CM 6206

USB Multi-Channel Audio Device

Advanced Driver Software Architecture TM

Software User Manual for XP

Rev. 0.3
Sep. 01, 2010

Revision History

Revision	Date	Description
0.1	2010/01/29	First release
0.2	2010/02/12	Modified
0.3	2010/09/01	Add Appendix A - Multi-Lingual Supporting List

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SECTION 1 Installing the Software of CM6206

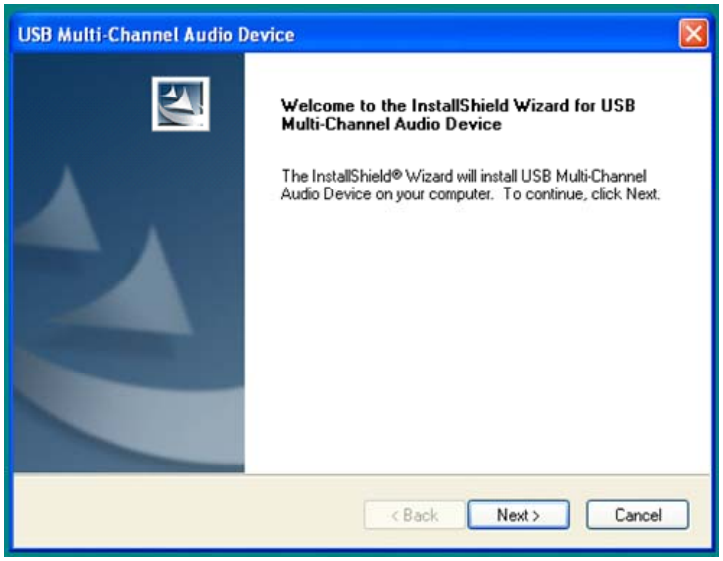
Ensure that you have plug-in the USB audio card before installing CM6206 USB Multi-Channel Audio Device driver. Otherwise, driver installation error may occur.

❖ Please make sure your CM6206 USB Multi-Channel Audio Device is plug-in. Otherwise you will see follow dialog.

1.1 Installation

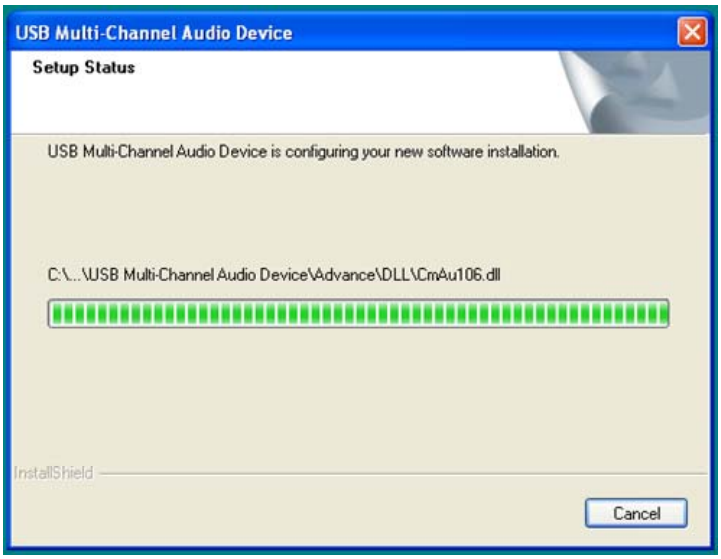
❖ Insert C-Media CM6206 USB Multi-Channel Audio Device driver CD. Double click the setup.exe file if auto run is disabled. Press “Cancel” if you want to quit installation.

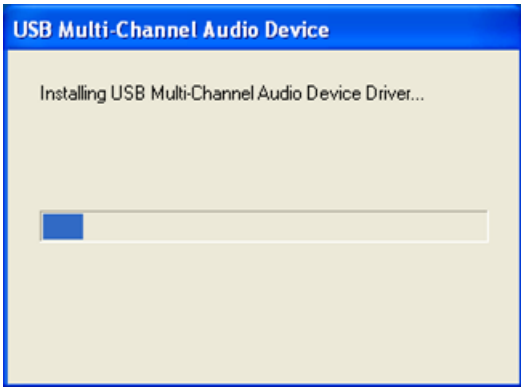
❖ Start Driver installing, please press “Next” button to next step as following diagram.



❖ Please press “Next” button to next step as following diagram.

❖ Install Program will automatic run following processes.

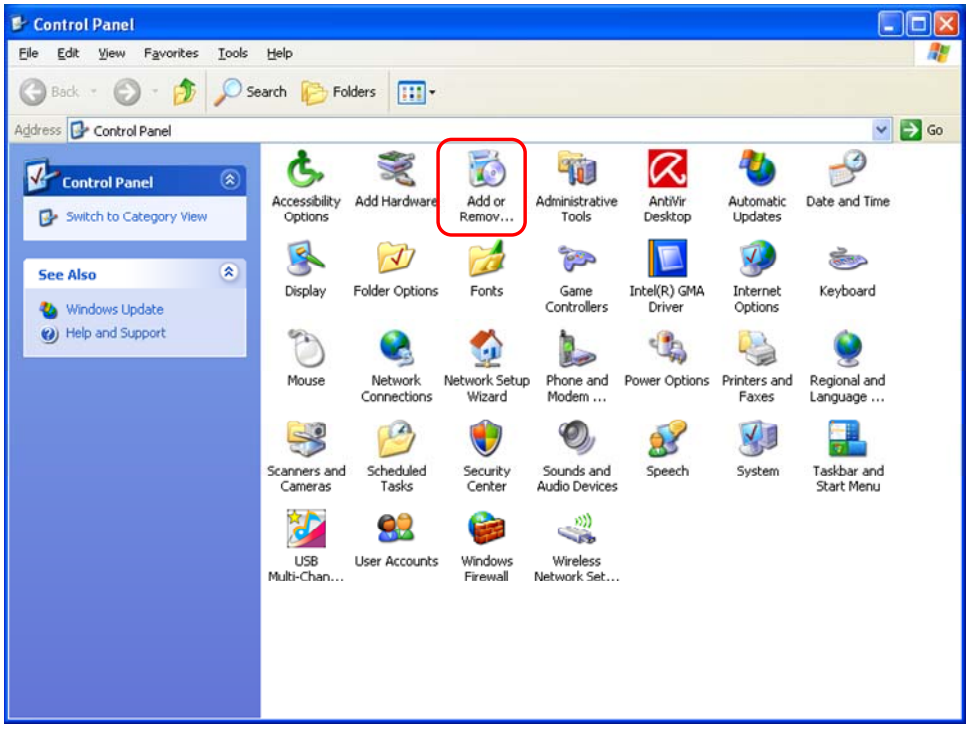




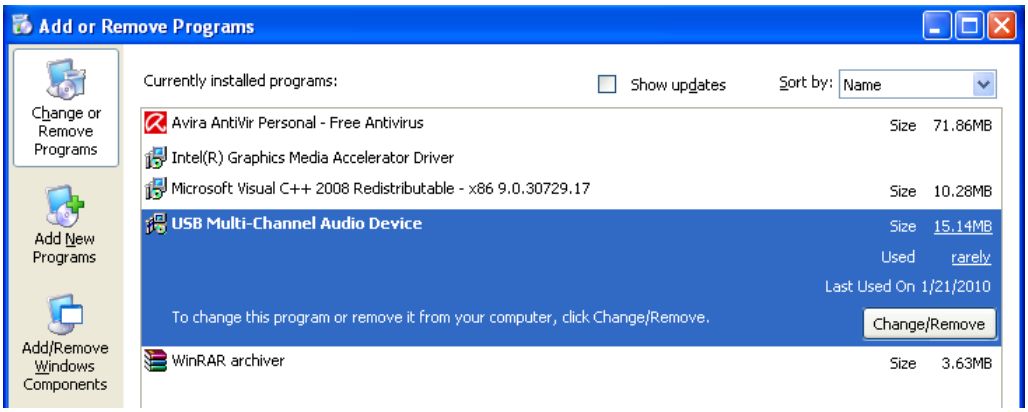
❖ Install complete. It is recommended that you restart your computer.

1.2 Un-Installation

❖ Double click “Add or Remove Programs” icon from Windows XP Control Panel.



❖ Select “USB Multi-Channel Audio Device” item, and then click “Change/Remove” button.



❖ Please press “OK” button to Uninstall C-Media CM6206 USB Multi-Channel Audio Device driver

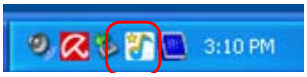
❖ Uninstall driver successfully, it is recommend restarting your computer to completely remove driver.

SECTION 2 Driver Control Panel (CPL) Introduction

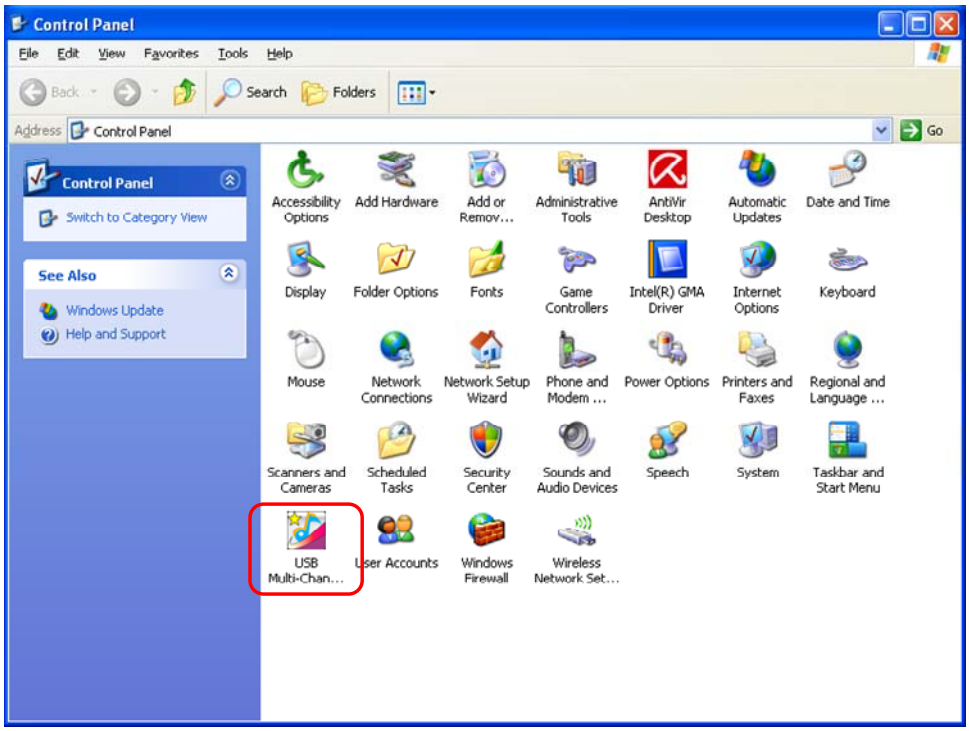
2.0 Open CM6206 USB Audio Device Software CPL

After the driver installing and rebooting, you will find the CM6206 USB Multi-Channel Audio Device software CPL icon on the system tray bar.

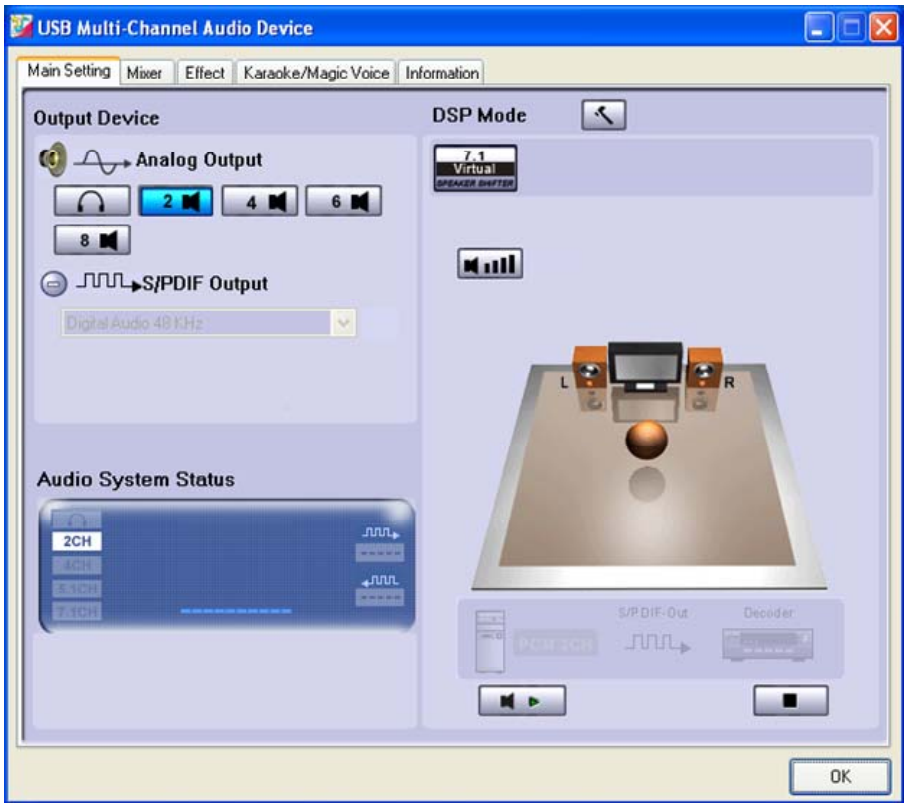
❖ You are able to open the CPL by double-clicking on the icon as following diagram.



❖ If the tray icon does not appear in your system tray, please go to the Windows XP control panel and double click the "USB Multi-Channel Audio Device" CPL icon to open it.

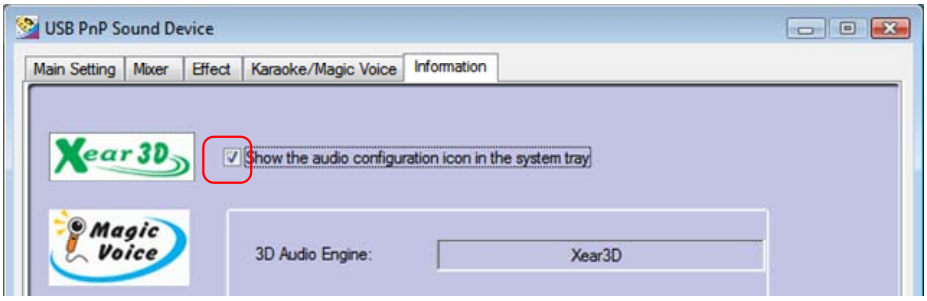


❖ The USB Multi-Channel Audio Device CPL will appear as below diagram.



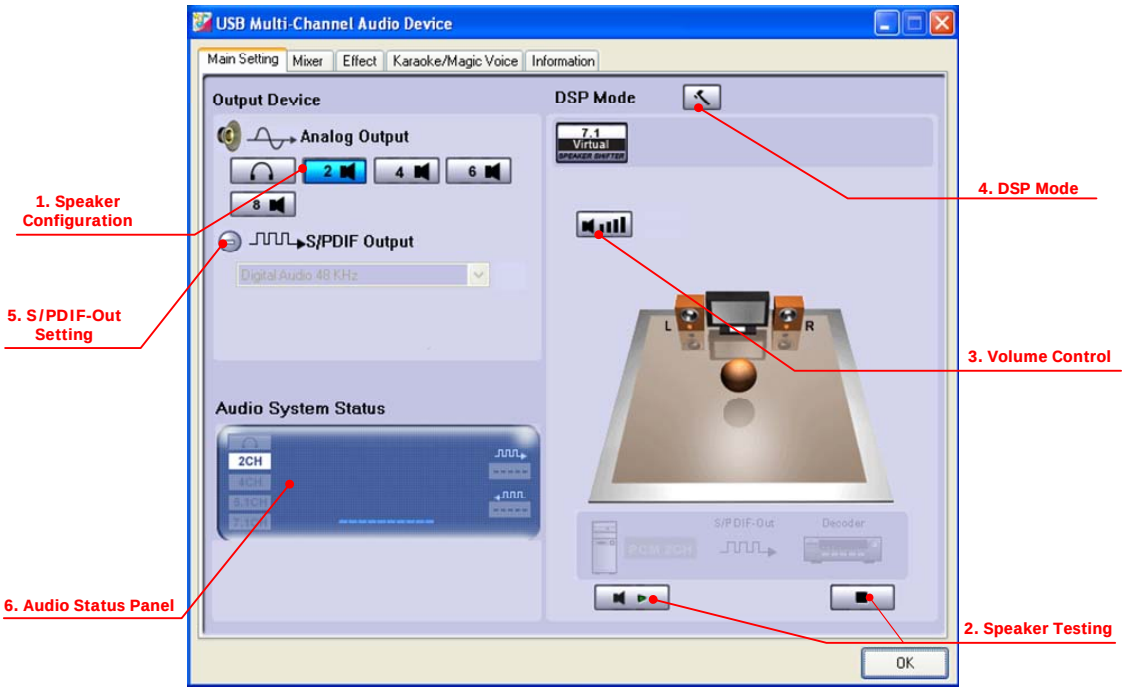
❖ How to make CPL icon visible in the system tray?

1. Open CM6206 USB Multi-Channel Audio Device software control panel.
2. Go to “Information” page.
3. Check “Show the audio configuration icon in the system tray.”



2.1 "Main Setting" Page Function Introduction

You can control the USB Audio various playback device configuration as below diagram.

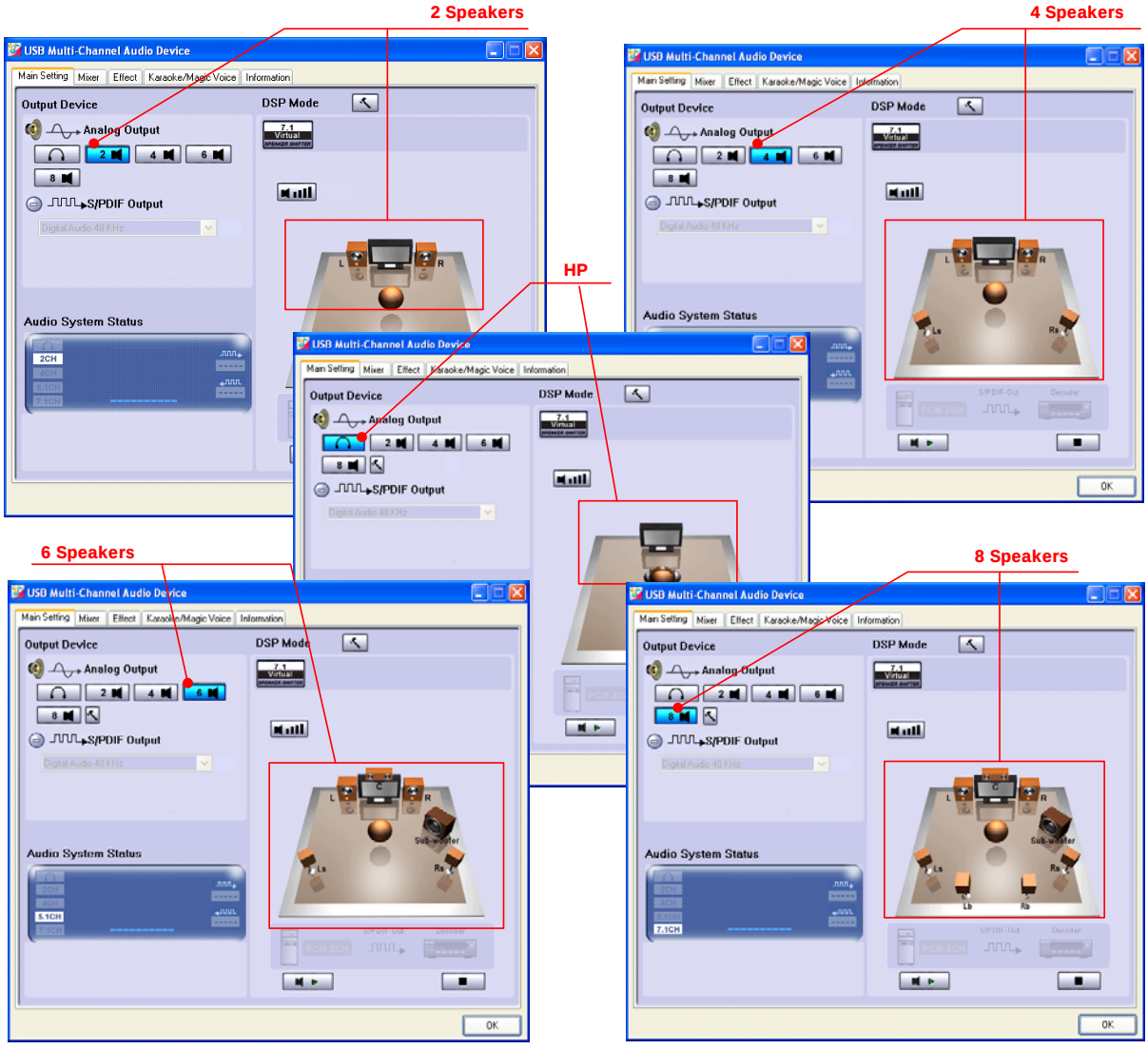


1. Analog Output - Speaker Configuration. (Please refer to 2.1.1)
2. Analog Output – Speaker Testing. (Please refer to 2.1.2)
3. Analog Output – Volume Control. (Please refer to 2.1.3)
4. Analog Output – DSP Mode. (Please refer to 2.1.4)
5. S/PDIF Output – S/PDIF Output Device Options. (Please refer to 2.1.5)
6. Display – Audio System Status. (Please refer to 2.1.6)

2.1.1 Analog Output - Speaker Configuration

CM6206 USB Multi-Channel Audio Device support 7.1CH analog output.

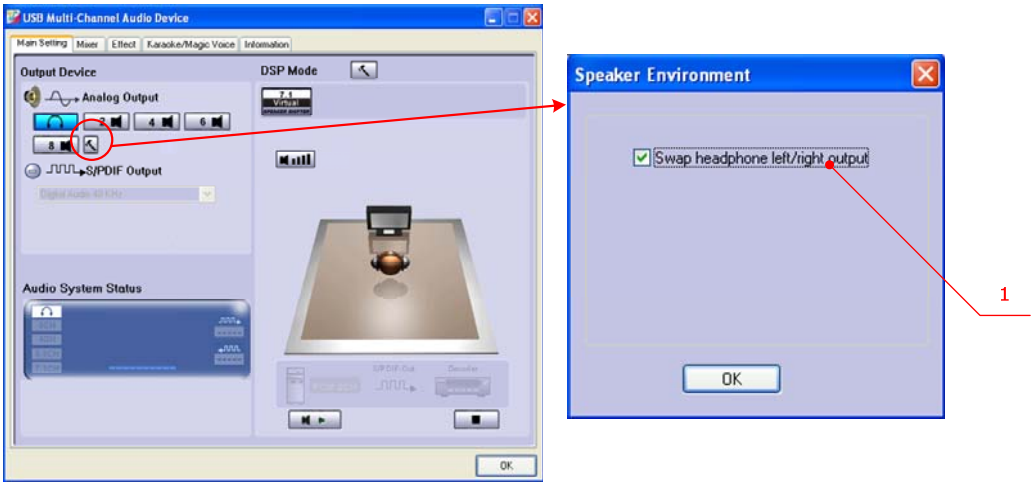
❖ Click Speaker configuration button (HP/2CH/4CH/6CH/8CH) to set the Speaker Channel or Headphone, and the Home Theater Diagram will auto change the speaker number.



❖ Click the Advanced settings button ( ) to set the advanced speaker setting.

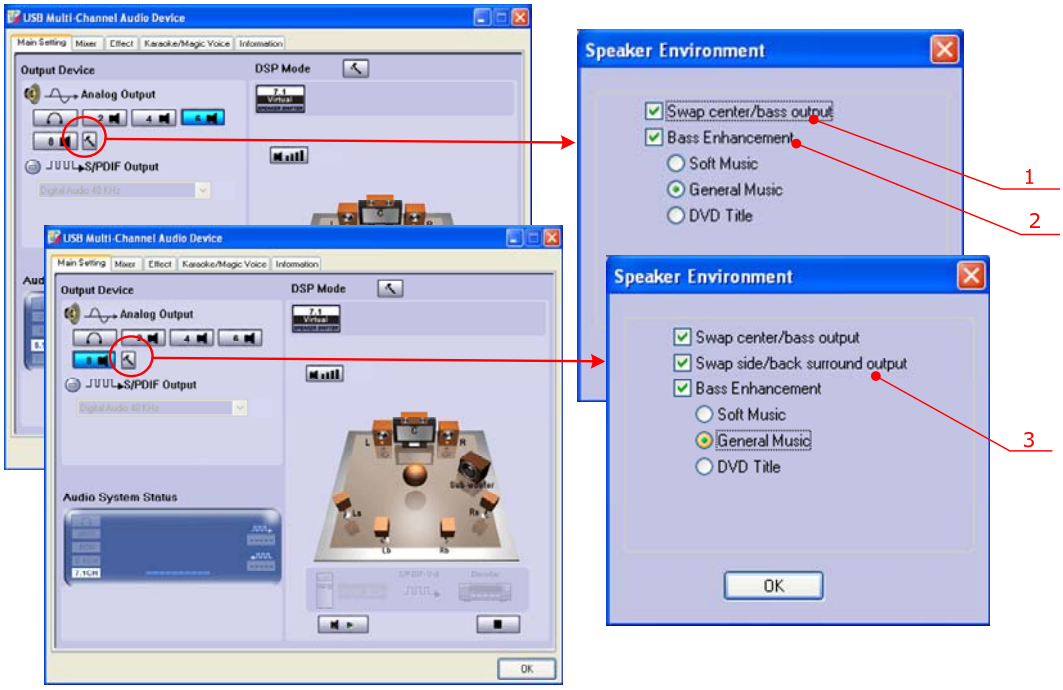
■ Advanced settings – Headphone

1. Swap headphone left/right output



■ Advanced settings – 6CH/8CH Speaker configuration

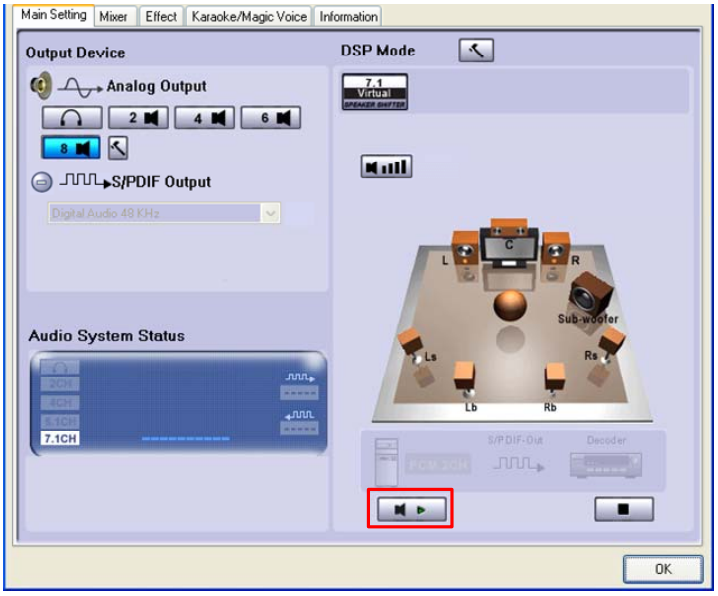
1. Swap center/bass output
2. Bass Enhancement – According to the media content type, you can choose the optimization Bass Enhancement type such as “Soft Music”, “General Music” and “DVD Title”.
3. Swap side/back surround output (only for 8CH)



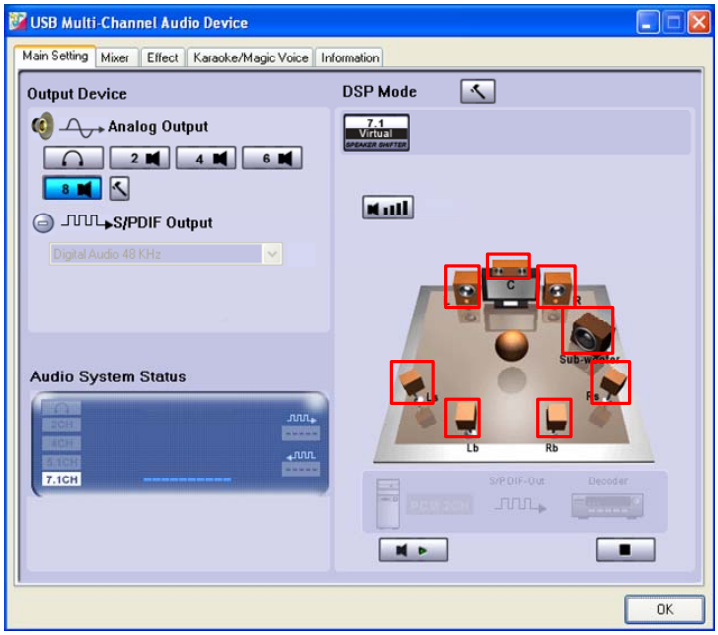
2.1.2 Analog Output – Speaker Testing

After the Speaker number setting, you can testing all the output sound for each channels whatever the Home Theater type is.

1. Automatic Speaker Testing:
   Click the auto testing button ( ), CPL will auto testing every speaker in turn.



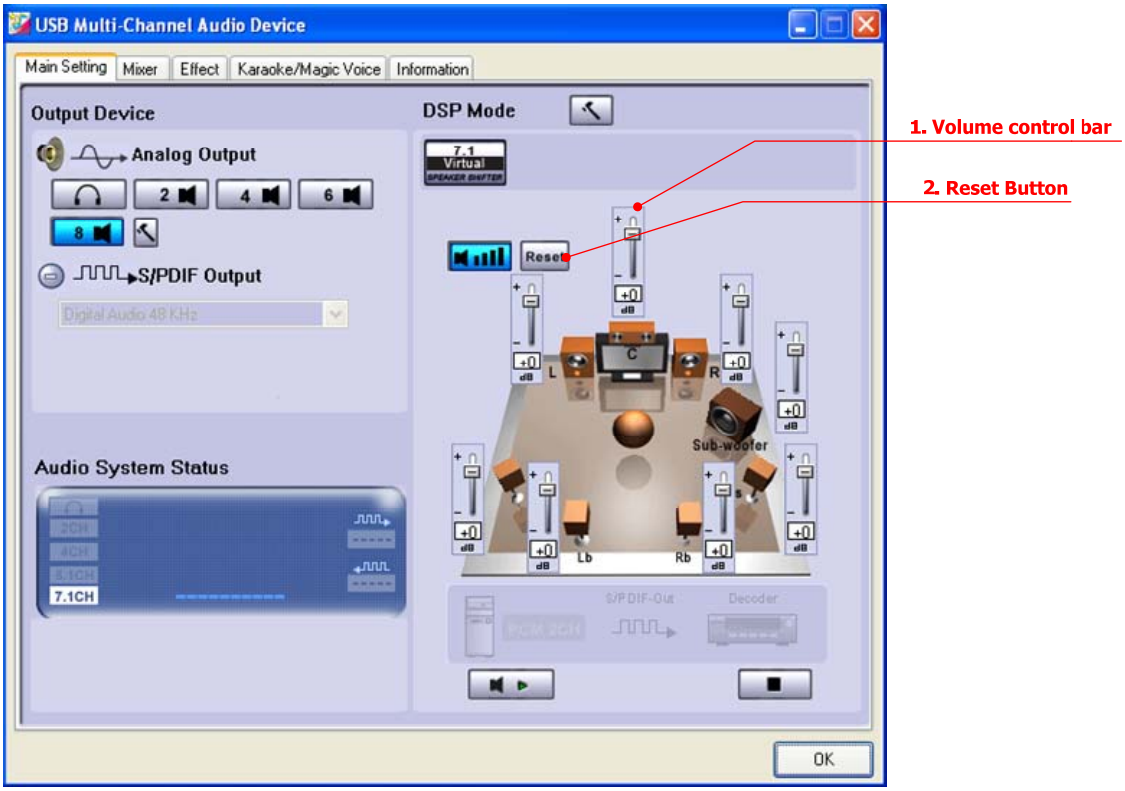
2. Manual Speaker Testing:
   Click the single speaker diagram to test speaker output sound by manual.



2.1.3 Analog Output – Volume Control

CM6206 USB Multi-Channel Audio Device CPL provides the volume control function, Click the "Digital Volume" Button ( ) to enable the volume control bar as following diagram.

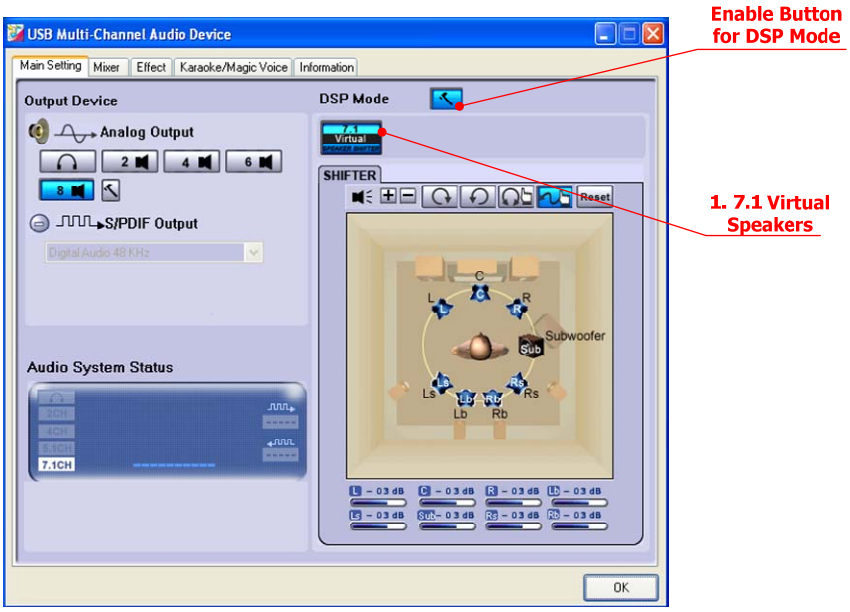
1. Volume Control Bar:
   Use the volume control bar to adjust sound value for individual speaker.
2. Reset Button:
   Click the "Reset" Button to return all speaker sound value to default setting.



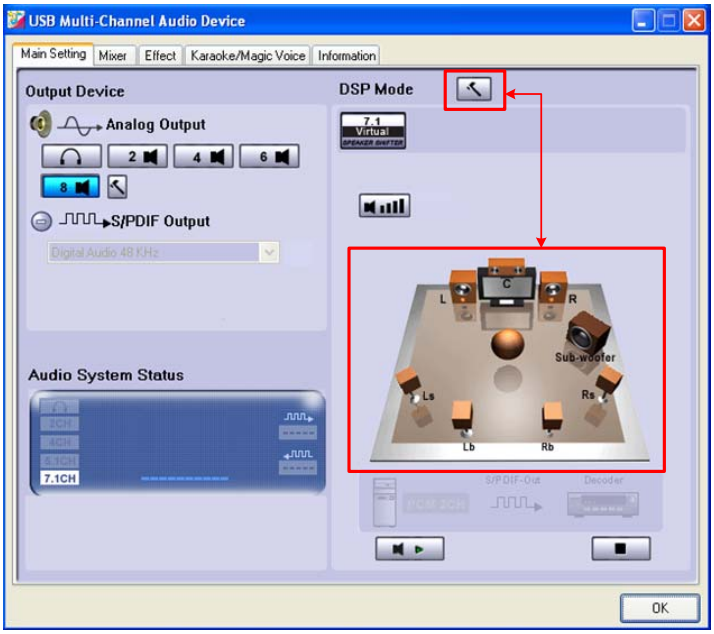
2.1.4 Analog Output - DSP Mode

CM6206 USB Multi-Channel Audio Device CPL provides a DSP mode.

❖ The button ( ) allows users switch DSP Effect Advanced Setting on or off. When the DSP Mode is turned on, users can see the DSP working layout to the right.

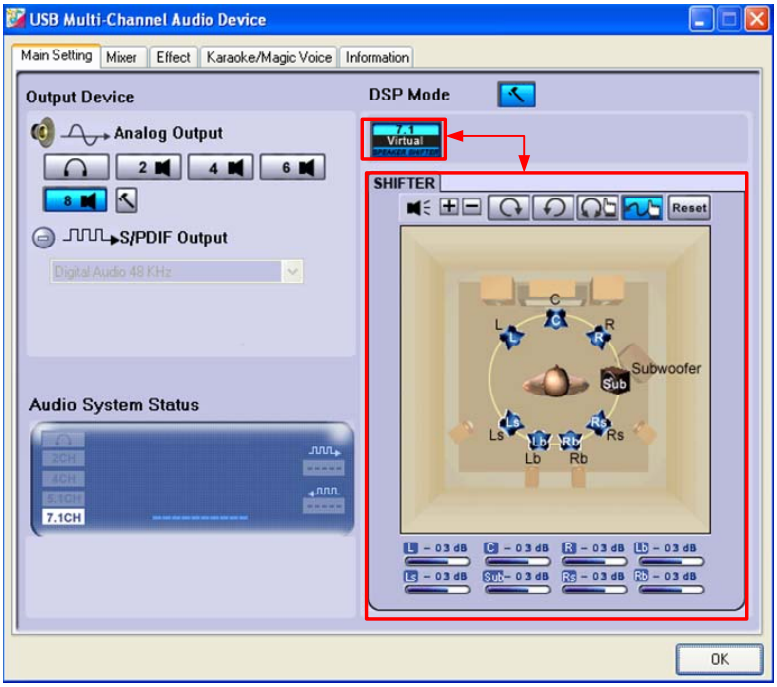


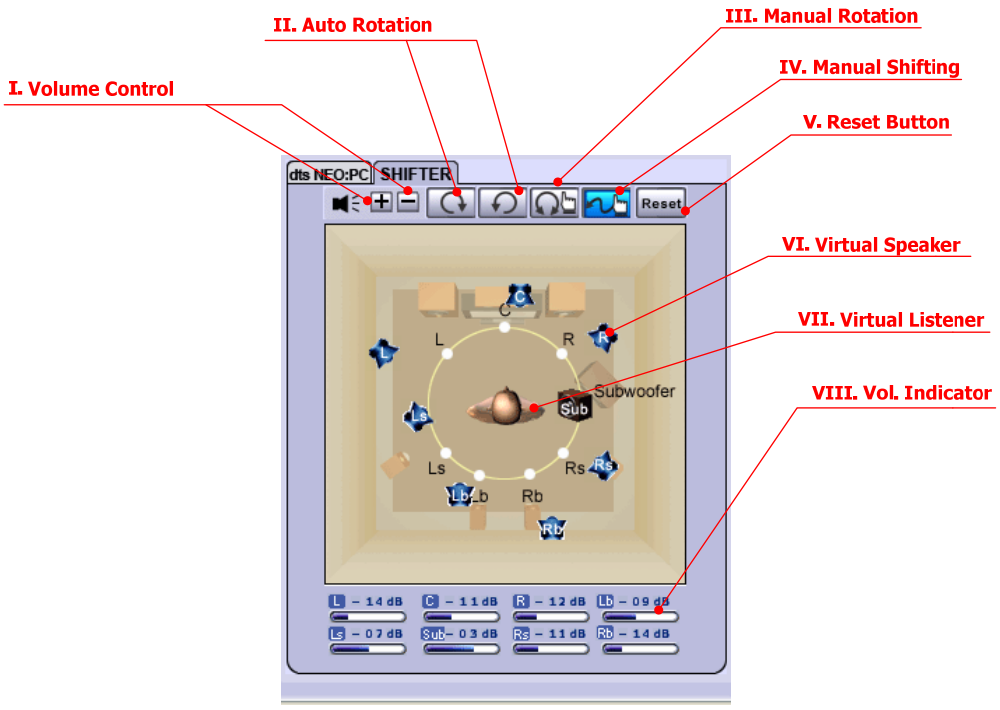
❖ When the DSP Mode is off ( ), the standard speaker test mode will be resumed.



1. C-Media 7.1 Virtual Speaker Shifter:

   Click the "7.1 Virtual Speaker button" ( ) to enable the DSP Effect. When enabled, the icon will be displayed in the DSP Effect section to the right.



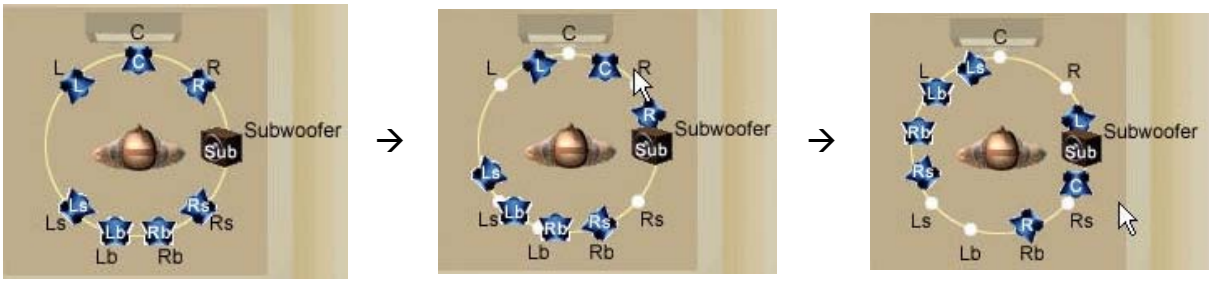


I. Volume Control:

Increase / decrease the volume of all channels by 1 dB for one step. (+4dB~-17dB)

II. Auto Rotation Mode:

The virtual speakers rotate clockwise or counterclockwise slowly. For example, if clockwise is selected:



T=0 T=0.25 sec T= 1 sec

III. Manually Rotation Mode:

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

IV. Manual Shifting (Free Moving Mode):

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

V. Reset:

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

VI. Virtual Speaker:

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

VII. Virtual Listener:

The virtual listener virtualizes your position.

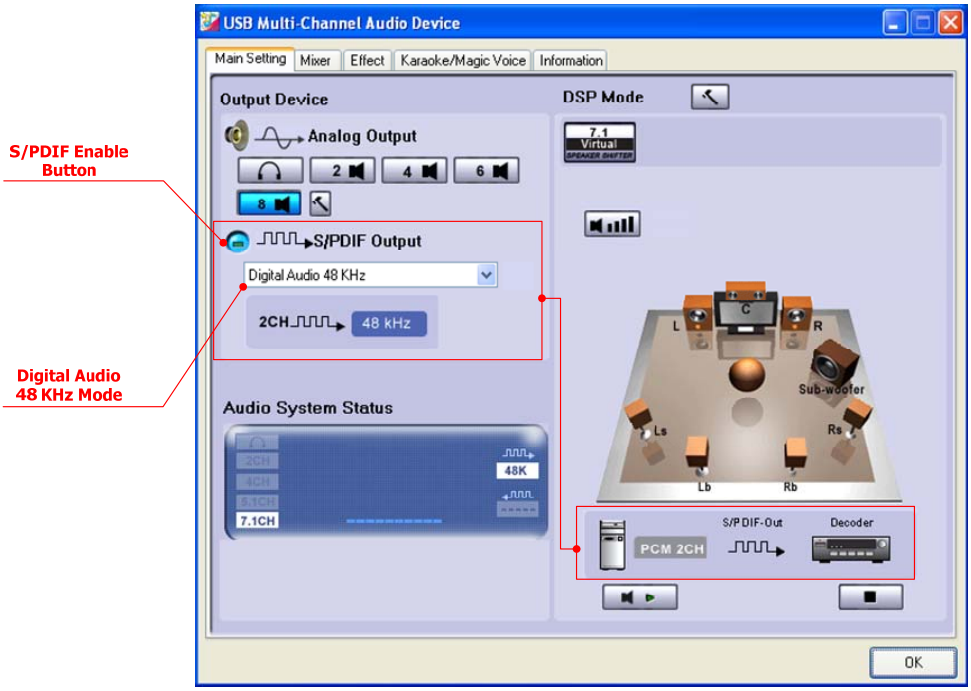
VIII. Volume indicator:

Indicate value for each channel.

2.1.5 S/PDIF Output – S/PDIF Output Device Options.

CM6206 USB Multi-Channel Audio Device support Digital Output. Click "S/PDIF Enable button" ( ) to enable S/PDIF Output.

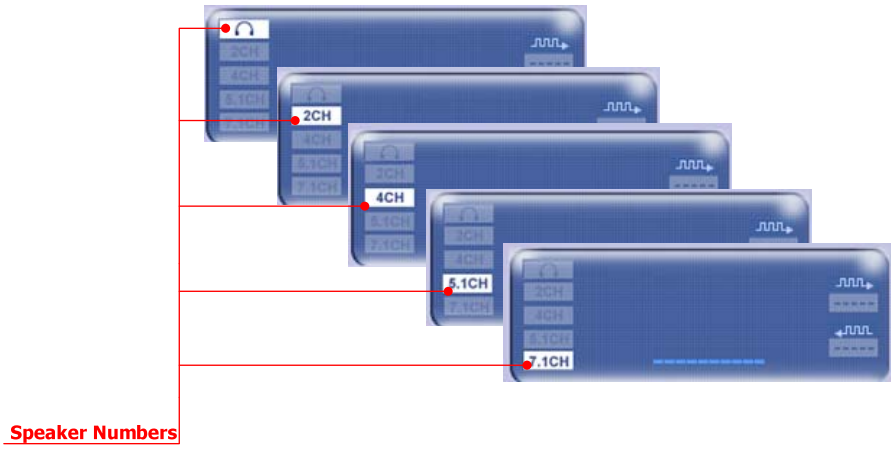
❖ **Digital Audio 48 KHz – 48KHz 2CH digital PCM Data Output.**



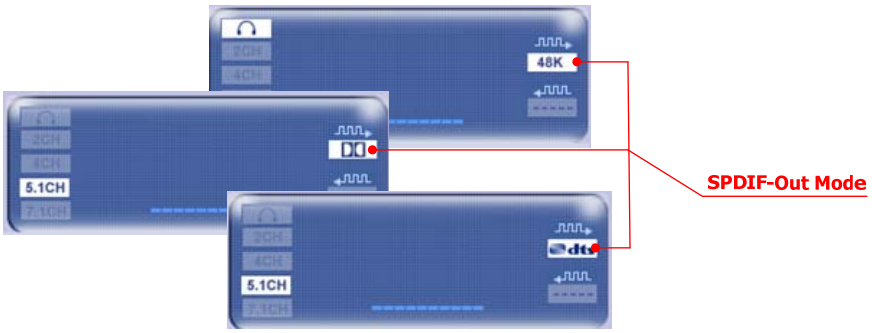
2.1.6 Audio System Status Panel

CM6206 USB Multi-Channel Audio Device CPL provides a panel to indicate the Audio system status.

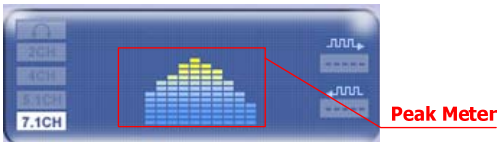
❖ Analog Speaker Number



❖ S/PDIF Output Mode



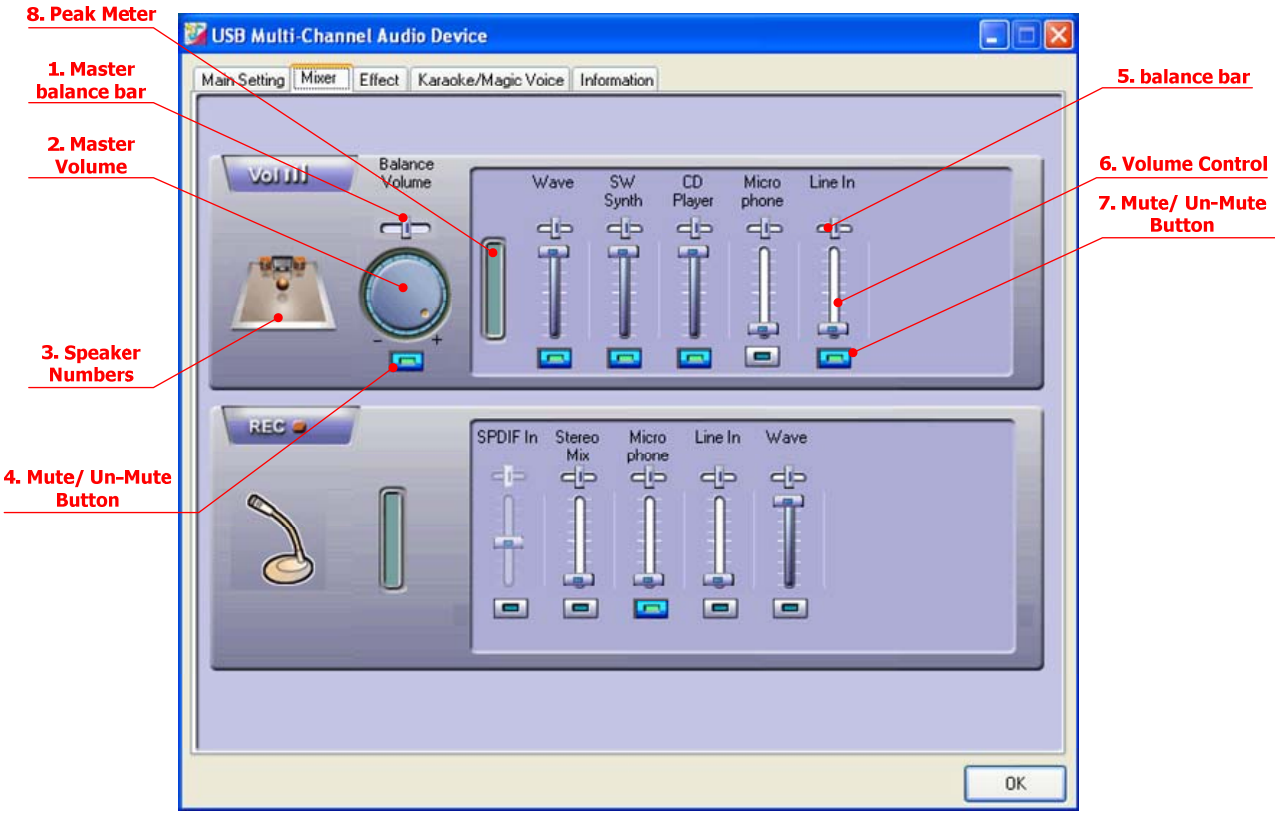
❖ Peak Meter



2.2 "Mixer" Page Function Introduction

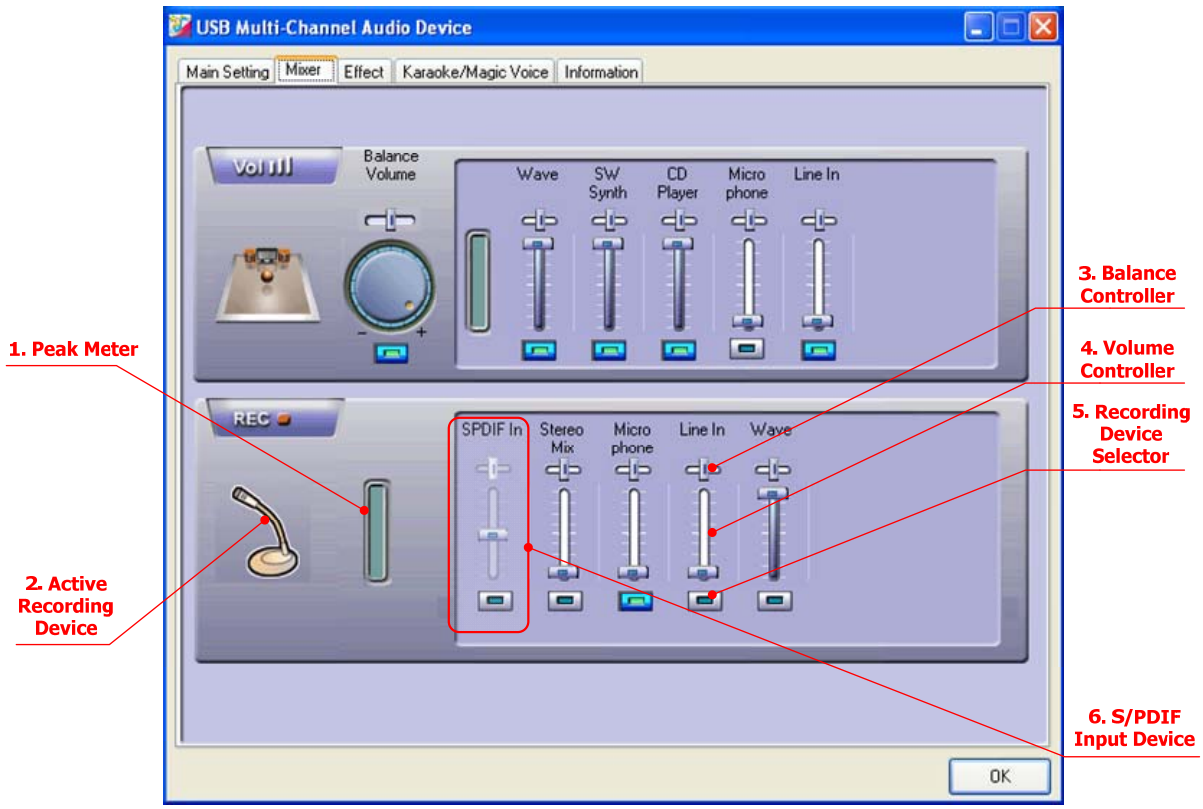
The built-in mixer lets users control volume / recording / monitoring.

2.2.1 Playback Mixer



1. Master Volume Controller - Control playback output volume.
2. Master balance Controller - Control playback balance.
3. Speaker configuration – Indicate the speaker numbers or Headphone
4. Master Volume Mute / Un-Mute Control – 1. Mute→ Button is un-lighted ( ).
   2. Un-Mute → Button is lighted ( ).
5. Balance Volume - You can control voice output from Left channel or Right Channel by balance controller.
6. Volume Control - Control playback output or A-A path device volume.
7. Mute/ Un-Mute Control - 1. Mute → Button is un-lighted ( ).
   2. Un-Mute → Button is lighted ( ).
8. Peak Meter- Indicate the instantaneous level of an audio signal.

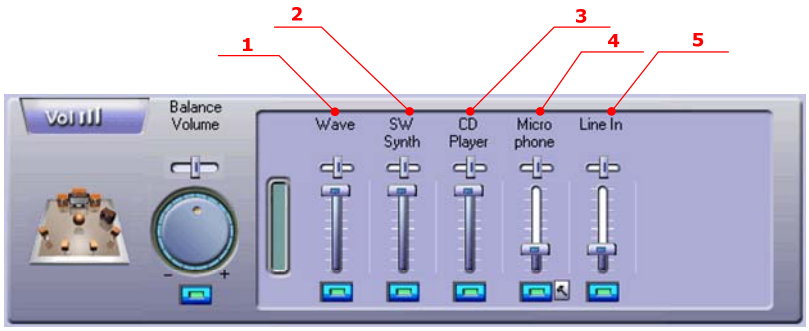
2.2.2 Recording Mixer



1. Peak Meter:
   Indicate the instantaneous level of an audio signal.
2. Active Recording Device:
   Indicate the recording resource device.
3. Voice Balance Controller:
   You can control sound output from Left channel or Right Channel by balance controller.
4. Volume Controller:
   You can control recording value by individual recording device.
5. Recording Device Selector:
   You can click selector to set the Recording source.
6. S/PDIF-Input Device:
   CM6206 support an S/PDIF-In recording device, user can record digital audio directly.

2.2.3 Playback Device Introduction

You have several options for controlling volume in this panel, including adjusting the volume level, muting and reducing volume.

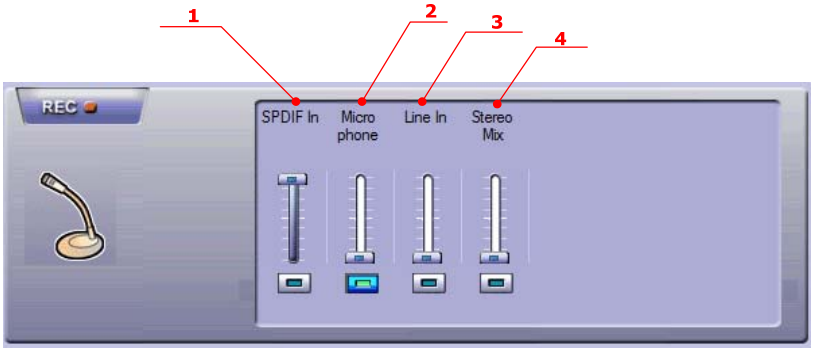


1. Wave:
   The volume controlling is for OS system audio volume level.
2. SW Synth:
   The volume controlling is for MIDI music.
3. CD Player:
   The volume controlling is the CD player, if you play CD audio, you can adjust volume level by this control bar.
4. Microphone:
   The volume controlling is for monitor (A-A path) of “Microphone-in” device. The A-A path is meaning the Microphone-in to Speaker-Out analog loop path.

5. Line-In:
   The volume controlling is for monitor (A-A path) of “Line-In” device. The A-A path is meaning the Line-In to Speaker-Out analog loop path.

2.2.4 Recording Device Introduction

You have several options for controlling volume in this panel, including adjusting the volume level and select the default recording device.



1. SPDIF In:
   The volume level controlling and default device selector for “SPDIF In” device, please connect the SPDIF cable and select ( ) the “SPDIF In” being the default device, and start to record sound.

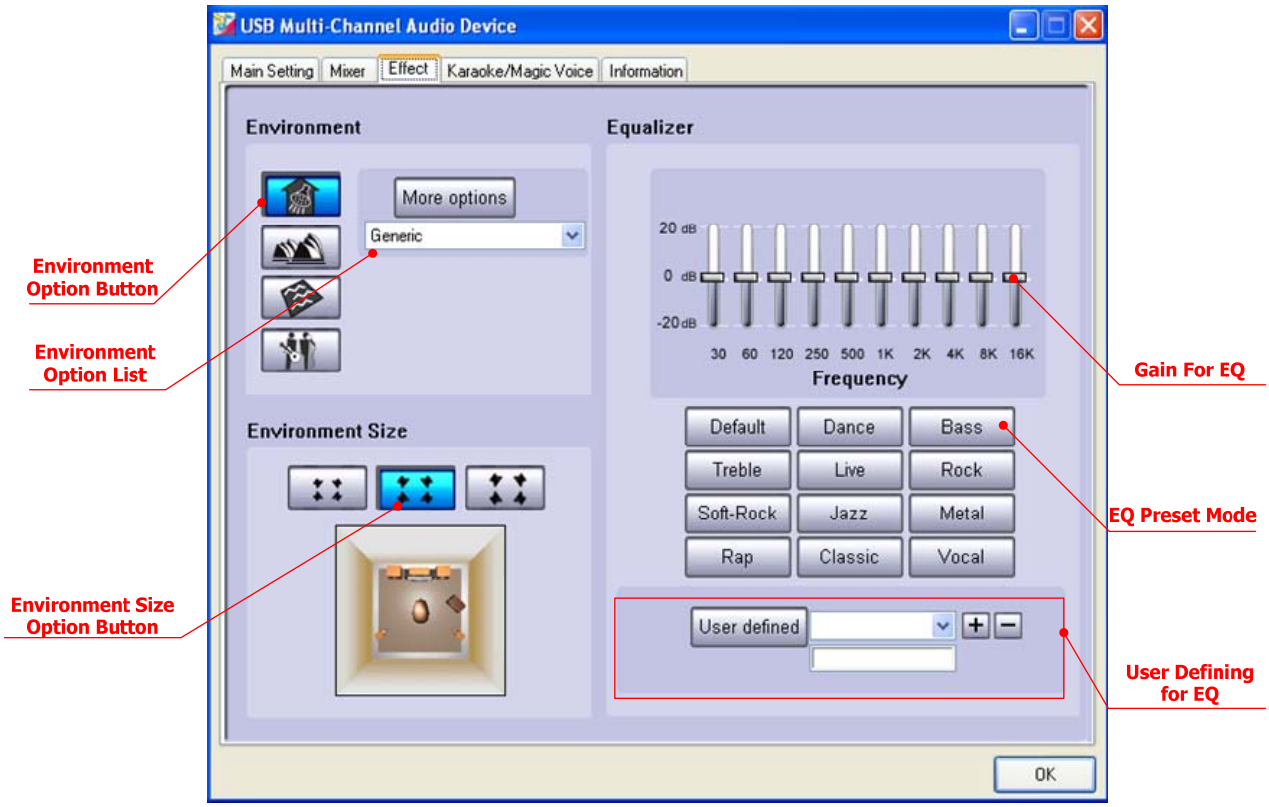
2. Microphone:
   The volume level controlling and default device selector for “Microphone” device, please plug-in the microphone device and select ( ) the “Microphone” being the default device, and start to record sound.

3. Line In:
   The volume level controlling and default device selector for “Line In” device, please plug-in the IPod or CD player output to “Line-in” jack and select ( ) the “Line-in” being the default device, and start to record sound.

4. Stereo Mix:
   The volume level controlling and default device selector for “Stereo Mix” device, the stereo mix recording is meaning to record what you hear, and then select ( ) the “Stereo Mix” being the default device, and start to record sound.

2.3 “Effect” Page Function Introduction

The features in this page provide various sound effects.



❖ 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 (Default is Medium). You feel the changes of space.

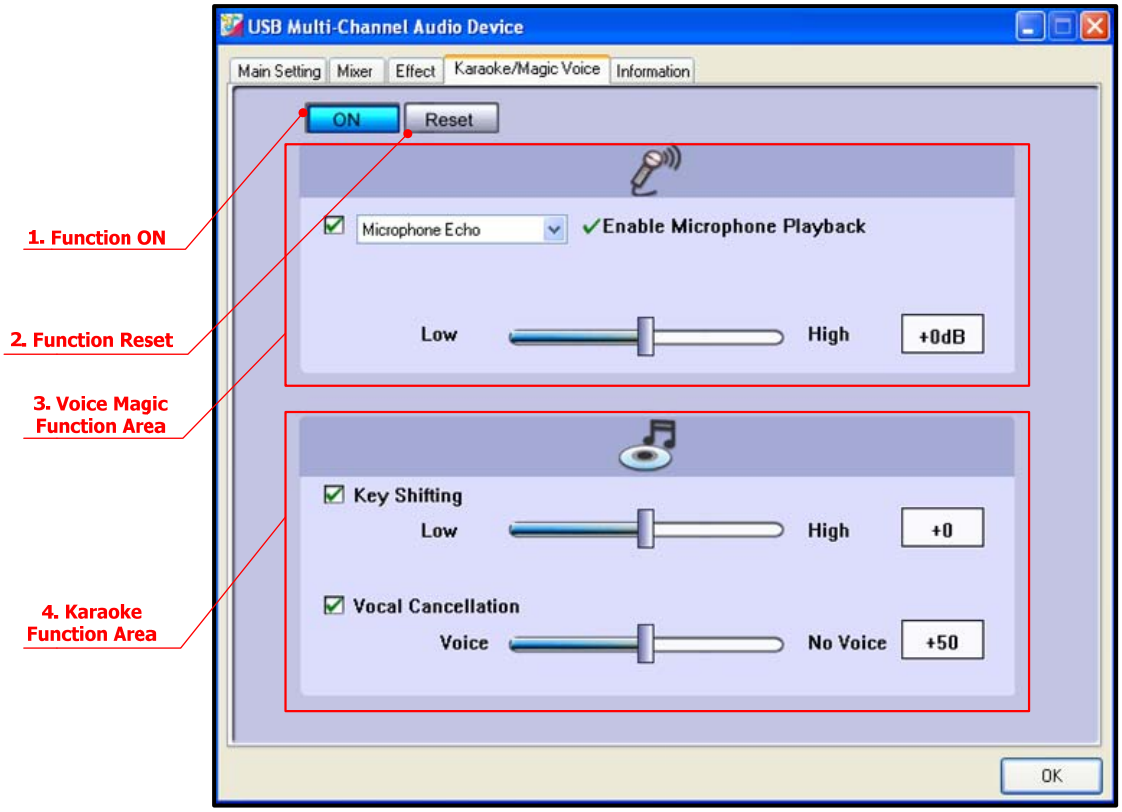
❖ Equalizer (EQ) 10-Band

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.

2.4 "Karaoke and Magic Voice™" Page Function Introduction

These functions let users experience the voice processing. It is also an interesting feature that can be used on VOIP applications and Karaoke speaker systems.



1. Click "ON" button to turn on the voice processing.
2. Click "Reset" button to return all setting to default volume.
3. Magic Voice Function Area – Provide "Microphone Echo" and "Magic Voice" functions. (Please refer to 2.4.1)
4. Karaoke Function Area - Provide "Key Shifting" and "Voice Cancellation" functions. (Please refer to 2.4.2)

2.4.1 Magic Voice Area

1. Microphone Echo:

When singing a song, you may need the Voice Echo to make the singing more euphonious. You can select "Microphone Echo" to get the effect and adjust the volume of the echo sound. The range is -12dB to +12dB.

At the first time you turn on the function, the driver will select the microphone input as the recording source. Click "OK" to close this window as following.

2. Magic Voice:

When you are talking to your friends over the network like messenger, VOIP, online game applications, you can use "Magic Voice™" effects in the pull-down menu for fun. Only one voice type can be chosen at one time.

When "Magic Voice™" is selected; the layout will be shown as followed. There are five options: Default (None Effect), Monster, and Cartoon, Male, and Female styles.

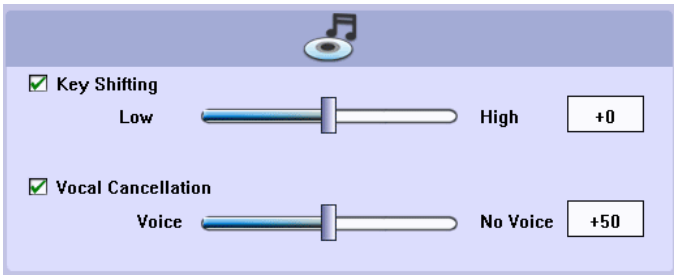
2.4.2 Karaoke Function Area

1. Key-Shifting:

   You can enable Key-Shifting for the Karaoke VCD or the music to make it suitable for your voice pitch. The range is -4 to +4 semitones.

2. Vocal Cancellation:

   If the music source includes original singer's voice, try "Vocal Cancellation" function to cancel it (0~100).

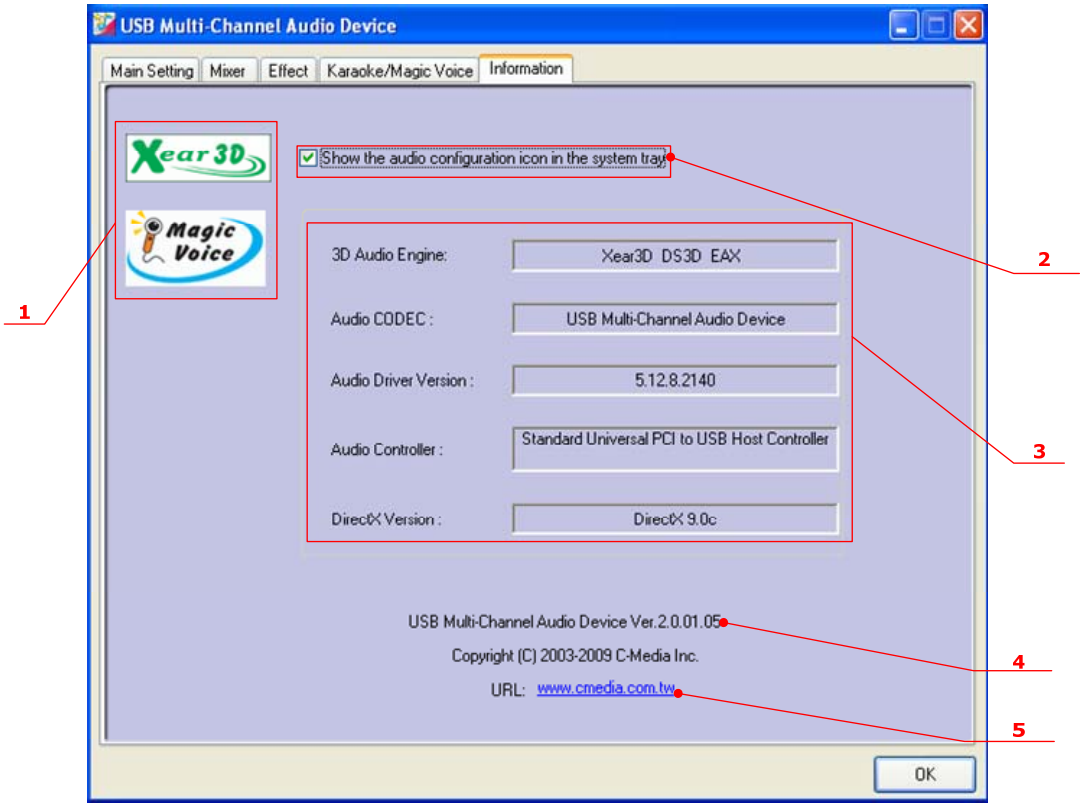


However, the effect doesn't always work, and it depends on the recording method of the source. It's usually not needed for Karaoke VCD or CD, which do not have voice inside generally.

2.5 "Information" Page Introduction

This page records the driver information and the technologies' trademark logo. You can get both hardware/software details and also legal information references here.

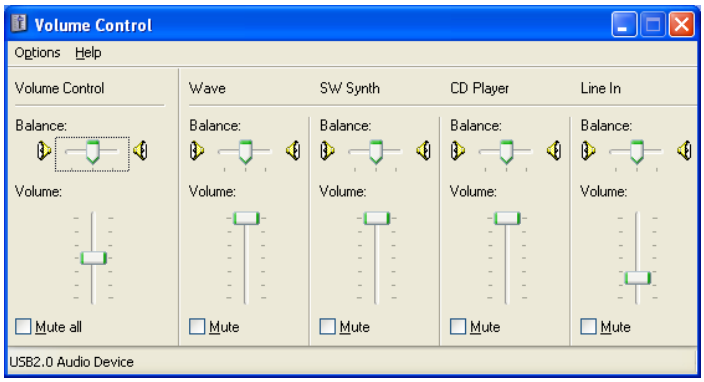
1. Trademark logo placement
2. Show Tray Icon option
3. Hardware and software information
4. Control Panel Version.(Ver.2.0.01.05)
5. C-Media Web Site. (URL:www.cmedia.com.tw)



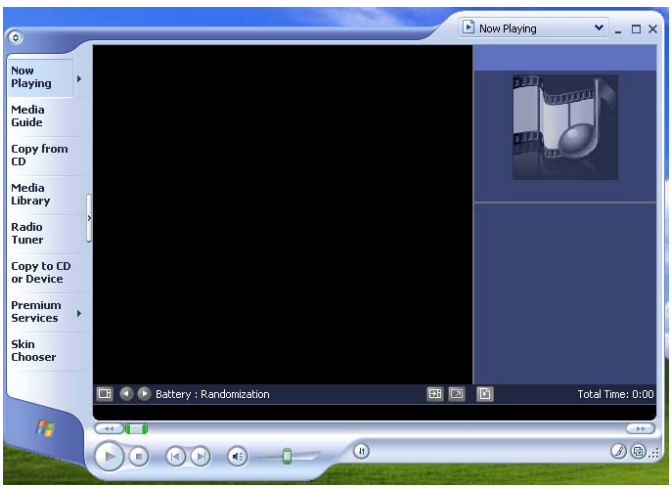
2.6 “Tray Icon” Function Introduction

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

1. Open:
   When click the “Open” item, will restore the CM6620 USB 2.0 High-Speed True HD Audio Software CPL.
2. Volume Control:
   When click the “Volume Control” item, will open the Volume Control of Windows OS as below diagram.

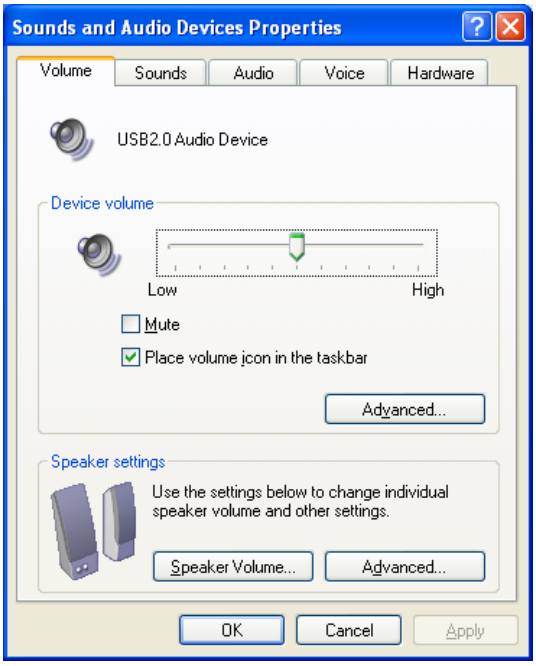


3. Windows Media Player:
   When click the “Windows Media Player” item, will open the Microsoft Windows Media Player.



4. Sound Recorder:
   When click the “Sound Recorder” item, will open the Windows build-in default recording program.

5. Multimedia Properties:
   Open the “Sounds and Audio Devices Properties” of Windows OS, you can set the advanced setting on this page.



Appendix A - Multi-Lingual Supporting List

C-Media USB/PCI Audio Driver Multi-Lingual Supporting List

- Totally Support 17 lingual versions.
- Detail information:

1 English 英文
2 German 德文
3 French 法文
4 Portuguese 葡萄牙文
5 Spanish 西班牙文
6 Russian 俄文
7 Italian 義大利文
8 Dutch 荷蘭文
9 Indonesian 印尼文
10 Danish 丹麥文
11 Chinese - Traditional 繁體中文
12 Chinese - Simplified 簡體中文
13 Korean 韓文
14 Japanese 日文
15 Swedish 瑞典文
16 Turkish 土耳其文
17 Thai 泰國文

Install to different operation system can auto detect language versions and show correct version.