

## Chapter 5

# CMedia 8738 Audio Subsystem

The CMedia 8738 offers a new generation PCI audio solution: it utilizes the state-of-the-art CRLR 3D Audio technology (HRTF 3D positional audio), and supports Microsoft's Direct Sound R 3D and Aureal's A3DR interfaces. Better yet, it supports two / four speakers and DLS based (Down Loadable Sound) wave table music synthesizer which supports the Direct MusicR.

### Feature

- Advanced 64-voice wavetable synthesizer
- Programmable independent sample rate from 4KHz to 48KHz for record and playback
- Full-duplex operation for simultaneous recording and playback
- Supports MS DLS (Downloadable sample) level-1 technology with limitless variety of instrument samples using PC RAM
- Supports HRTF 3D positional audio with MSDS, DS3D, DirectMusic, Aureal A3D and Creative EAX (Environment Audio Extensions), C3DX APIs
- 4-Channel speaker audio support is easy to build up a Home Theater environment
- Supports Fiber Optic module for Internet music, PC, and MD connections
- Supports MIDI and dual game ports
- Embedded 32OHM .5w earphone amplifier

### 4 Speakers System

The CMedia 8738 Audio subsystem provides 2 wave channels (front/rear), known as the 4 speakers system. When games or application programs via DirectSoundR 3D or A3DR interface locate the sound sources to the listener's back, the two rear speakers will work to enhance the rear audio positional effect, so as to complement the insufficiency of using only two front speakers to emulate the audio effect. The following is the hardware installation and the software setups:

## Installation

1. Connect the front pair speakers to the Line-out jack of the audio adapter, and then connect rear pair speakers to Line-in/Rear jack of the audio adapter. The original Line-in can be moved to Aux-in.
2. Install the audio driver and Audio Rack application software(see chapter 4).
3. There is a 4 speakers option in the volume control of the mixer, and when you enable this option, it means the rear speakers are connected to Line-in/Rear jack. When Line-in/Rear jack is connected to other external Line-in sources, please DO NOT enable this option in order to avoid hardware conflicts. Regarding rear speaker option, you can turn **ON** or turn **OFF** the output of the back speakers, and adjust the volume, to have the rear/front speakers have the same volume.



4 Speaker selector Button