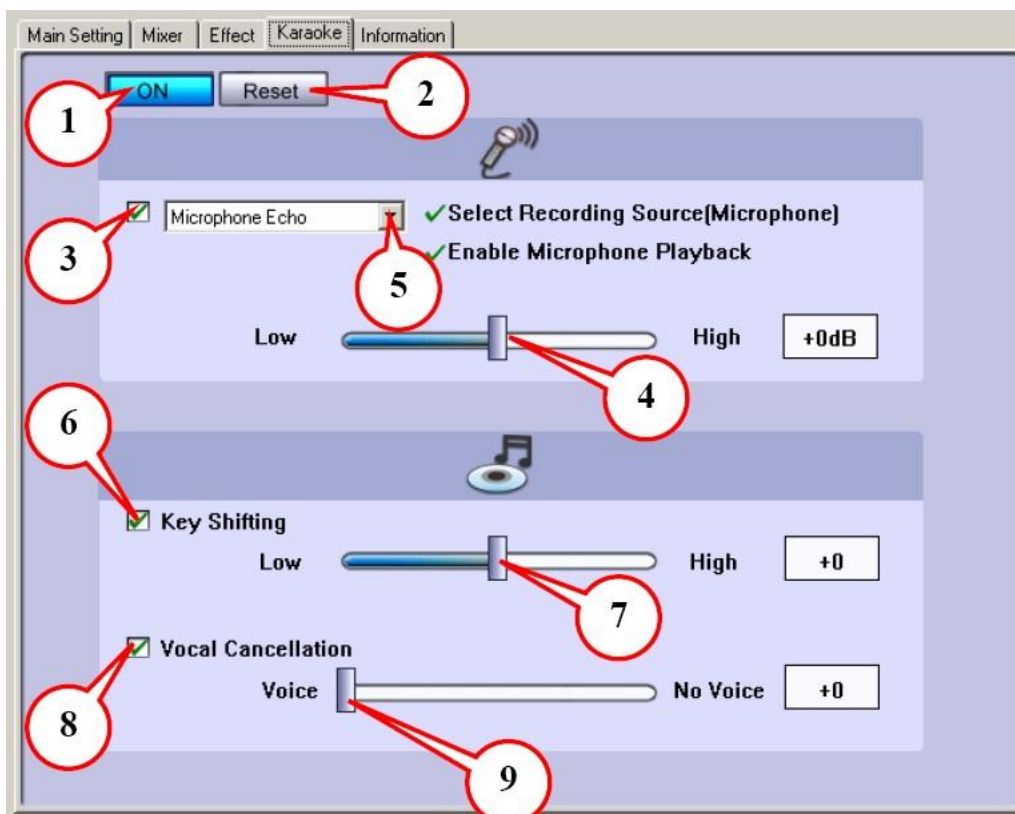


NOTE: Actual strings depend on your operation system. These screen shots are from Windows® 8 and might vary slightly for each operation system.

1. Environment Option Button
2. Environment Option List
3. Environment Size Option Button
4. Gain for EQ
5. EQ Preset Mode
6. User Defining for EQ

- * **Environment:** Select an “Environment option button” or “Environment option List” for emulation that is implemented by producing the sound reflection and reverberation.
- * **Environment Size:** You can change the “Environment Size Button” to simulate a larger or smaller space and feel the difference.
- * **Equalizer (EQ) 10-Band:** Select a pre-set mode for equalizer that is designed accordingly. There are 12 preset modes such as Bass, Treble, Live, Rock, Jazz, etc. You can change the gain setting for each band and then give it a name in the following blank. Click “+” to add your new setting into the “User Defined” list. Click “-” to delete settings.

Karaoke



1. **Karaoke On/Off:** Click this button to control all karaoke functions.
2. **Karaoke Setting Reset:** Resets all setting to default value
3. **Start Microphone Echo Function:** Select this button will pop up a dialog box to enable microphone function.

Click "OK" button to select recording source and enable microphone

4. **Echo Low/High Control Bar:** Adjust echo low/high
5. **Magic Voice Function (Optional):** This function only supported in multi-channel audio products.

When you enable microphone echo then can pull down the menu to select magic voice. Magic voice provides 5 different effects for choice.



6. **Start Key Shifting Function:** Select this button to enable key shifting function and control.
7. **Key Shifting Low/High Control Bar:** This function can adjust tune of background music to fit your singing.
8. **Star Vocal Cancellation Function:** Select this button to enable vocal cancellation function and control.
9. **Vocal Canceling Control Bar:** This function can control singer's vocal of background music and cancel it as possible.

3. Troubleshooting

1. No Sound

You can often resolve a few basic problems by checking:

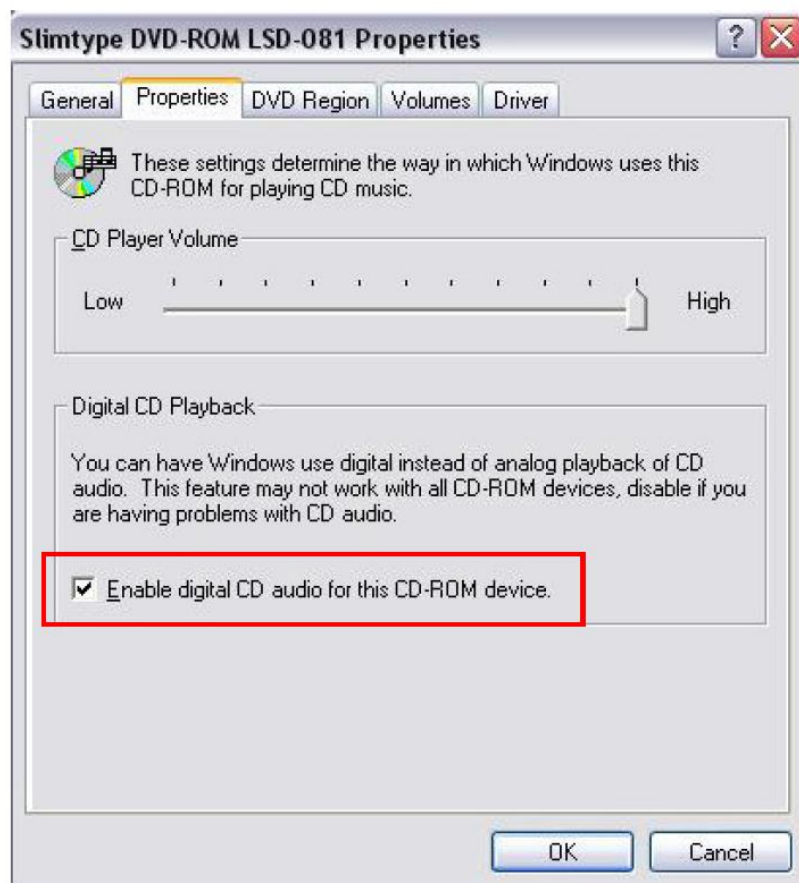
- The power of the speaker
- The sound volume
- The cable connections
- The audio CD compatibility

2. No Sound Is Recorded

You can often resolve a few basic problems by checking:

- If the MIC is probably connected
- If the file is saved and opened properly

3. Why play CD without sound ?



In most common cases, the digital CD playback function fails to run. This is because USB audio is digital signal, it uses a different path to process CD music with traditional analog CD.

You should open “Device Manager”, select “DVD/CD ROM drives” and open it. Then switch to “properties” page and enable digital CD audio.

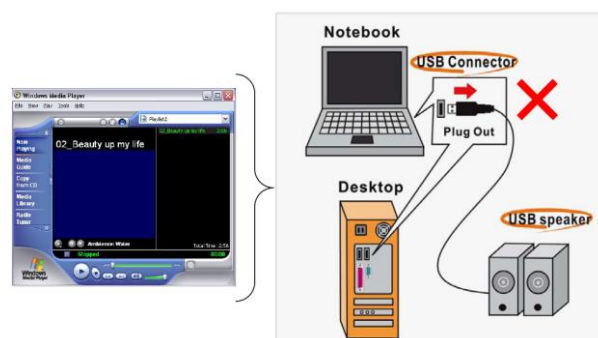
4. When using software application program (e.g. Media player, Winamp, PowerDVD, WinDVD....) to playback media files, can I plug out USB audio device while playing?

It is the incorrect mode of operation because while application programs are playing audio stream, Windows system is still using audio device to process and deliver data real-time. So, when the user plug out USB audio device, the Windows system cannot deliver audio data to the same device, hence the overlapping may cause application programs / system to crash or fail.

The correct way to plug out USB Audio device is to stop playback function first (Especially when your system is Windows® 98SE or Windows® ME). This corrected operation will enable a stable working system. Otherwise, uncorrected plug out may cause application program or system crash.

Note :

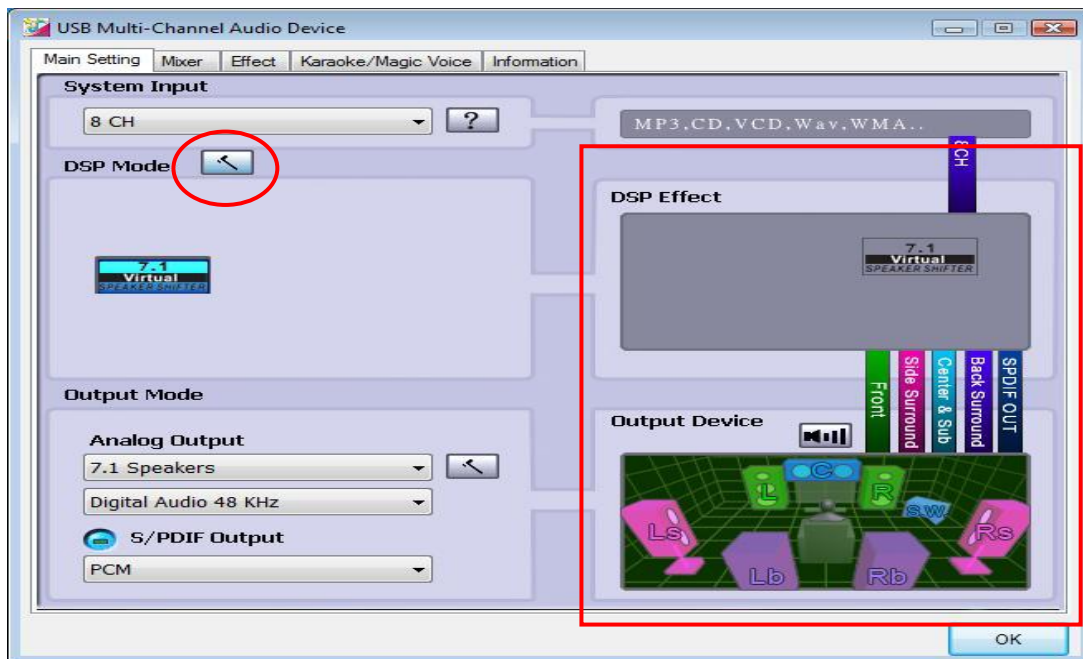
Do not plug out while application programs are playing media files. Please stop playback before plug out USB audio device.



5. If the real 7.1 source is not available under Windows® Vista™

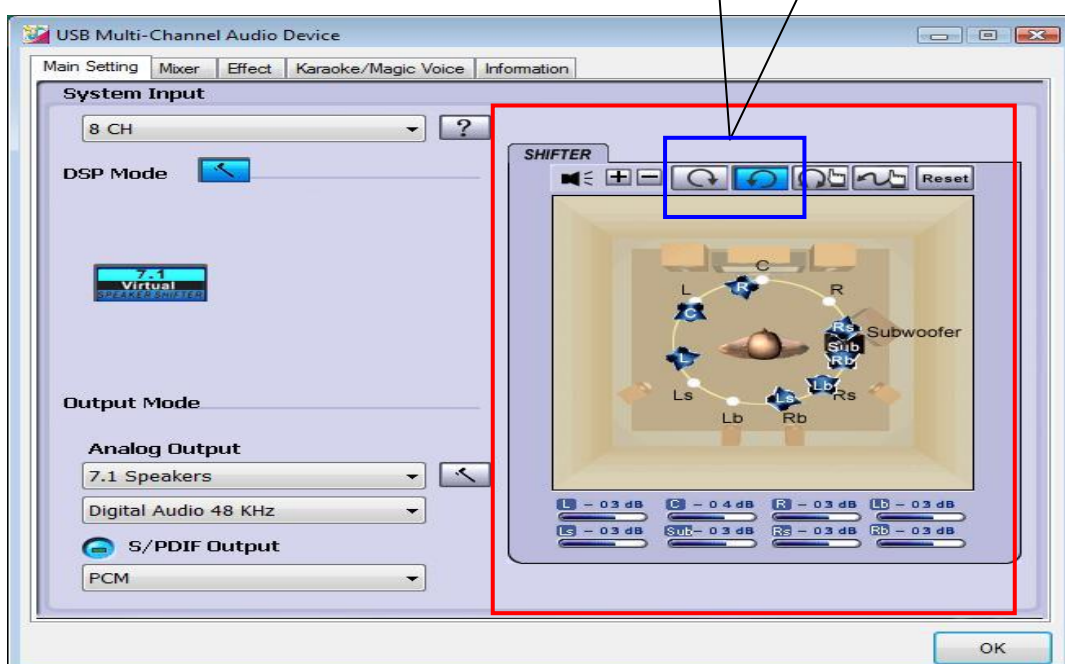
If the real 7.1 source is not available under Vista™, you have to click the surrounding effect button to activate audio output via SS-out, BS-out and C/B out. Otherwise, audio output will transmit through headphone and Front out only.

First of all, please click “**DSP Mode**” to change the screen of **DSP Effect** to **Shifter**.



Secondly, please click clockwise or counter clockwise surrounding effect to activate audio output via SS-out, BS-out and C/B out.

Clockwise, counter clockwise surround



4. Limitations

1. **If the audio source is not 7.1 Channel, the output cannot achieve optimized audio effect.**

2. **Windows® 2000:**

Does not support Line-In, SPDIF-In, and SPDIF-out.

Mac® OS:

Does not support SPDIF Out.

Support recording but monitoring under Line In.

3. **Windows® XP and Windows® Vista:**

If the driver of External USB 7.1 Channel Sound Box is properly installed; External USB 7.1 Channel Sound Box will switch to headphone mode after plugging in a headphone jack. There will be no output for surround output, back surround output, and center/Subwoofer output but front out will keep functioning.

4. The Playback mute button can work with Headphone-out, F-out, SS-out, BS-out, and C/B out but SPDIF out.

5. Specifications

Item	Description		
Interface	USB 1.1/ 2.0		1 x USB Type B Port
Connector	Audio-Out	Headphone	1x3.5mm Stereo audio Jack Female in Green
		Front Audio	1x3.5mm Stereo audio Jack Female in Green
		Surround	1x3.5mm Stereo audio Jack Female in Gray
		Back surround	1x3.5mm Stereo audio Jack Female in Black
		Center/Subwoofer	1x3.5mm Stereo audio Jack Female in Yellow
		S/PDIF-In	1x S/PDIF Audio Jack Female in Black
	Audio-In	Line-In Port	1x3.5mm Stereo audio Jack Female in Blue
		Mic-In Port	1x3.5mm Stereo audio Jack Female in Pink
		S/PDIF-In	1x S/PDIF Audio Jack Female in Black
LEDs	Green	Lights up when powered on; flash when operation.	
	Blue	Lights up for recording muted, lights off for recording function can be used.	
HID Buttons	Volume Up	Press the Volume up button for volume up	
	Volume Down	Press the Volume down button for volume down	
	Play Mute	Press the Play Mute button for playback mute	
	Record Mute	Press the Record Mute button for recording process mute.	
Power mode	Self-Power only		
Sampling rate	Supports Fixed 48/44.1 KHz sampling rate in analog recording and playback		
Compliant	USB 1.1 and 2.0 full speed specification to 1.5/12 Mbps		
	USB audio device class specification 1.0		
	USB HID class specification V1.1		
	IEC 60958 spec. compliant (consumer format S/PDIF input and output with loop-back support)		
	SCMS (Serial Copy Management System)		

* Specifications are subject to change without notice.

6. Regulatory Compliance

FCC Conditions

This equipment has been tested and found to comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received. Including interference that may cause undesired operation.

Important! Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment. Use an approved phone set.

CE

This equipment is in compliance with the requirements of the following regulations:
EN 55 022: CLASS B

WEEE Information

For EU (European Union) member users:

According to the WEEE (Waste electrical and electronic equipment) Directive, do not dispose of this product as household waste or commercial waste. Waste electrical and electronic equipment should be appropriately collected and recycled as required by practices established for your country. For information on recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.



Technical Support

Diamond Technical Support staff is here to help resolve any issues that you may be experiencing with the installation of the Diamond product. Prior to contacting technical support please make sure you have the following information available.

1. Model #: (Printed on the bar code, located on the box)
2. Installation CD Version: (printed on the CD label)
3. The version of Windows that your system is running.
4. The manufacturer and model # of your computer.
5. CPU type and speed (example: Intel Pentium4 2.4GHZ)
6. A complete description of the problem that you are experiencing including any steps that you have taken to try to resolve the issue.

Technical Support Options

Free Telephone Support

818-534-1414

(long distance rates may apply)

Mon - Fri, 8 - 4:30 PST

<http://www.diamondmm.com>