

VB-AUDIO CABLE

Virtual Audio Device working as Virtual Audio Cable



CASE STUDY

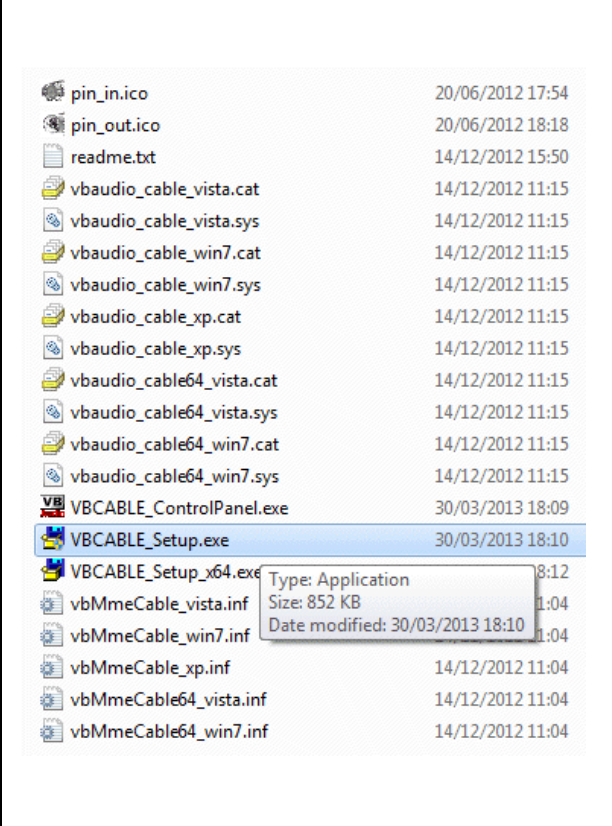

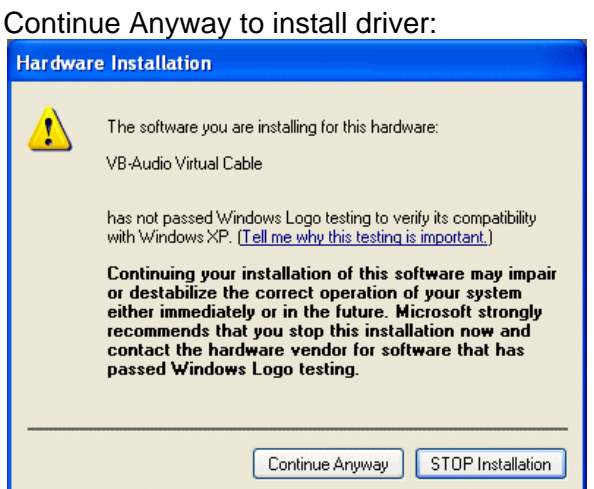
Record Audio Stream with Audacity* under Windows XP.

Additionally:
Use VB-Audio Density Demo as Audio Repeater
And Use Asio4All

**Audacity® is free, open source, cross-platform software for recording and editing sounds.
(<http://audacity.sourceforge.net/>)*

STEP 1: VB-CABLE INSTALLATION

The VB CABLE is a regular MME / WDM / Direct X Audio Driver presenting a playback and recording point (exactly like other regular audio devices). To install it, just unzip the package in a folder on your local disk and launch the program **VBCABLE_Setup.exe** (for 32bit O/S).

	<p>Installation program :</p>  <p>Continue Anyway to install driver:</p> 
--	--

After installation you can go on Control Panel / Sound and Audio Properties Dialog Box to check that you have a new Audio Device installed on your system, called **VB-Audio Point**.

REM: (under other O/S above VISTA, the driver name is VB-CABLE input/output).

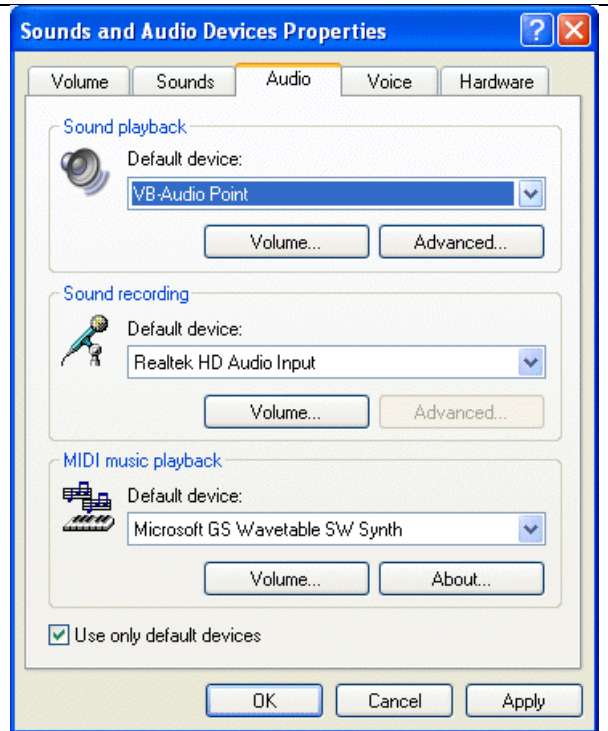
STEP 2: SELECT VB-CABLE AS DEFAULT DEVICE

The VB-CABLE works like a regular audio device and can be selected as a playback device by whatever audio application handling MME, WDM or Direct-X Audio Devices.

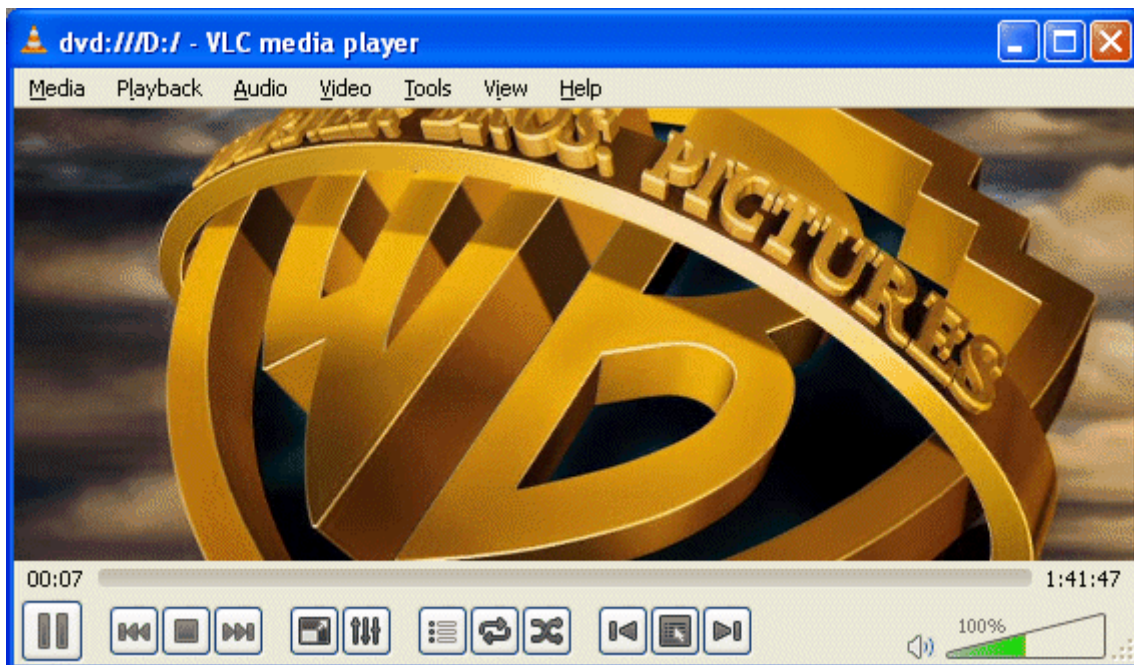
If you want to record whatever sound played on your computer, you can select the VB-AUDIO CABLE as Default Playback Device. Then every sound playing on your computer will be sent to the VB-CABLE input.

Of course, you will hear nothing anymore in your speaker while the VB-CABLE output is not routed to physical output (with another audio application).

REM: Don't forget to push the APPLY button to confirm your selection.



Then you can launch a player application (using default playback device). For example VLC, Windows Media Player, Winamp...



STEP 3: CHECK THE SOUND COMING IN VB-CABLE

The VB-CABLE package includes a small Control Panel program that can be useful to check if it works.



Here you can see in the input levels section if the audio signal is coming in the cable input (playback device). You can click on it to change the level unit (db or % level).

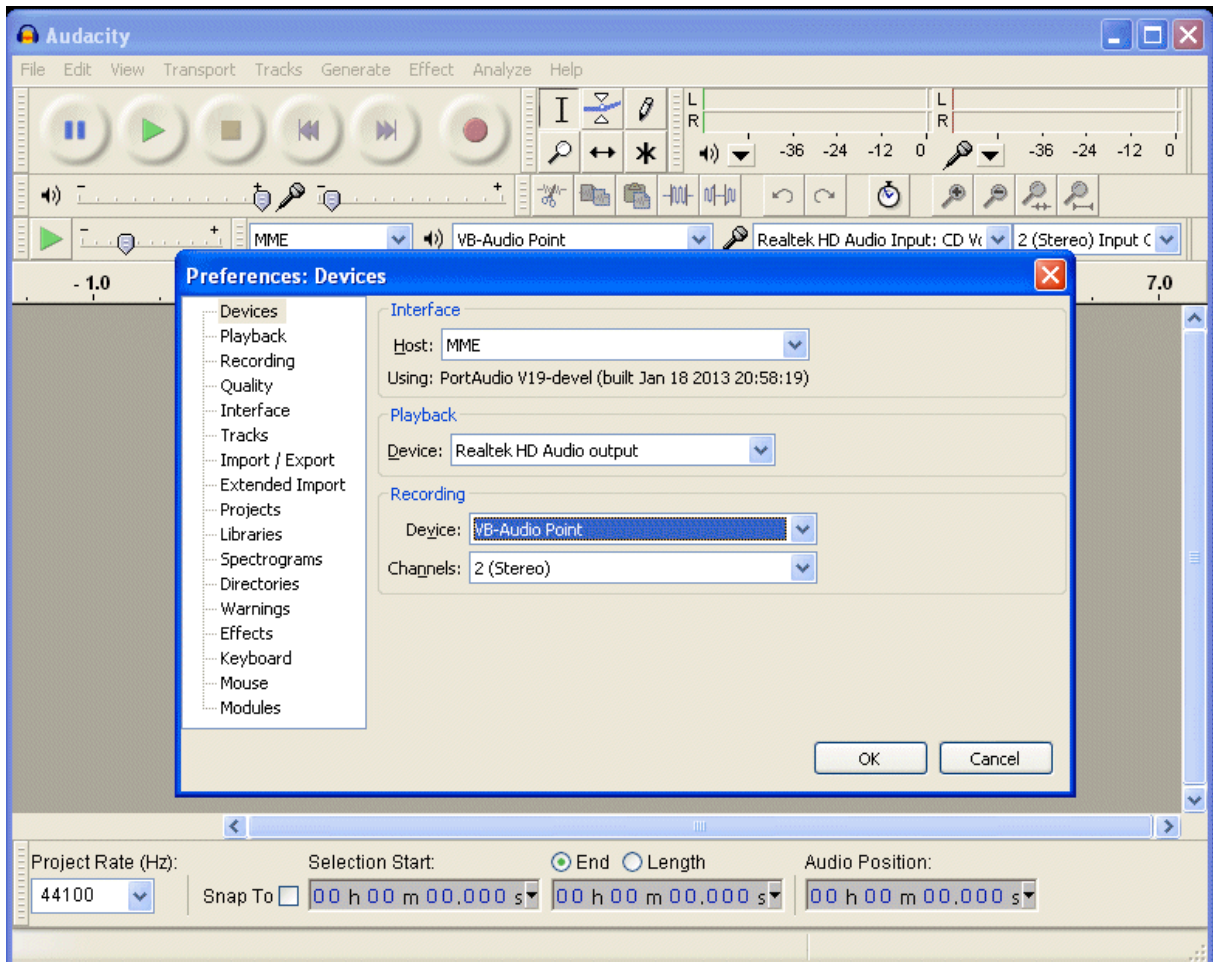
The Input and Output section show the Audio Point Configuration (Playback and Recording device audio point). Under XP this is set by client applications. In the picture above, the Output configuration is not shown because no client application is connected to this point (Recording Device). Note that the VB-CABLE can handle whatever format change on both points in real time (user has nothing to configure).

Statistics are there for analyzing purpose and are not useful for user.

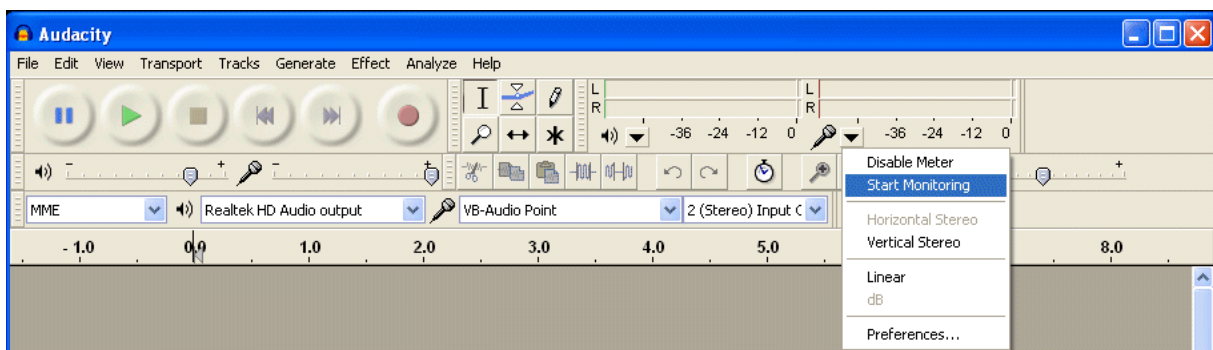
STEP 4: LAUNCH AND CONFIGURE AUDACITY PROGRAM

Audacity® is free, open source, cross-platform software for recording and editing sounds. (<http://audacity.sourceforge.net/>).

First of all you may configure AUDACITY device to record the signal coming in VB-CABLE and playback in a real audio output (in this example: the Realtek HD Audio output).

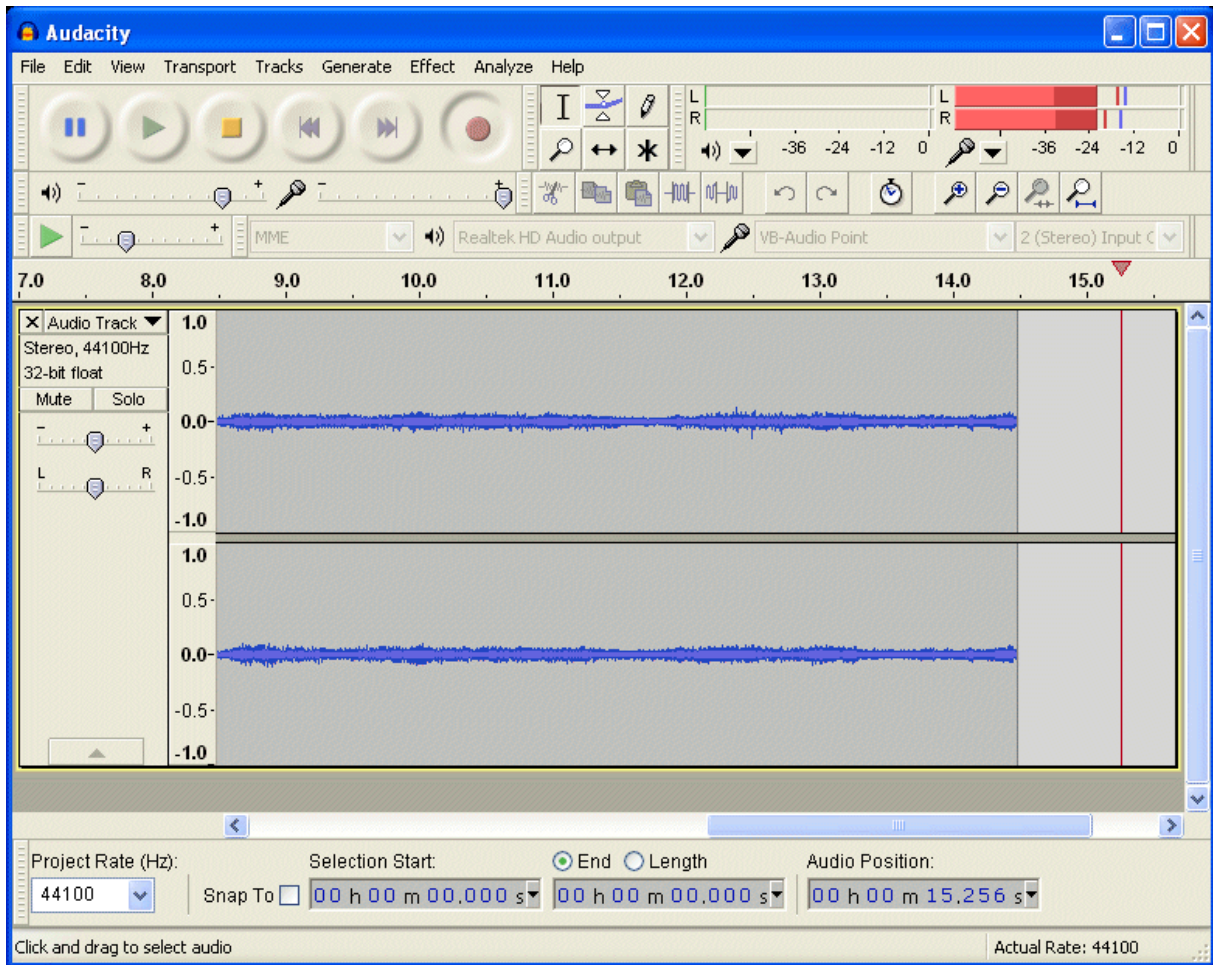


You can check that the signal is coming from the VB-CABLE by using START MONITOR function. Then you will see the Level Meters move.



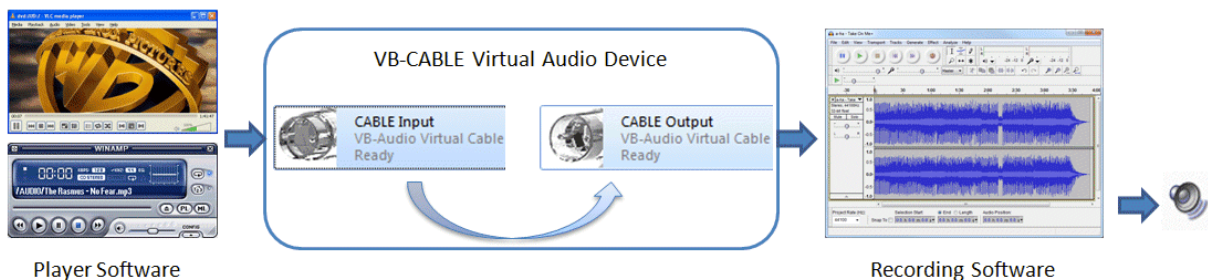
STEP 5: RECORD / PLAYBACK

Simply push the RECORD Button.



The Sound coming in VB-CABLE is recorded and after could be played back through a real output audio device (Just Push PLAY).

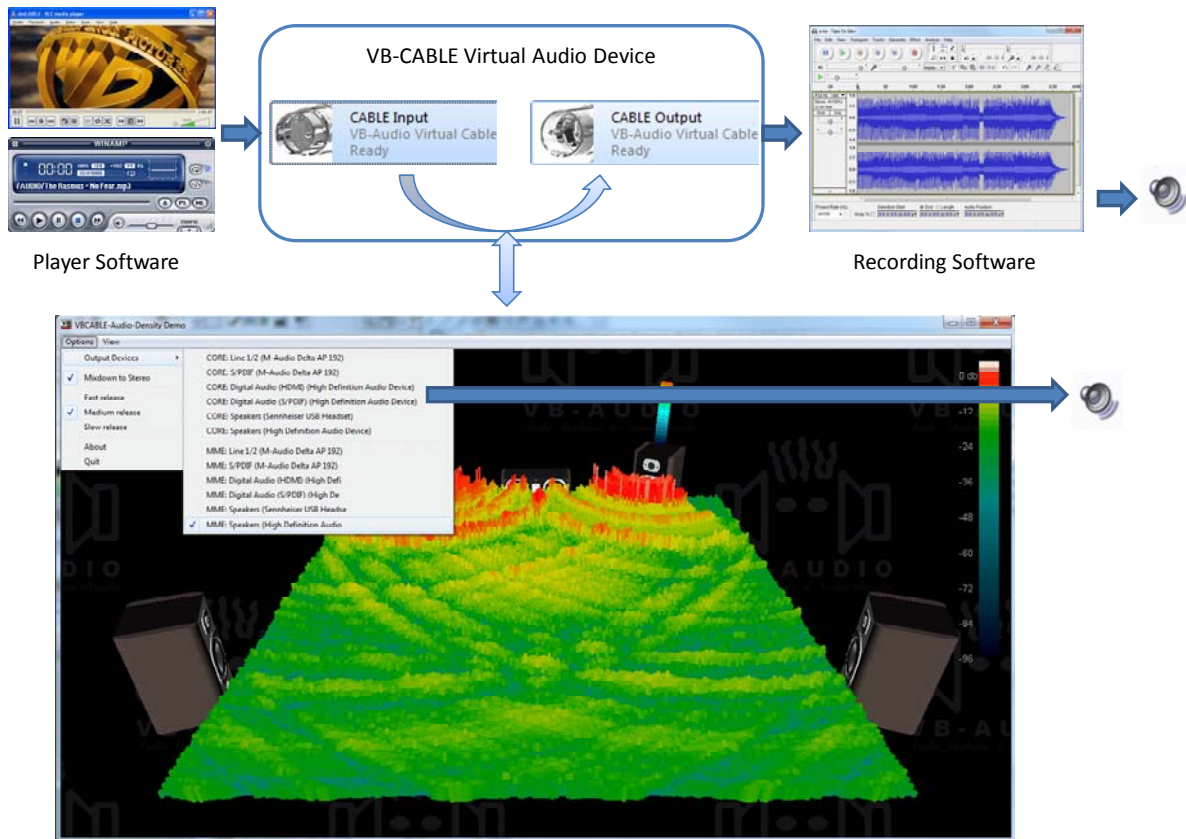
Routing Diagram :



Every player are sending sound in the VB-CABLE input since it's set as Default Playback Audio Device. Then a third Application can get back the signal from the CABLE-Output, which is a Virtual Recording Audio Device.

ANNEXE 1: USING AUDIO DENSITY DEMO AS AUDIO REPEATER.

Audio Density Demo (free application to download on www.vb-cable.com) can be used as audio repeater since it re-routes the signal coming in VB-CABLE to a real audio output, independently from the regular workflow using VB-CABLE Input and output device.



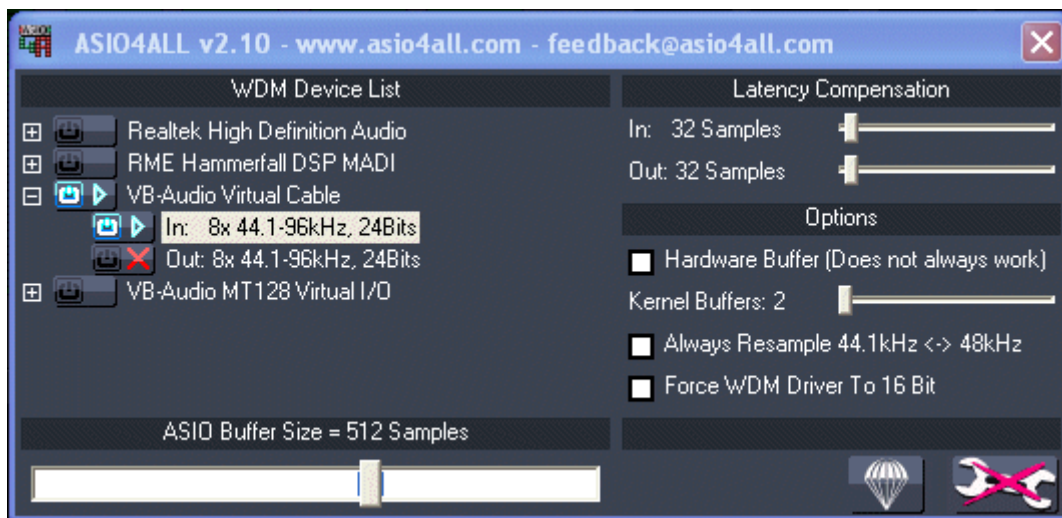
Audio Density Demo is using the VB-CABLE as Virtual I/O (it has direct access to VB-CABLE without using Audio Device Interface – REM: This technology is under license and can be bought by company wanting to endow their software application with virtual audio i/o. Contact vb@vb-audio.com).

ANNEXE 2: USING ASIO4ALL (www.asio4all.com).

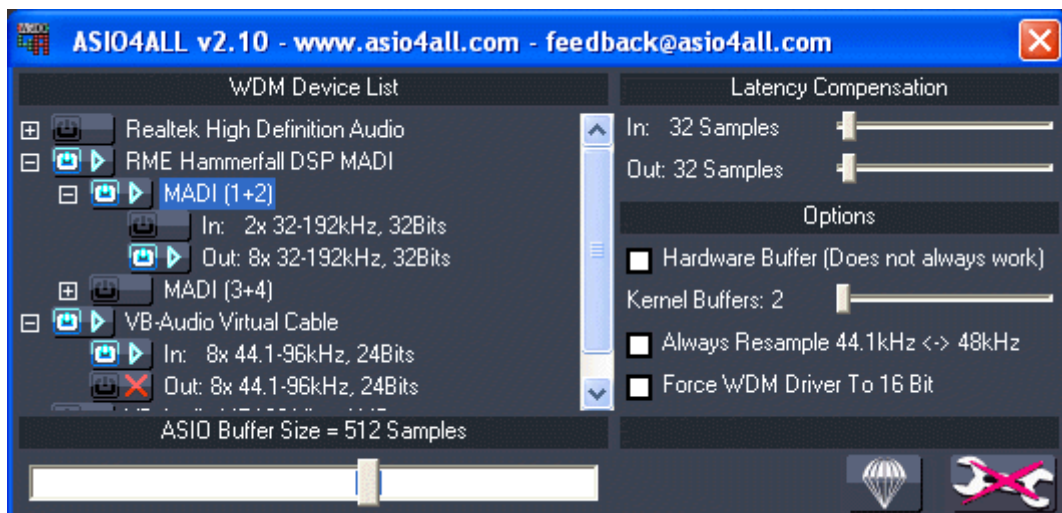
If your recorder application is using ASIO exclusively, it's even possible to record the output of the VB-CABLE (the Recording Device Point) by configuring properly the ASIO4ALL driver.

ASIO4ALL will automatically use the both input and output point of the selected audio device. So if you select the VB-CABLE, both points will be used by the ASIO4ALL driver and no sound could come in the VB-CABLE.

To make it work, ASIO4ALL Driver must be configured to take only the input point of the VB-CABLE which is the recording audio device point (so the output of the VB-CABLE).



In this case, the Recorder Application using ASIO4ALL Driver will be able to capture signal coming from the VB-CABLE. But of course won't be able to play it back (because no output). To monitor (in real time) or playback the recorded sound, you can select another device.



In this example, the ASIO driver provides signal coming from VB-CABLE and playback through the MADI 1+2 RME board.