

SC808

HD Audio
PCI-e Audio Device

User's Manual

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FCC and CE Radiation Norm

FCC

This equipment has been tested and found to comply with limits for a Class B digital device pursuant to Part 15 of Federal Communication Commission (FCC) rules.

CE

This equipment has been tested and found to comply with the limits of the European Council Directive on the approximation of the law of the member states relating to electromagnetic compatibility (89/336/EEC) according to EN 55022 class B.

FCC and CE Compliance Statement

These limits are designed to provide reasonable protection against frequency interface in residential installation. This equipment generates uses and can radiate radio frequency energy, and if not installed or used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and 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 on a circuit different from that to which the receiver is connect to



CAUTION!

The Federal Communication Commission warns the user that changes or modifications to the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Overview

The SC808 is a high-end stereo sound card base on CMEDIA's latest native PCI-e technology audio DSP CM8888 for 24-bit/192KHz audio processing. It uses high quality components such as WM8741 DAC and TI LM4562 OP and precision layout as well, let your desktop PC to deliver unparalleled audio quality for music playback. Built-in 128dB SNR DAC and powerful headphone OP amps, you can easily hear the sound detail. Moreover, customer could swap the OPs to get different audio performance and quality. SC808 provides two modes for listening experience, one is music mode, which focuses on stereo output and vary output interface as well. For example: Stereo RCA Output to speaker, Headphone output with amplifier for high impedance headphone, and SPDIF Coaxial and Optical to Hi-Fi AV receiver. Another mode is multimedia mode, which provides 8 channel outputs and Microphone Input from bundled daughter board. The bundled Xear Audio Center software provides many features such as environment effect; flex bass II, Xear Audio Brilliant and Xear Dynamic Bass, Smart Volume etc., to enhance the audio listening experience. Moreover, SC808 comes with a daughter board for Microphone Input and 8 channel outputs. It also built-in HD Audio connectors can support headset interface from system case. Compliance with UAA (Universal Audio Architecture), it means you can directly use this board under Windows 8 or Windows 7 without installing any drivers. With the highest audio quality and flexible connection of SC808, it's really the best companion to generate a Hi-Fi PC System!

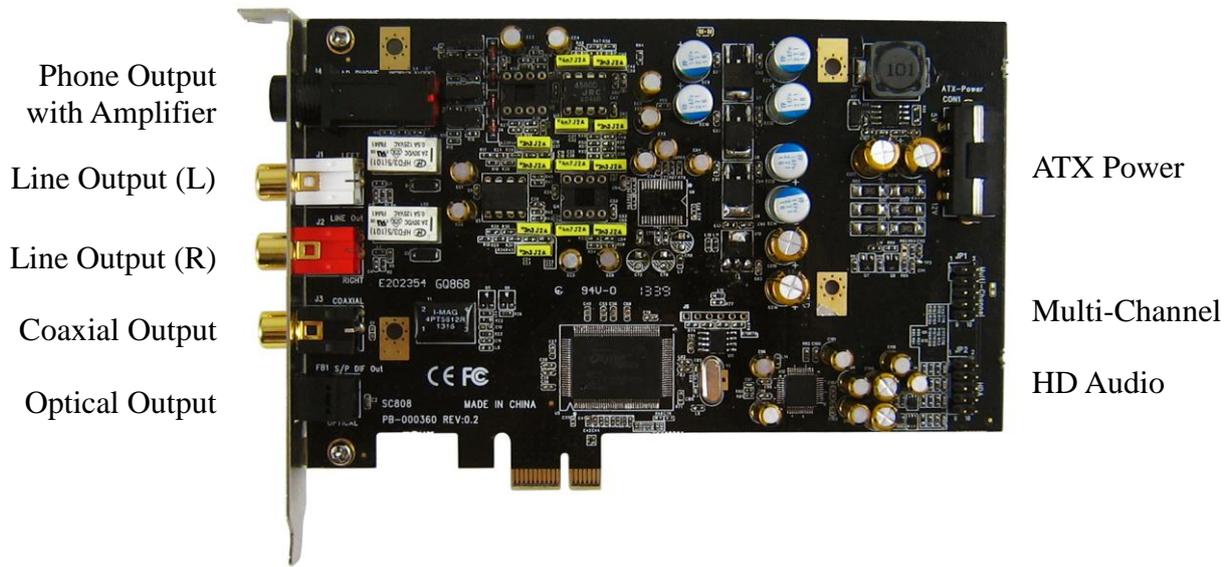
Package Contents

- SC808 main board
- SC808 daughter board for multi-channel
- Flat Connection Cable x2
- Quick Installation Guide
- Installation CD
 - ◆ Xear Audio for Windows 8/7/XP
 - ◆ User's Manual

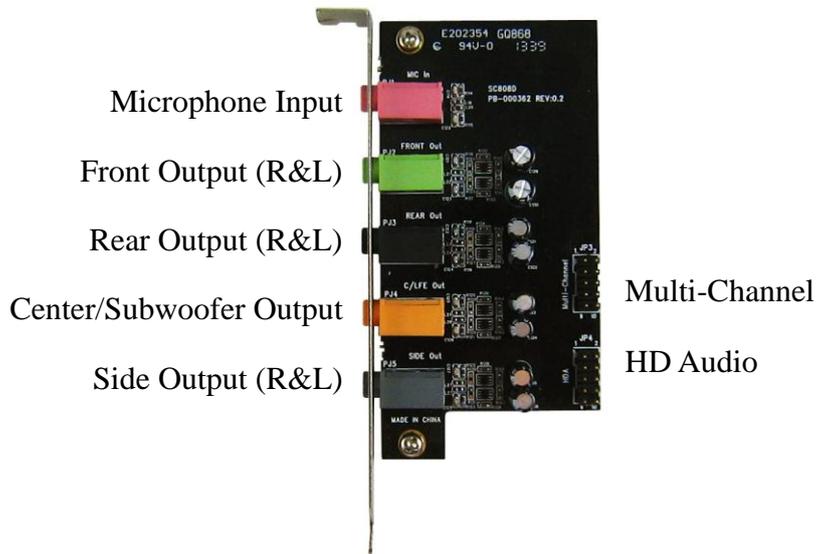
System Requirements

- Compatible with Microsoft ® Windows ® 8, Windows ® 7, Windows XP
- Intel ® Core™ 2 Duo or AMD ® equivalent processor, 2.2 GHz or faster
- Available PCI-e slot
- 100MB Hard Disk space
- 4GB System Memory
- Available CD-ROM or DVD-ROM Drive (for installation)

Figure of SC808 Boards and Connections



SC808 Main Board



SC808 Daughter Board

Connections

Most of the audio devices, such as Speakers, Headphones and Hi-Fi Amplifier can be connected to the connectors of SC808. Below table shows the connectors and their descriptions:

Main Board	Connections
Phone Out (6.3mm)	Connect to Front Speaker or Headphones
Line Out (RCA Left)	Connect to RCA connector of Speaker (Left Channel)
Line Out (RCA Right)	Connect to RCA connector of Speaker (Right Channel)
S/PDIF (Coaxial)	Connect to the Coaxial of Digital Amplifier or Decoder
S/PDIF (Optical)	Connect to the Optical of Digital Amplifier or Decoder
ATX-Power (4P)	Connect to Power Supply
HDA (HD Audio)	Connect to the Headphone/Microphone of case or Daughter board.
Multi-Channel	Connect to Daughter board for multi-channel application.

Daughter board	Connections
Microphone In (3.5mm)	to external microphone
Front Output (3.5mm)	to the optical input of Digital Amplifier or Decoder
Rear Output (3.5mm)	to the coaxial output of DVD Player
C/LFE Output (3.5mm)	to the optical input of Digital Amplifier or Decoder
Side Output (3.5mm)	to the coaxial output of DVD Player
HDA (HD Audio)	Connect to the Headphone/Microphone of case or Main board.
Multi-Channel	Connect to the Main board.

Select Phone output or Line output manually

We try to avoid any interference from layout in SC808, therefore, we separate the phone out and Line out manually from software. It also means you can only choose one of them from control panel any times, and it is only works for Windows 8, 7 and XP. For other OS, you can only use Line Output. For more detail, please refer to Software session.

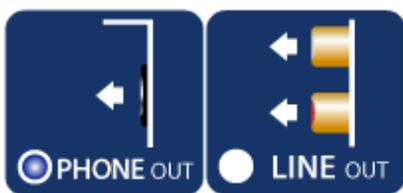


Xear Audio Center



Enable Phone Output

Or

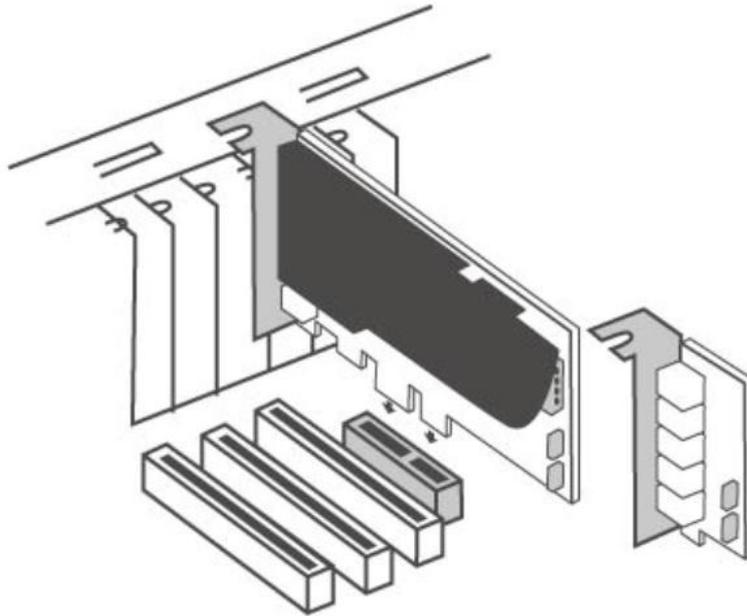


Enable Phone Output

Hardware Installation

Install SC808 HD Audio PCI-e Audio Device

1. Remove the case of system.
2. Insert SC808 to a PCI-e slot.

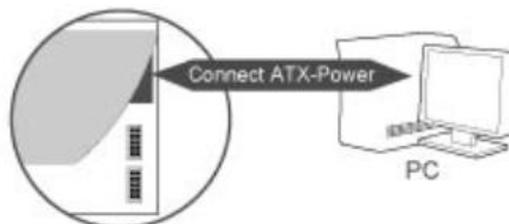


**NOTE: Please DO connect the ATX Power cable for SC808 Card Power.
It means the SC808 CANNOT work without ATX Power Connected.**

SC808 can fulfill three kinds of scenario for different applications:

Stereo Music: for listening music in high definition quality.

1. Connect ATX-Power

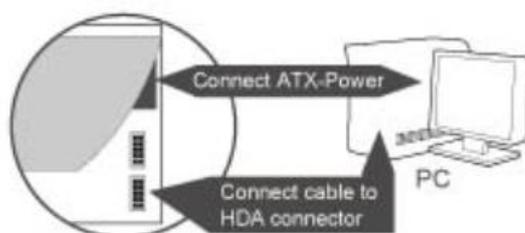


2. Close Case and boot the system.

Stereo Music with Microphone Input: for VoIP or Gaming usage.

In this mode, SC808 must connect to external headset port of system case. If the system does not provide this feature, please use the microphone input of daughter board.

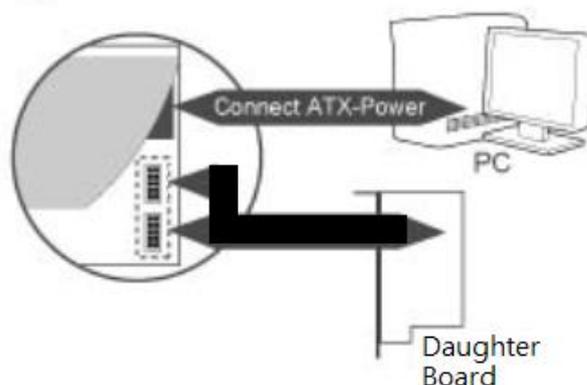
1. **Connect ATX-Power (Necessary Step)**
2. Connect cable (bundled from Case with external Headset port) to HDA connector.



3. Close Case and reboot the system.

Stereo Music with Multi-Channel output and Microphone Input: to enjoy the high definition stereo audio and multi-channel home theater experience.

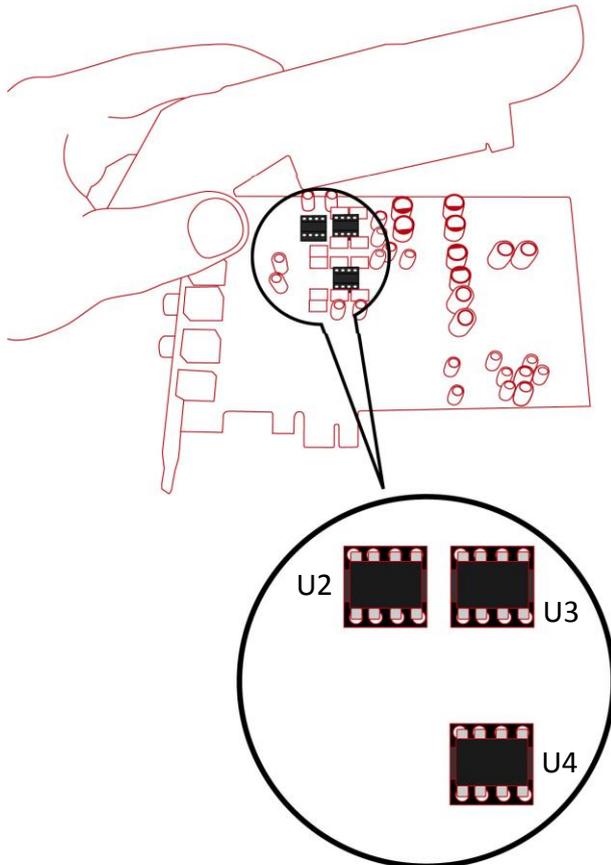
1. Install SC808 main board and daughter board
2. **Connect ATX-Power (Necessary Step)**
3. Connect cables from SC808 Main Board to Daughter Board with multi-channel and HDA connectors



4. Close Case and reboot the system.

Swap OP design

1. Remove the Shield Cover from the SC808.
2. Found out the 4x2 Sockets
3. Use suitable tools to remove the OPs
4. Close the shield Cover.



NOTE:

1. U3 & U4 are pre-amplifier of Line-Out, due to the OPs support both Left and Right Channels for each one, please do change the same mode for better audio performance.
2. U2 is pre-amplifier of Phone-Out.
3. However, the audio path is from U3 & U4 to U2, therefore, change U3 & U4 will also affect the audio performance of Phone-Out.

Software Installation and Un-Installation

 **Notice:**

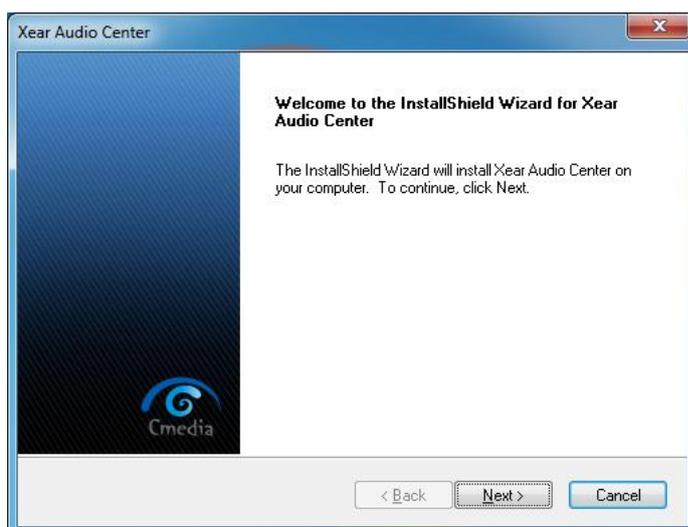
Ensure that you have plug-in the PCI-E audio card before installing High Definition Audio Device drivers. Otherwise, driver installation error may occur.

Before installing/Uninstalling, you should close all audio programs to avoid the driver installation failed.

- ❖ Insert SC808 HD Audio PCI-e Audio Device installation CD. Double click the setup.exe file, if auto run is disabled. Press “Cancel” if you want to quit installation.

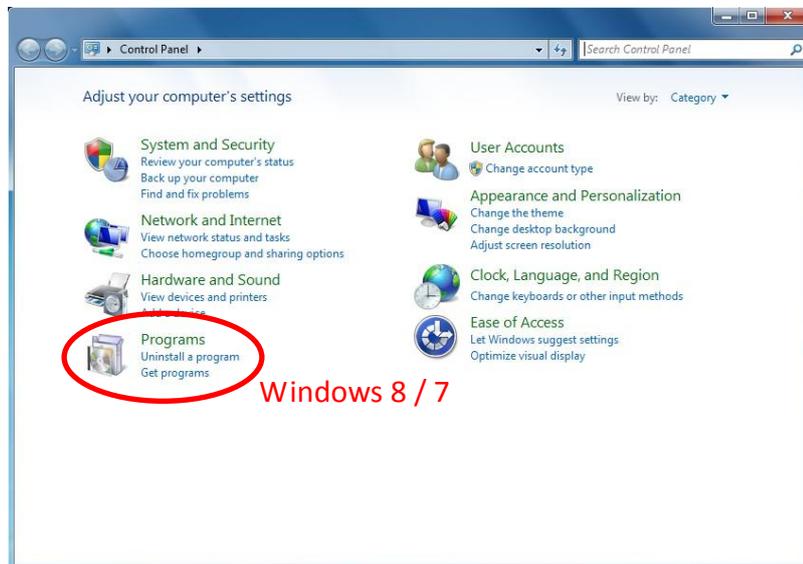
Installation

- ❖ Start Driver installation, you can see a welcome window. Press “Next” button and follow the instruction of the popped windows until the end. Allow Computer restart to activate the driver.

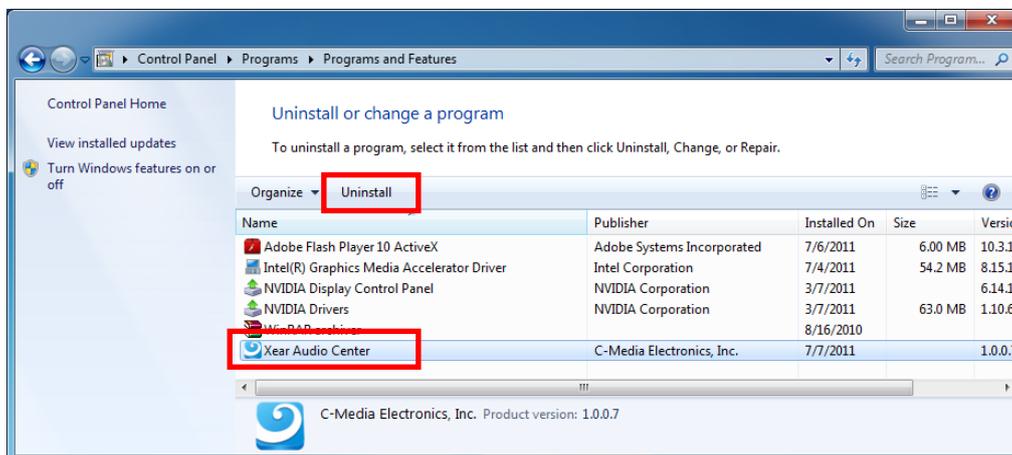


Un-Installation

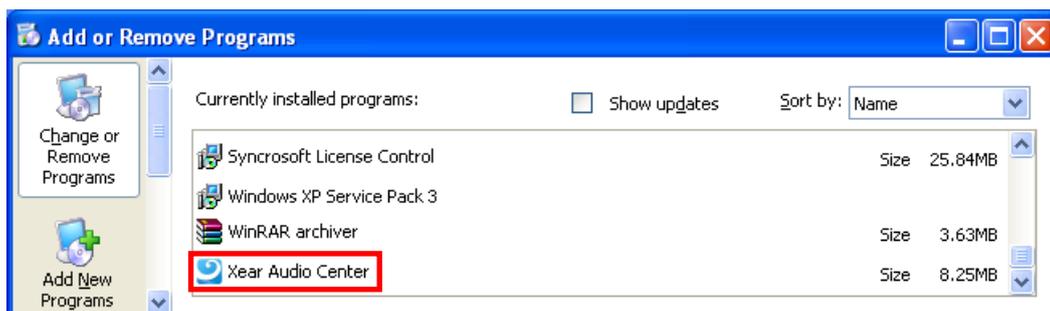
- ❖ Close all audio programs. Double click the “Programs/Uninstall a program” item from Windows Control Panel.



- ❖ Select “Xear Audio Center” item, then click the “Uninstall” button.
For Windows 8 / 7 . Follow the instructions of the popped windows until the un-installation finishes. Restart your computer to completely remove driver.



For Windows XP



Xear Audio Center Introduction

Open SC808 HD Audio PCI-e Audio Device Software CPL

After the driver is installed and the system is rebooted, you will find the PCI-e Advanced Audio Device CPL (Xear Audio Center) icon on the system tray bar.

- ❖ Double-clicking on the icon to open CPL software.

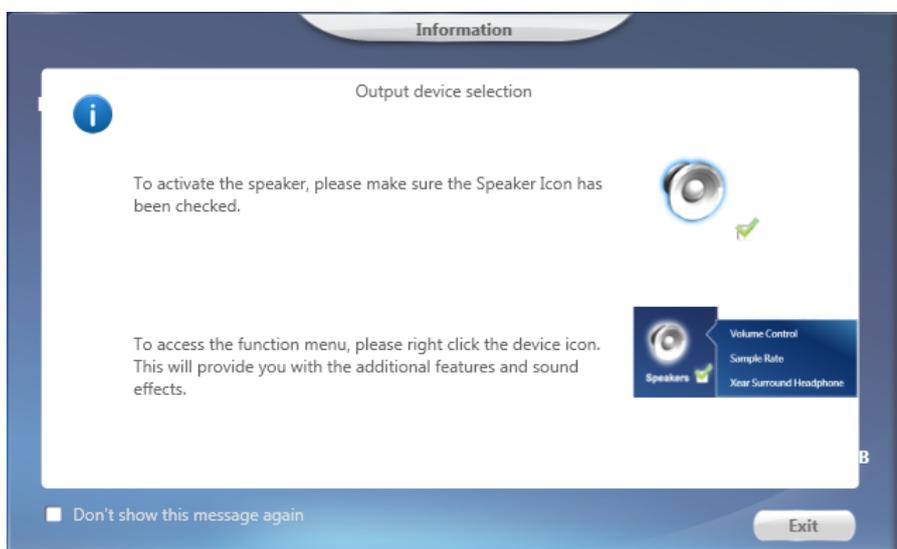
Windows 8 / 7 Tray Icon



XP Tray Icon



- ❖ The first time Xear Audio Center is opened, you can see a message as shown below. You can get the information about how to use Xear Audio Center.



If you don't want to see this window next time, check the "Don't show this message again" option.

❖ The “Xear Audio Center” will appear as the below diagram. Please note the Left icon may not show on screen if the daughter board or extension HDA (from system case) are not connected.

Stereo Music Scenario (only install the SC808 main board)



Stereo Music with Microphone Input Scenario (install the SC808 main board and connect the HD Audio cable from system case, parts of the system may not offer this feature)



Stereo Music with multi-channel Output and Microphone Input Scenario
(install the SC808 main board and daughter board, please use bundled cables to connect these two boards)

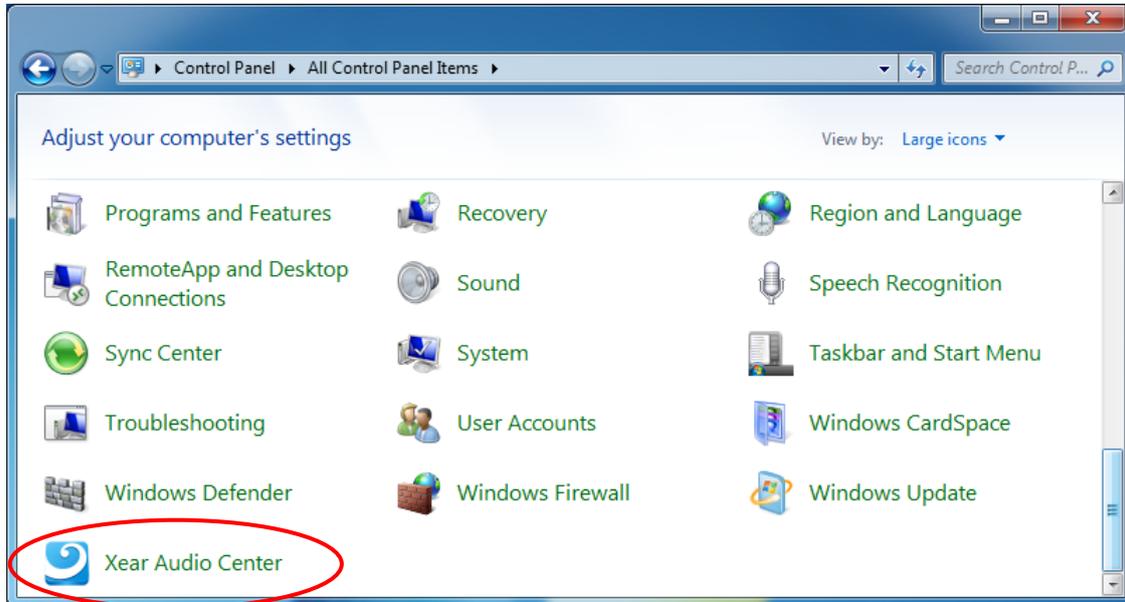
Note: There are two Speakers Icons in the left menu, the top one is for multi-channel Output configuration, and second one is for Stereo Output configuration. The detail setting between these icons is also different.



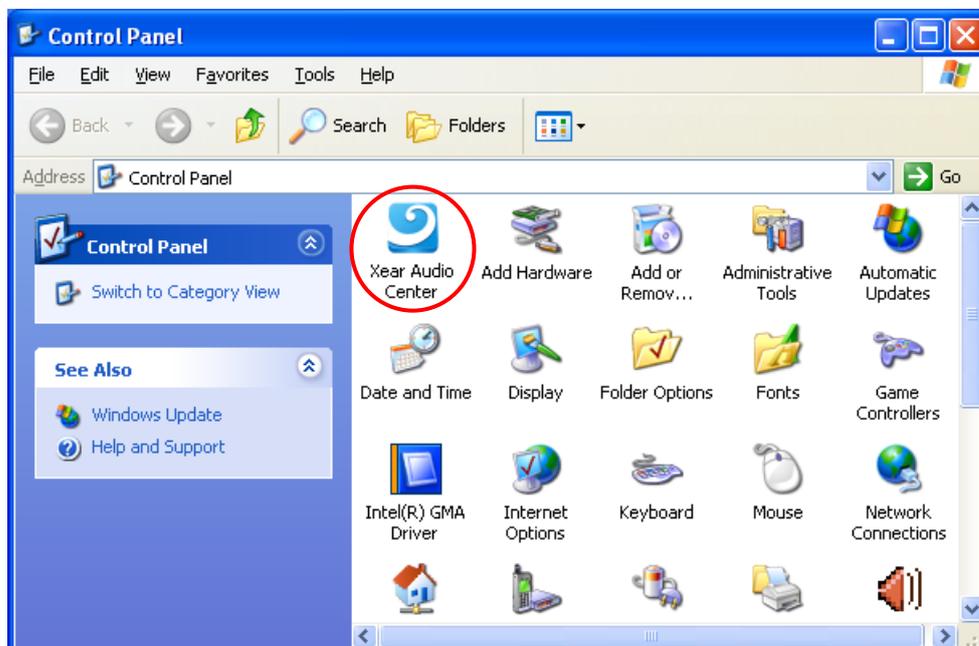
NOTE: To simplify your reading, this manual will combine Stereo Music and Multi-Channel in one Session.

- ❖ If the tray icon does not appear in your system tray, please go to the Windows control panel and double click the “Xear Audio Center” CPL icon to open it.

For Windows 8 / 7



For Windows XP



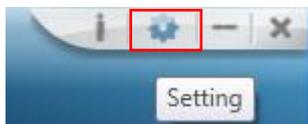
❖ How to make CPL icon visible in the system tray?



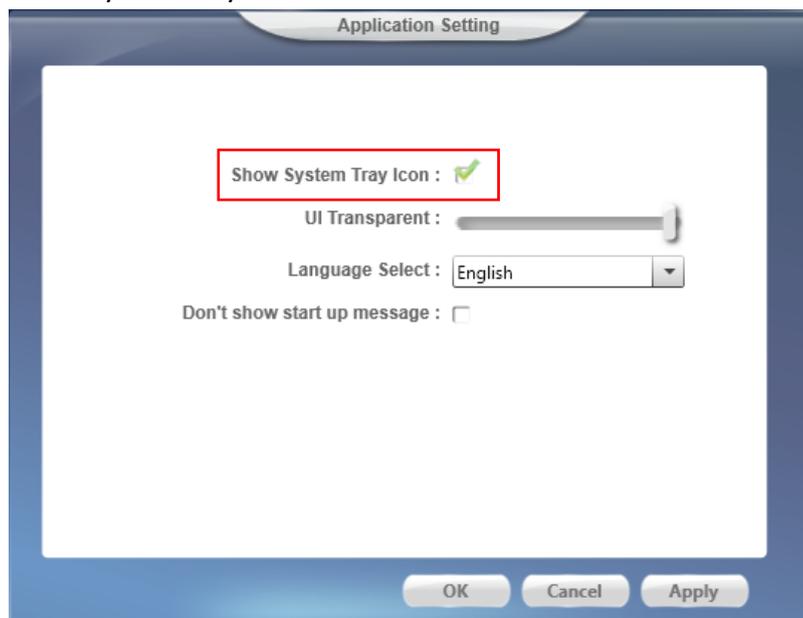
1. Open Xear Audio Center



2. Click on the “setting” button to open the setting window.



3. Check “Show System Tray Icon”. The Xear Audio center icon will be shown in the system tray.

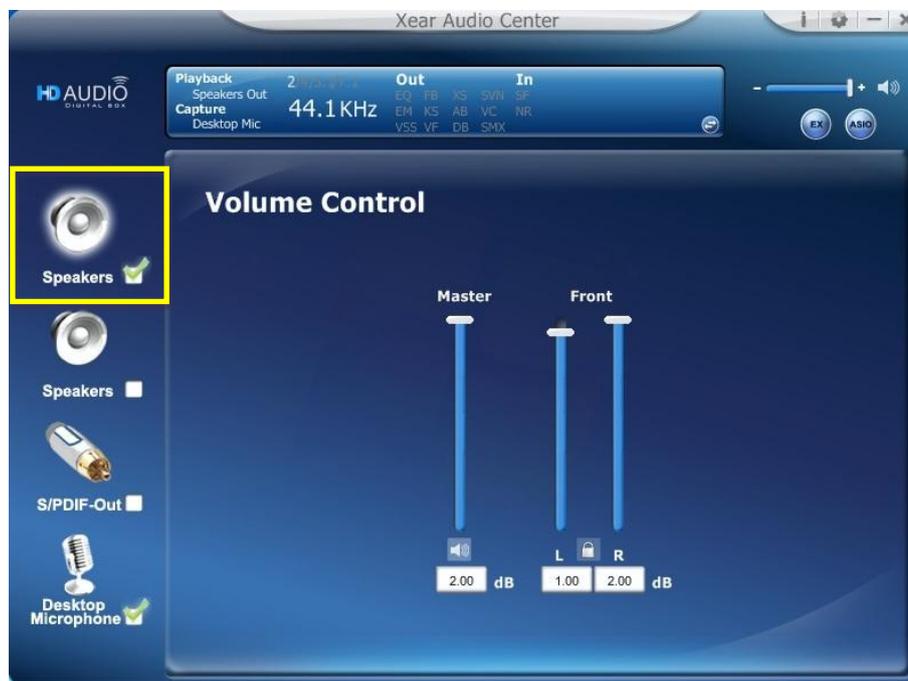


Xear Audio Center Function Introduction

You can control the PCI-e sound card configuration as shown in the diagram below.

Select a Default Device

Before the Audio device playback or recording operation starting, it needs to select a device as the default device. Windows OS will assign the system resource to the default device.



■ Set Default Output Device (Speaker)



Click mouse left button on the **check box** () of the **speaker device icon** to set the default device is "Speakers".

■ Set Default Input Device (Desktop Microphone)



Check on the **check box** () to set the default device in “Desktop Microphone”.

NOTE: SC808 only provide microphone as input device and must connect to HD Audio connector of system case or daughter board.

■ Function Behavior

- Only one **audio output device** (one of two Speakers or SPDIF-Out) can be set as the default audio output device in Windows 8, 7.
- There is only one audio Input device (Desktop Microphone) set as the default audio input device in Windows 8, 7.

Master Volume / Mute & Un-Mute



■ Master Volume Adjusting

You can increase or decrease the volume of **all output devices** (Speaker, Headphone and SPDIF-Out etc.) by this master volume

bar ().

■ Mute/ Un-Mute the volume

You can mute/un-mute volume of **all output devices** by the

mute () or Un-mute button ().

Function Pop Menu

Xear Audio Center provides several sound effects, there is a pop menu for each output/input device and you can entry into the sound effect page to enjoy your music, movie and gaming.

How to open pop menu:

- I. Double click left mouse on Device Icon.
- II. One click left mouse button on Device Icon.



Xear 3D EX



■ Function Introduction

C-Media Xear3D EX technology provides a complete and fully backward compatible 3D audio interface for Windows 8 / 7.

Xear Pro (ASIO)



■ Function Introduction

Xear Pro (ASIO) providing a low-latency and high fidelity interface between a software application and a computer's sound card. (Recommend player: Foobar2000).

Face-Lift CPL supports launch ASIO 2.2 control panel.



(ASIO is abbreviated from “Audio Stream Input Output”; Audio Stream Input / Output (ASIO) are a computer sound card driver protocol for digital audio specified by Steinberg.)

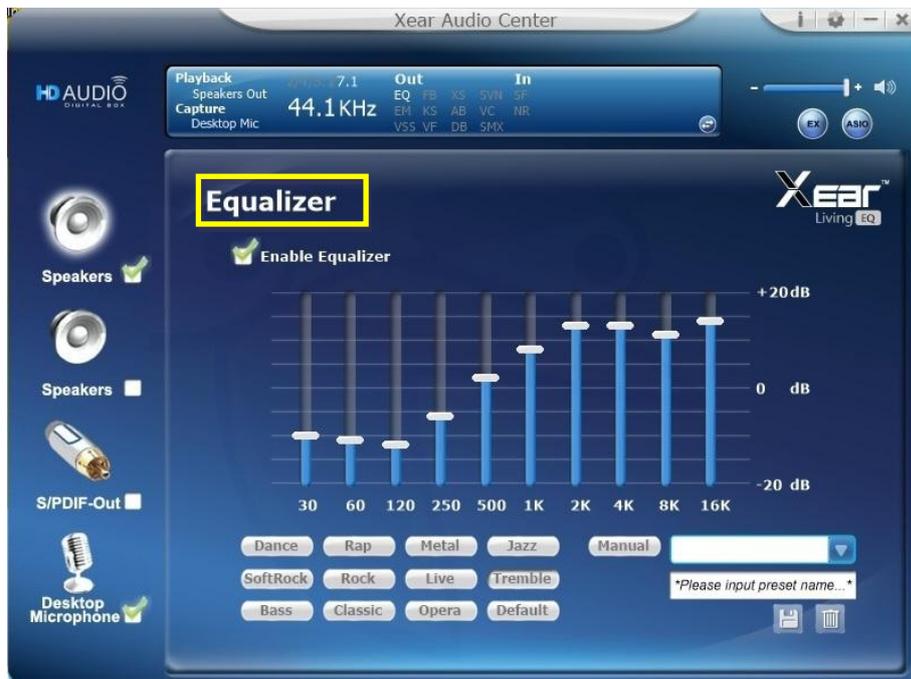
Function Page Area

When you click one of the function items in a pop menu, a function page as below will be shown as below.

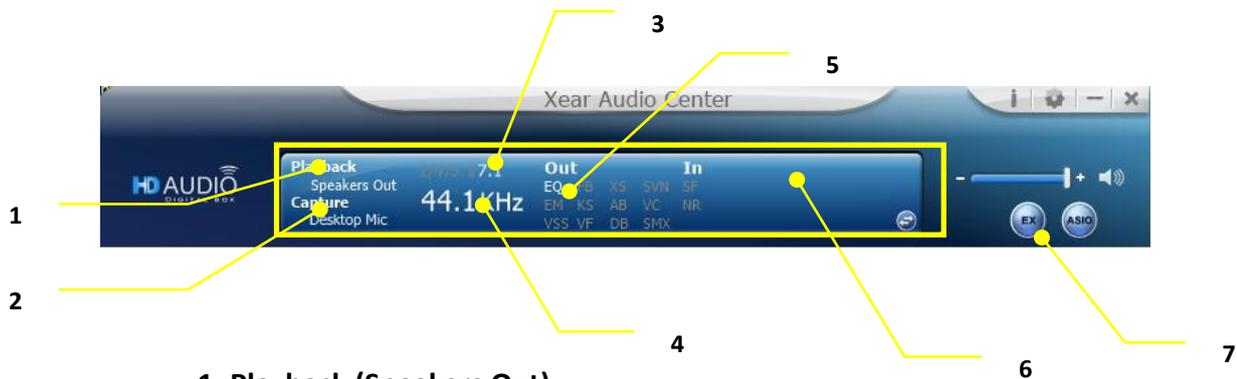
Choose the Equalizer Page



Entry the Equalizer Function Page



Audio Status Panel



1. Playback (Speakers Out)

It indicates that Speaker is the output default device.

2. Capture (Desktop Mic)

It indicates that Desktop Mic is the input default device.

3. Speaker Numbers (2/ 4 / 5.1 / 7.1)

It indicates the speaker numbers (for Speaker device only).

4. Sample Rate

It indicates the Playback sample rate for default output device.

5. Audio Output effect indicator

It indicates the playback sound effect status.

Abbreviation	Sound effect
EQ	Equalizer
EM	Environment Effects
VSS	7.1 Virtual Speaker Shifter
FB	Flex Bass II
KS	Xear SingFX → Key Shifting
VF	Xear SingFX → Vocal Fading
XS	Xear Surround Speaker
AB	Xear Audio Brilliant
DB	Xear Dynamic Bass
SVN	Xear Smart Volume
VC	Xear Voice Clarity
SMX	Xear Surround Max

6. Input effect indicator

It indicates the playback sound effect status.

Abbreviation	Sound effect
SF	Xear SingFX → Microphone Echo
SF	Xear SingFX → Magic Voice
NR	Noise Reduction

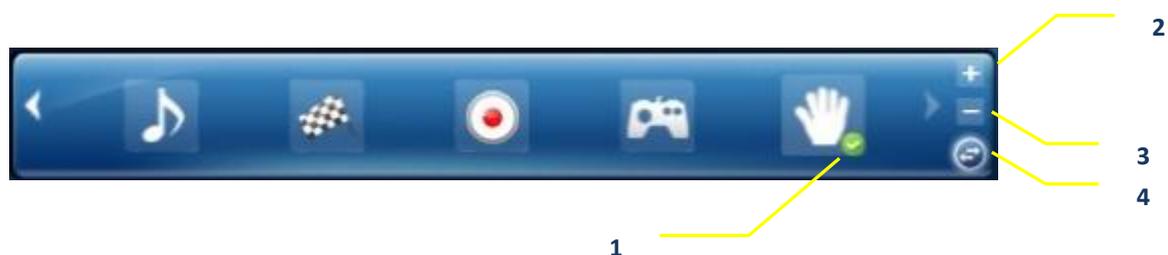
7. Switch to Profile Panel button

Click on this button will switch status bar to Profile panel.

(Refer to Profile Panel)

Profile Panel

This is the profile for sound effect setting; it has the preset mode and the user define mode. The user define mode can be customized.



1. Profile Mode:

You can set the preset profile mode by these profile buttons. When the preset mode is active, there is a Green-check symbol shown on the right-down corner.

2. Add Profile:

You can adjust specific sound effects (Ex: EQ, EM etc...) settings and click this “+” add profile button to name and to create a user-define mode.

3. Delete Profile:

You can click this “-“button to delete the user-define mode.

4. Switch Button:

This switches the Profile panel to Audio Status Panel.

Speakers Device function introduction

To Access function menu, please right click  the Speaker-Output device icon, this will provide you with the additional feature and sound effects.



^ Speakers for Multi-Channel



^ Speakers for Stereo Music

Volume control Page



❖ Function Introduction

This function page provides a volume control for Speaker device.

1. Volume control bar:

Master – It can adjust volume level for all channels.

Front - It can adjust volume level for front channel.

2. Left/ Right Channel Lock (Front, Cen/LFE, Rear, Side):

Clicking on the lock/ un-lock button can sync left-channel and right-channel.

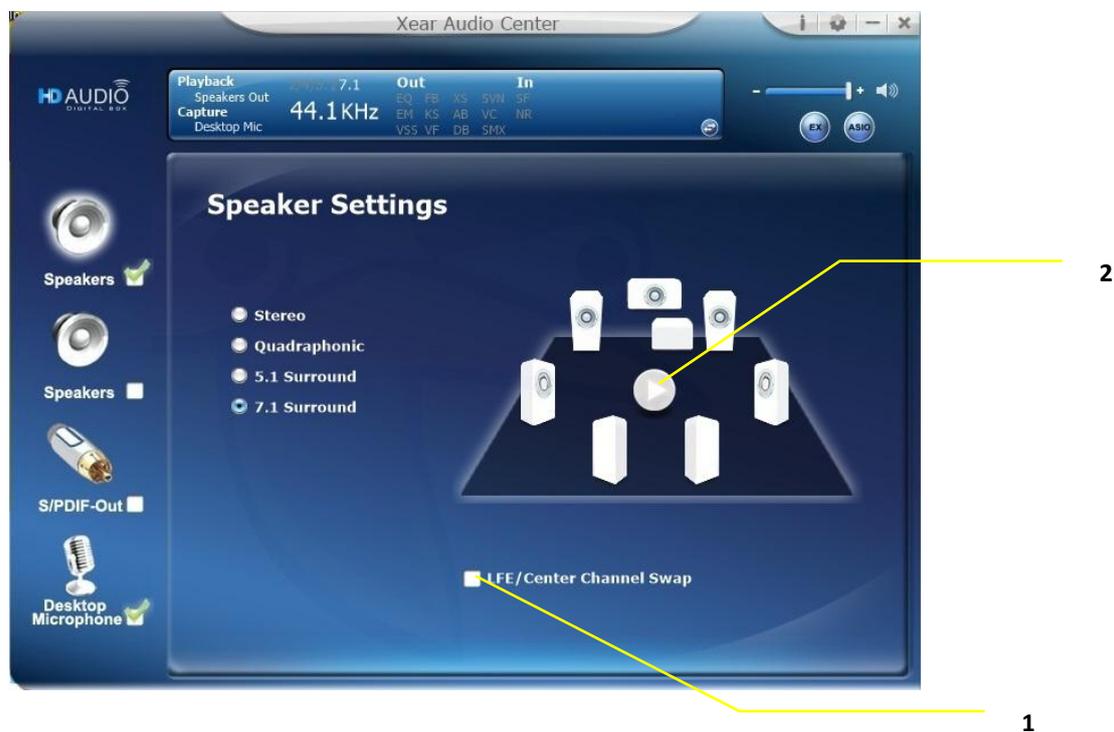
3. Mute / Un-mute:

Clicking on the mute/ un-mute button can mute all channels.

4. dB Input Area (Front, Cen/LFE, Rear, Side):

You can directly fill-in a dB value into this text box to set the volume level.

Speaker Setting Page



❖ Function Introduction

You can set the speaker numbers (Stereo/ Quadraphonic /5.1 Surround /7.1 Surround) in this page.

1. **LFE/Center Channel Swap** -- When this item enable, it can swap the audio stream between Center/LFE.
2. **Speaker Test** – Click the “Speaker Test” button, the CPL will auto play test sound in order.
Front-Left > Front-Right > Back-Left > Back-Right > Center > Bass

NOTE: Due to Stereo Music mode has two channels output only, this feature is disappear from the pop menu of second speakers.

Sample Rate Page



❖ Function Introduction

This function page provides a sample rate setting for Speaker device.

1. Sample Rate button

44.1 KHz - set playback sample rate to 44.1 KHz

48 KHz - set playback sample rate to 48 KHz

88.2 KHz - set playback sample rate to 88.2 KHz

96 KHz - set playback sample rate to 96 KHz

192 KHz - set playback sample rate to 192 KHz

2. Bit Depth button

16 bit - set playback bit depth to 16 Bit

24 bit - set playback bit depth to 24 Bit

Equalizer



❖ Function Introduction

It provides a 10-band EQ function; you will be able to adjust the EQ band manually and create customized preset items or click on the preset EQ mode.

1. EQ enable/disable switch

Click this check box to enable/disable EQ

2. Preset mode

Select a pre-set mode of the equalizer that is designed accordingly. There are 12 preset modes such as Bass, Treble, Live, Rock, Jazz, etc.

3. EQ band controller

You can change the gain setting for each band (30/ 60/ 120/ 250/ 500/ 1K/ 2K/ 4K/ 8K/ 16K)

4. Manual mode

You can change the gain setting for each band and then give it a

name in the “A. Input Field” and then click “” to add your new setting into the “B. Manual Mode List”. Click “” to delete settings.



Environment Effects



❖ Function Introduction

It provides 28 special environment emulations; you can hear different sound reflection and reverberation.

1. Environment Effect enable/disable switch

Click on this check box to enable/disable Environment Effect.

2. Environment Effect mode

Click on an Environment effect button or pull the dropdown list to choose an Environment effect.

3. Zoom Size

You can change the "Room Size" to simulate a larger or smaller space.

7.1 Virtual Speaker Shifter



❖ Function Introduction

You can use this page to simulate the speaker direction and distance.

1. 7.1 Virtual speaker shifter enable/disable switch

Click on this check box to enable/disable 7.1 Virtual Speaker.

2. Auto Rotation Mode

The virtual speakers rotate clockwise or counterclockwise slowly.

3. Manually Rotation Mode

Use mouse to rotate the virtual speakers on the screen manually.

4. Manual Shifting (Free Moving Mode)

Use pointer and click-and-drag to move the locations of the individual virtual speakers.

5. Reset

Reset the location of virtual speakers / virtual listener to default.

6. Virtual Speaker (L/R/Ls/Rs/Lb/Rb/C/W)

Each virtual speaker virtualizes one channel of the 7.1 channel speakers in the real world.

7. Volume Control

Each virtual speaker virtualizes one channel of the 7.1 channel speakers in the real world.

8. Volume indicator

Indicate value for each channel.

Flex Bass II



❖ Function Introduction

You can use this function to increase/decrease the LFE strength. This function can cut the low frequency band (50~250Hz) of stereo music content (ex. Mp3, WMA, CD Audio) and transfer to subwoofer or each speaker.

1. Flex Bass II enable/disable switch

Click on this check box to enable/disable Flex Bass II.

2. Cut Off Frequency:

The cutting range of low frequency is from 50Hz to 250Hz.

3. Bass Level:

The bass level range is from -12 to 12dB.

4. Speaker Size (L/R/Ls/Rs/Lb/Rb/C/W)

Small Speaker without bass

When the speaker size is set to small, you can hear the sound resonance more obvious and reverberation from subwoofer.

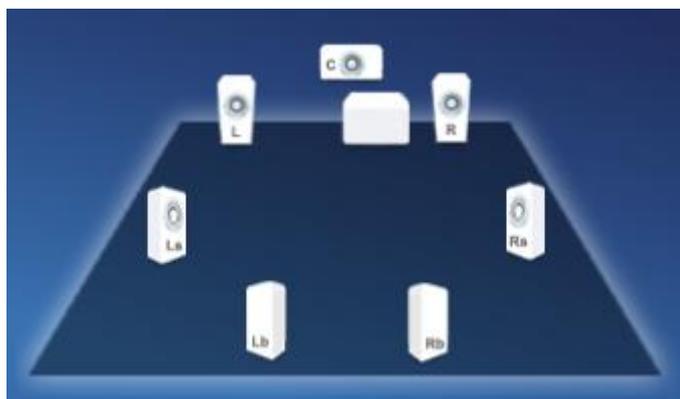
Large Speaker with bass:

When the speaker size is setting to large, you can hear the sound resonance more obvious and reverberation from itself.

5. Speaker Diagram

You also can check the speaker size from this home theater diagram.

Small Speaker



Large Speaker



Xear SingFX



❖ Function Introduction

Xear SingFX page provides 2 features for karaoke application.

1. Key Shifting switch

It provides the key change function, there are 4 shifting-up steps and 4 shifting-down steps, you can use slide bar to change the key level.

2. Vocal Fading:

It provides the vocal removal function for any stereo music content (ex. Mp3、WMA、CD), you can use slider bar to change the vocal fading level.

Xear Surround Speaker



❖ Function Introduction

You can use this function to simulate a multi-speaker home theater surround listening experience by 2 channel (Stereo) Speaker device.

1. Enable Xear Surround

Click this check box to enable the Xear Surround sound effect.

2. Adjust Sound Field Expansion / Speaker Angle

Xear Surround Speaker provides the Sound Filed Expansion and Speaker Angle for user fine tune and it can improve the Listening experience.

Xear Audio Brilliant



❖ Function Introduction

Xear Audio Brilliant can restore the clarity and details of compressed audio in music, movies and games (MP3, WMA, AAC, AC3, etc.).

1. Enable Audio Brilliant

Click this check box to enable the Xear Audio Brilliant.

2. Brilliant Level

You can increase/decrease the Brilliant Level.

3. Reset

Return to default value.

Xear Dynamic Bass



❖ Function Introduction

Xear Dynamic Bass can increase the bass reproduction capability of small speaker drivers by applying psychoacoustic techniques.

1. Enable Dynamic Bass

Click this check box to enable the Xear Dynamic Bass effect.

2. Bass Level

You can increase/decrease the Bass Level.

3. Cut-Off Frequency

You can adjust the Cut-Off Frequency range, to make the bass effect more strong.

4. Reset

Return to default value.

Xear Smart Volume



❖ Function Introduction

Xear Smart Volume can normalize sound levels of music to reduce the frequencies required for volume adjustments on Televisions, Docking Speakers, PCs and other consumer products.

1. Enable Smart Volume

Click this check box to enable the Xear Smart Volume

2. Volume Level

You can set normalize sound level.

3. Mode

You can choose Music mode and Speech Mode for your needs.

Xear Voice Clarity



❖ Function Introduction

Xear Voice Clarity can increase clarity, intelligibility, and prominence of receiving voice in VOIP, game, music, or movies without suppressing or changing other audio.

1. Enable Voice Clarity

Click this check box to enable the Xear Voice Clarity effect.

2. Voice Clarity Level

You can increase the volume level to make the voice more clear.

3. Noise Suppression for communication

You can eliminate the background noise.

4. Reset

Return to default volume.

Xear Surround Max



❖ Function Introduction

Xear Surround Max can expand stereo audio content to each output channel, When you playing mp3 music file and enable this function, you can hear music from each speaker (8 speakers)..

1. Enable Voice Clarity

Click this check box to enable the Xear Surround Max

Headphone-Out Device function introduction

To Access function menu, please right click  the Headphone -Output device icon, this will provide you with the additional feature and sound effects.



Volume control Page



❖ Function Introduction

This function page provides a volume control for Headphone device.

1. **Volume control bar:**
Headphone - It can adjust volume level for Headphone device .
2. **Left/ Right Channel Lock :**
 Clicking on the lock/ un-lock button, it can lock left-channel and right-channel to sync L/R channel.
3. **Mute / Un-mute:**
 Clicking on the mute/ un-mute button, it can mute all channels.
4. **dB Input Area :**
 You can directly fill-in a dB value into this text box to set the volume level

..

Headphone Settings Page



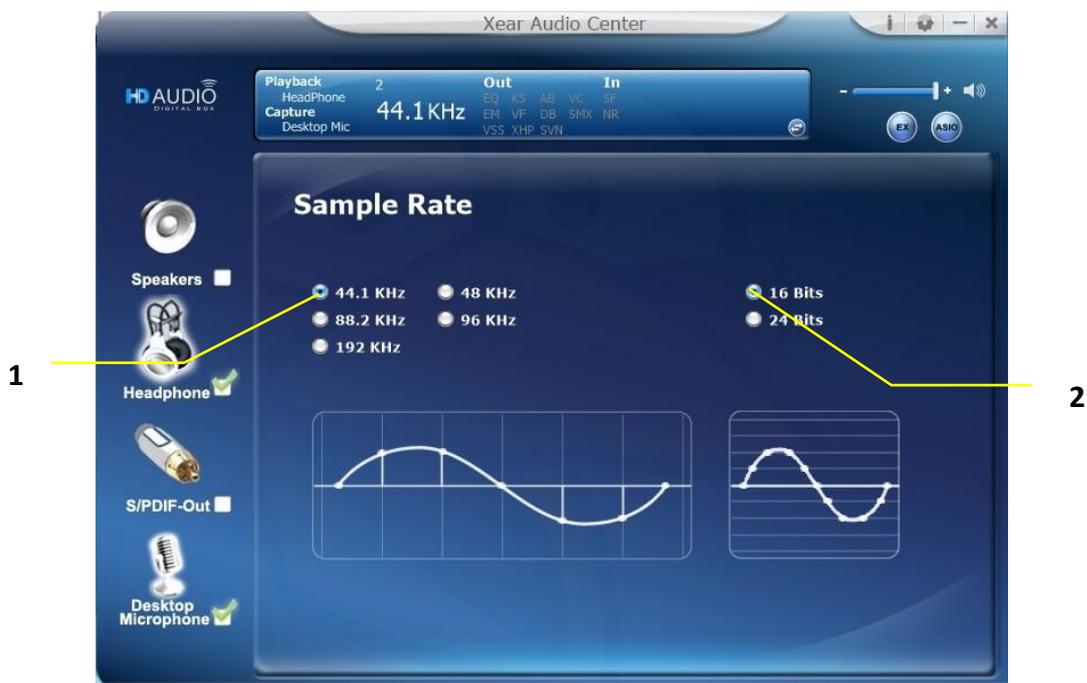
❖ Function Introduction

You can play a test sound for headphone in this page.

1. Headphone Test

Click the “Headphone Test” button, the CPL will auto play test sound.

Sample Rate Page



❖ Function Introduction

This function page provides a sample rate setting for Headphone device.

1. Sample Rate button

44.1 KHz - set playback sample rate to 44.1 KHz

48 KHz - set playback sample rate to 48 KHz

88.2 KHz - set playback sample rate to 88.2 KHz

96 KHz - set playback sample rate to 96 KHz

192 KHz - set playback sample rate to 192 KHz

2. Bit Depth button

16 bit - set playback bit depth to 16 Bit

24 bit - set playback bit depth to 24 Bit

Equalizer



❖ Function Introduction

It provides a 10-band EQ function; you will be able to adjust the EQ band by manual and create customized preset items or click on the preset EQ mode.

1. EQ enable/disable switch

Click on this check box to enable/disable EQ

2. Preset mode

Select a pre-set mode for equalizer that is designed accordingly. There are 12 preset modes such as Bass, Treble, Live, Rock, Jazz, etc.

3. EQ band controller

You can change the gain setting for each band
(30/ 60/ 120/ 250/ 500/ 1K/ 2K/ 4K/ 8K/ 16K)

4. Manual mode

You can change the gain value of each band and then give it a

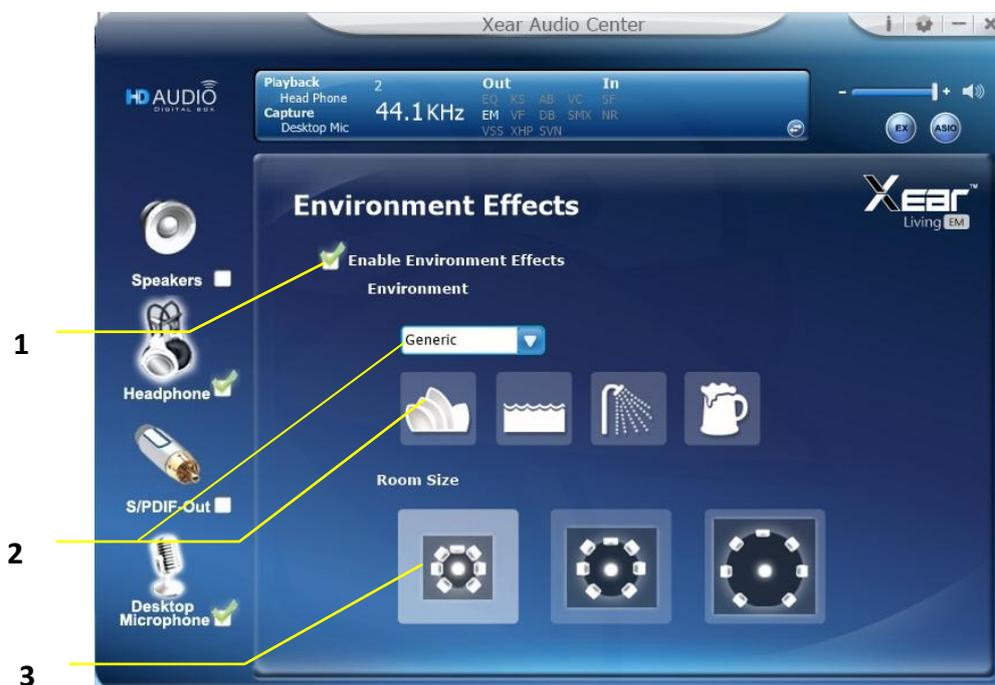
name to the "A. Input Field" and then click "  " to save your

new setting into the “B. customization EQ list”.

Click “” to delete settings.



Environment Effects



❖ Function Introduction

It provides 28 special environment emulations; you can hear different sound reflection and reverberation.

1. Environment Effect enable/disable switch

Click on this check box to enable/disable Environment Effect.

2. Environment Effect mode

Click on an Environment effect button or drop the dropdown list to choose a Environment effect.

3. Zoom Size

You can change the "Room Size" to simulate a larger or smaller space.

Xear SingFX



❖ Function Introduction

Xear SingFX page provides 2 feature for karaoke application.

1. Key Shifting switch

It provides the key change function, there are shifting-up 4 steps and shifting-down 4 steps, you can use slider bar to change the key level.

2. Vocal Fading:

It provides the vocal removing function for any stereo music content (ex. Mp3、WMA、CD), you can use slider bar to change the vocal fading level.

Xear Surround Headphone



❖ Function Introduction

You can use this function to simulate a multi-speaker home theater surround listening experience by 2 channel (Stereo) Headphone device.

1. Enable Xear Surround

Click this check box to enable the Xear Surround sound effect.

2. Room Size

Xear Surround Headphone provides 3 room size modes and one anechoic room. You can change the "Room Size Button" to simulate the difference room size and room type.

Xear Audio Brilliant



❖ Function Introduction

Xear Audio Brilliant can restore the clarity and details of compressed audio in music, movies and games (MP3, WMA, AAC, AC3, etc.).

1. Enable Audio Brilliant

Click this check box to enable the Xear Audio Brilliant.

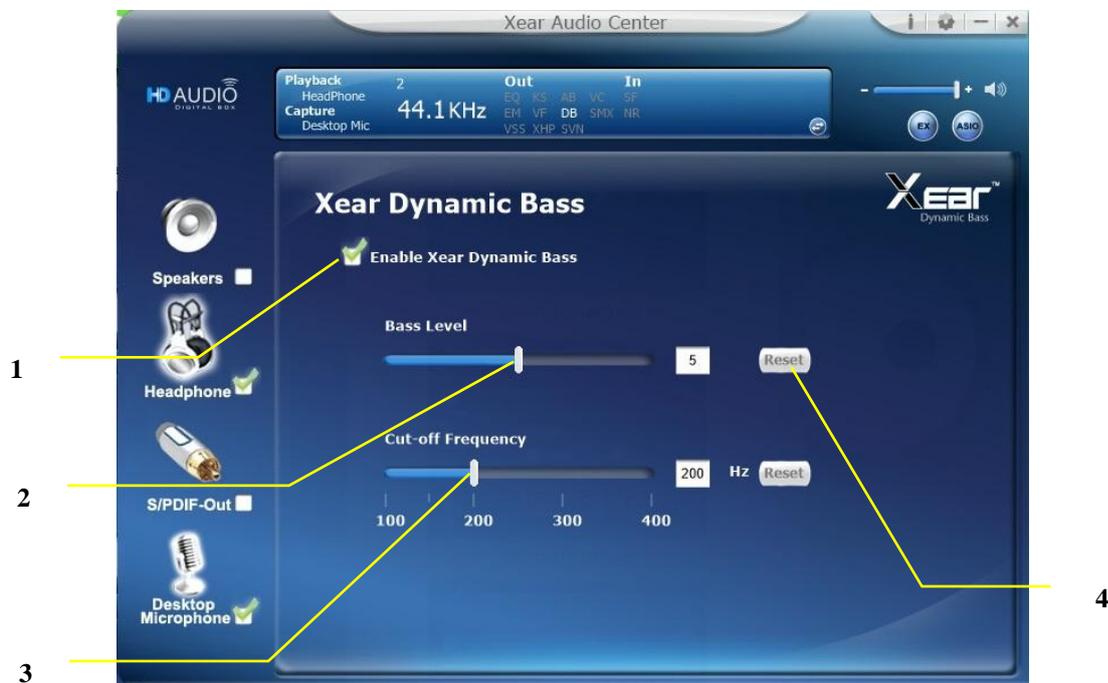
2. Brilliant Level

You can increase/decrease the Brilliant Level.

3. Reset

Return to default value.

Xear Dynamic Bass



❖ Function Introduction

Xear Dynamic Bass can increase the bass reproduction capability of small speaker drivers by applying psychoacoustic techniques.

1. Enable Dynamic Bass

Click this check box to enable the Xear Dynamic Bass effect.

2. Bass Level

You can increase/decrease the Bass Level.

3. Cut-Off Frequency

You can adjust the Cut-Off Frequency range, to make the bass effect more strong.

4. Reset

Return to default value.

Xear Smart Volume



❖ Function Introduction

Xear Smart Volume can normalize sound levels of music to reduce the frequencies required for volume adjustments on Televisions, Docking Speakers, PCs and other consumer products.

1. Enable Smart Volume

Click this check box to enable the Xear Smart Volume

2. Volume Level

You can set normalize sound level.

3. Mode

You can choose Music mode and Speech Mode for your needs.

Xear Voice Clarity



❖ Function Introduction

Xear Voice Clarity can increase clarity, intelligibility, and prominence of receiving voice in VOIP, game, music, or movies without suppressing or changing other audio.

1. Enable Voice Clarity

Click this check box to enable the Xear Voice Clarity effect.

2. Voice Clarity Level

You can increase the volume level to make the voice more clear.

3. Noise Suppression for communication

You can eliminate the background noise.

4. Reset

Return to default volume.

SPDIF-Out Device function introduction

To Access function menu, please right click  the SPDIF -Output device icon, this will provide you with the additional feature and sound effects.



Volume control Page



❖ Function Introduction

This function page provides a volume control for SPDIF-Out device.

- 1. Volume control bar:**
SPDIF-Out – You can use this bar to increase/decrease volume level.
- 2. Left/ Right Channel Lock:**
Clicking on the Lock/ Un-Lock button can sync the left-channel and right-channel volume.
- 3. Mute / Un-mute:**
Clicking on the mute/ un-mute button can mute SPDIF-Out.
- 4. dB Input Area:**
You can directly fill-in a dB value into this text box to set the volume level.

Sample Rate Page



❖ Function Introduction

This function page provides a sample rate setting for SPDIF-Out device.

1. Sample Rate button

44.1 KHz - set playback sample rate to 44.1 KHz

48 KHz - set playback sample rate to 48 KHz

88.2 KHz - set playback sample rate to 88.2 KHz

96 KHz - set playback sample rate to 96 KHz

192 KHz - set playback sample rate to 192 KHz

2. Bit Depth button

16 bit - set playback bit depth to 16bit

24 bit - set playback bit depth to 24bit

Desktop Microphone Device function introduction

To Access function menu, please right click  the Mic -in device icon, this will provide you with the additional feature and sound effects.



Volume control Page



❖ Function Introduction

This function page provides the recording volume and the volume control of Microphone device.

1. Volume control bar:

Mic-In – It can adjust the volume level of recording.

2. Left/ Right Channel Lock:

Clicking on the Lock/ Un-Lock button can sync the left-channel and right-channel volume.

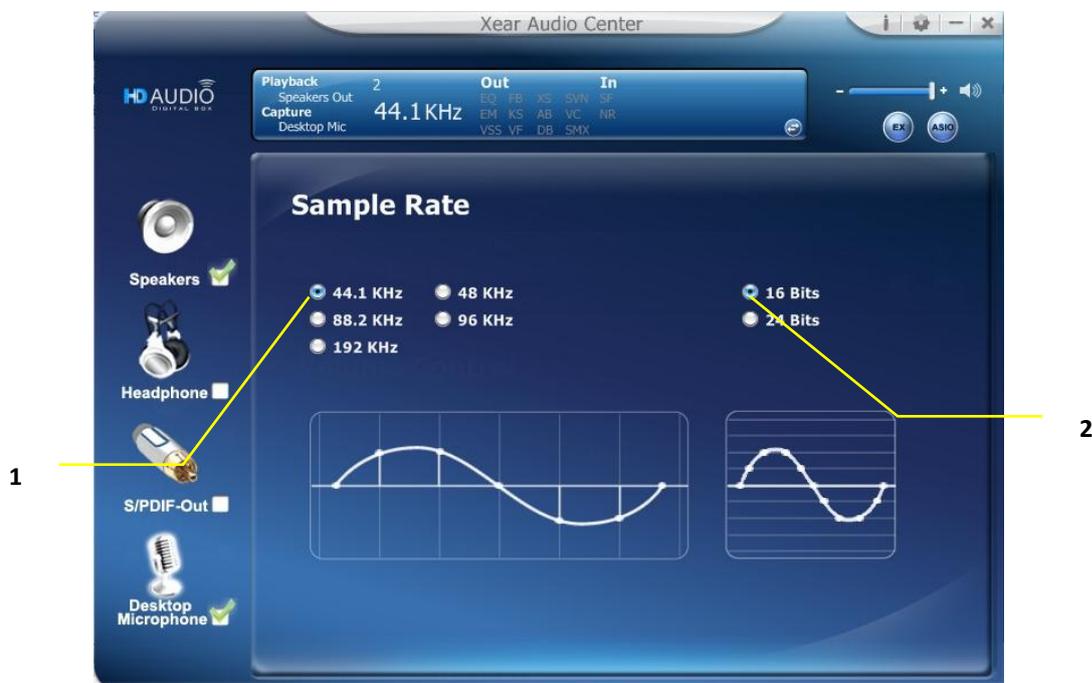
3. Mute / Un-mute:

Clicking on the Mute/ Un-Mute button can mute all channels.

4. dB Input Area

You can directly fill-in a dB value into this text box to set the volume level.

Sample Rate Page



❖ Function Introduction

This function page provides a sample rate setting for Microphone device.

1. Sample Rate button

44.1 K Hz - set recording sample rate to 44.1 KHz

48 K Hz - set recording sample rate to 48 KHz

88.2K Hz - set recording sample rate to 88.2 KHz

96 K Hz - set recording sample rate to 96 KHz

192 K Hz - set recording sample rate to 192 KHz

2. Bit Depth button

16 bit - set recording bit depth to 16 bit

24 bit - set recording bit depth to 24 bit

Xear SingFX Page



❖ Function Introduction

When you are talking to your friends over the network like messenger, VOIP, online game applications, you can use “Magic Voice” effects to simulate some funny voice. Only one voice type can be chosen at one time.

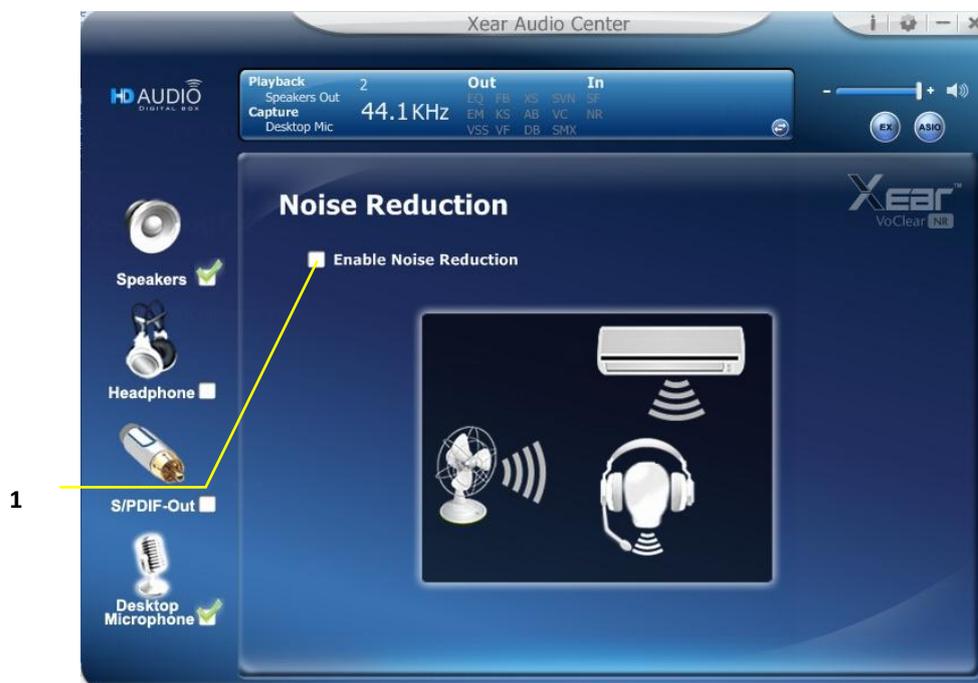
1. Microphone Echo,

Click this check box to enable the Microphone echo effect; you can use the slide bar to change the echo level.

2. Magic Voice mode (Monster/Carton/Male/Female)

Click this check box to enable the Magic Voice effect; you can click on the any button to select the magic voice mode.

Noise Reduction Page



❖ Function Introduction

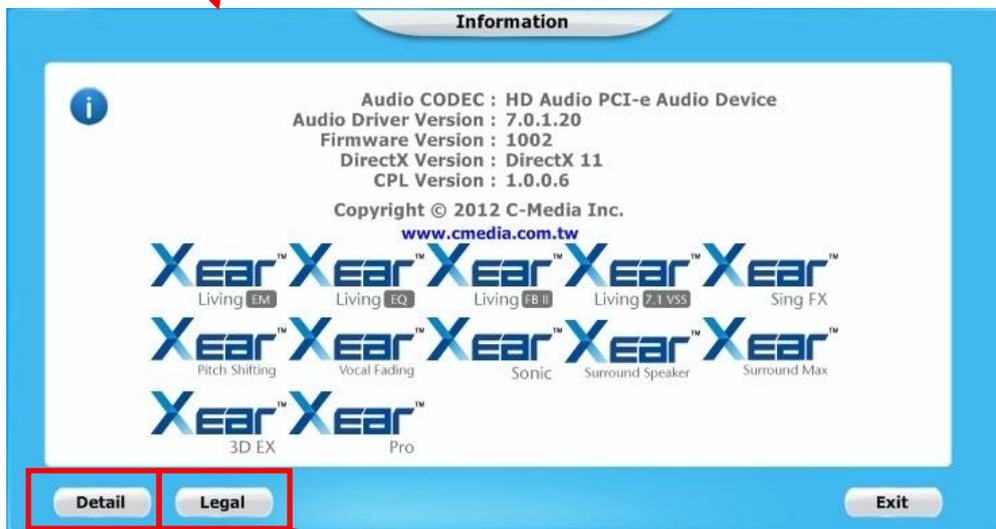
Noise Removal effect can be used to attenuate constant background noise such as electric fans or hums.

1. Enable Noise Reduction

You can click this check box to enable the Noise Reduction effect.

Information Page Introduction

This page lists the driver information and the technology trademark logo. You can get both hardware/software details and also the legal information references.

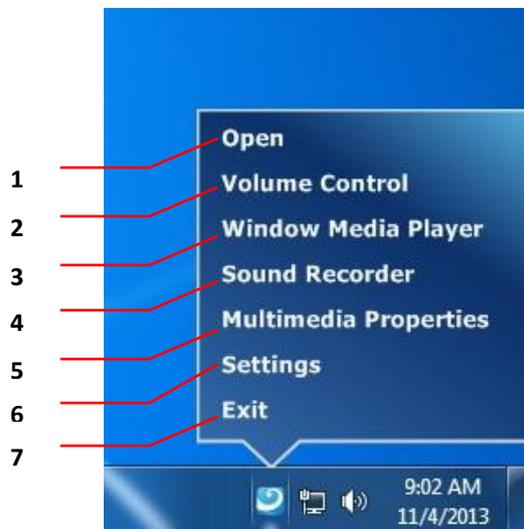


Detail:



Tray Icon Function Introduction

Open the “CPL Tray Icon Function List” by right-clicking the tray icon on system tray.



1. Open:

Clicking the “Open” item will restore the Xear Audio Center.

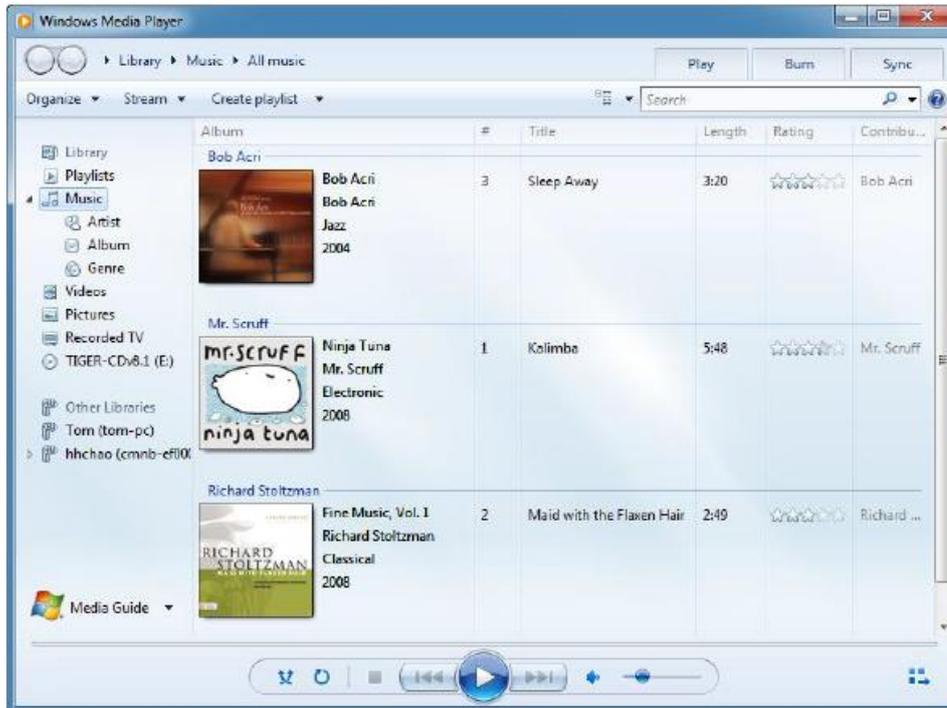
2. Volume Control:

Clicking the “Volume Control” item will open the Volume Mixer of Windows OS. If you want to separately control the volume of your speakers and other sound devices or programs, use this Volume Mixer.



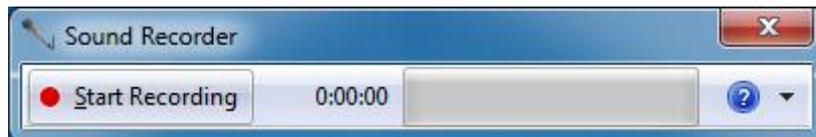
3. Windows Media Player:

Clicking the “Windows Media Player” item will open the Microsoft Windows Media Player.



4. Sound Recorder:

Click the “Sound Recorder” item to open the Windows Sound recorder.



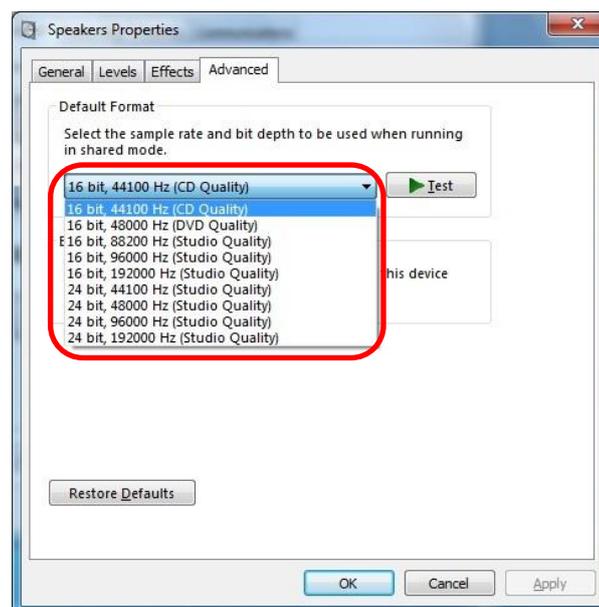
5. Multimedia Properties:

Open the Multimedia Properties page of Windows OS, you can select the working sample rate & bit rate.

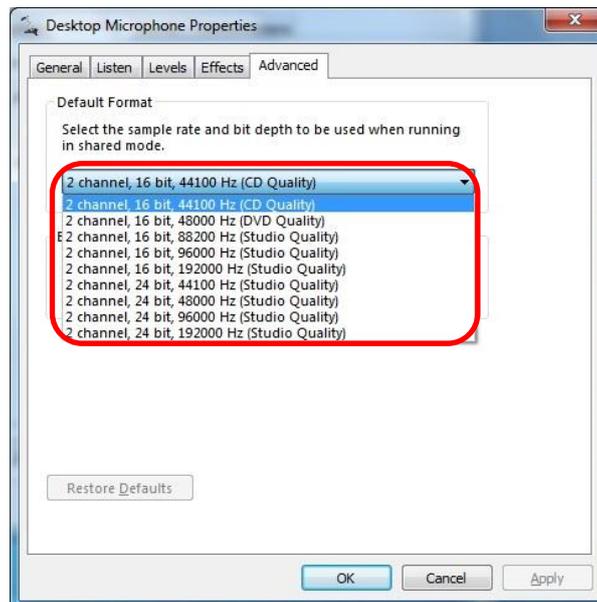
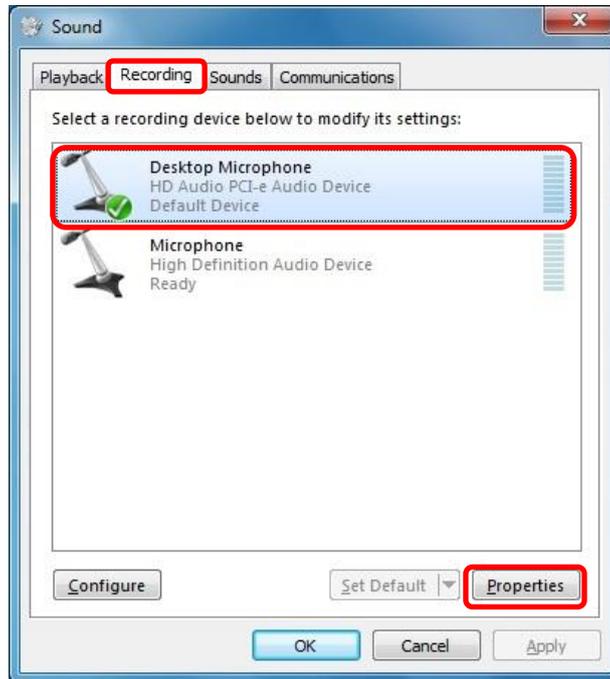
- I. Select the “Speakers” device and then click the “properties” button.



- II. Click the “Advanced” tag, enter the advanced page, and pull the dropdown list to open default format support list as shown in the below diagram.

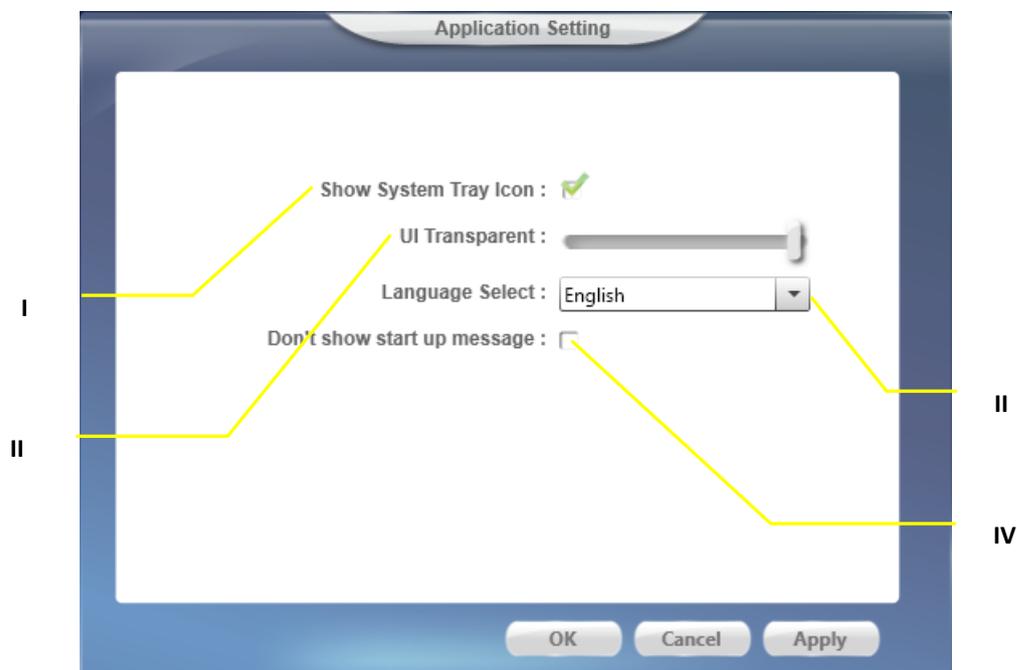


III. Please follow the same procedure to change the Sample Rate & Bit Rate of “Microphone” device on recording tag.



6. Setting

Click setting item to open the “Xear Audio Center” setting page as below.



- I. Show System Tray Icon – Check “Show System Tray Icon” box, the Xear Audio center icon will be shown in the system tray.



- II. UI Transparent – It can adjust transparent of the UI vision.
- III. Language Select – it can change the UI language. (Refer to [Appendix A](#))
- IV. Don't show start up message – it can enable/disable the UI start-up message.

7. Exit:

Clicking the “Exit” item will exit the tray Icon from system tray.

Appendix A - Multi-Lingual Supporting List

SC808 Audio Driver Multi-Lingual Supporting List

- Support 17 lingual versions:
- Detail Information

- 1 English - English
- 2 German - Deutsch
- 3 French - Français
- 4 Portuguese - Português
- 5 Spanish - Español
- 6 Russian - русский язык
- 7 Italian - Italiano
- 8 Dutch - Nederlands
- 9 Indonesian - Bahasa Indonesia
- 10 Danish - Dansk
- 11 Chinese - Traditional
- 12 Chinese - Simplified
- 13 Korean - 한국어 (韓國語)
- 14 Japanese-日本語
- 15 Swedish - Svenska
- 16 Turkish - Türkçe
- 17 Thai- ไทย

Installing to different country version of operation system can auto detect the language version and show a correct version.

Appendix B – Trouble Shooting

1. Why my system cannot detect this board after reboot?

You may forget to connect the ATX Power from Power Supply, to get the better power support, SC808 uses Power Supply (+12V, +5V and GND) only, it is to avoid the noise interference from Bus power. Please turn off the system and reconnect the ATX Power, and then reboot the system.
2. How do I enjoy the 24-bit/192kHz high definition audio quality from SC808?

Please find out the output device, and setting the sample rate to 24 bit/192 kHz. We recommend that you can use the 24 bit/ 192 kHz content for more detail or if you just have lower quality of contents. SC808 will process sampling rate converting feature to update the audio quality. Moreover, please also check with your music player is also support high resolution playback.
3. Why I need to install drivers under Windows environment?

Exactly, the installation CD is not for driver installation. SC808 design in compliance with Microsoft Universal Audio Architecture (UAA), it means the SC808 can use Microsoft internal drivers. The bundle software will enhance the audio features by install the Xear Audio Center. With Xear Audio Center, you will add extra features such as Equalizer, Environment Effect, Virtual Speaker Shifter, Flex Bass II, Xear SingFX, Xear Surround Speaker, Xear Audio Brilliant, Xear Dynamic Bass, Xear Smart Volume, Xear Voice Clarity, Xear Surround Max. Please read this manual for more detail.
4. Did SC808 support ASIO?

Yes, SC808 support ASIO, and you need to install the bundle CD to get this support. Moreover, if you are dedicated the applications of music play, we recommend you to use latest foobar2000 and add ASIO plug-ins as default player for ASIO application.