

7

 **atomix**  
PRODUCTIONS  
SOUND TECHNOLOGY PROVIDER

**VIRTUAL DJ**

# Audio Setup Guide

# TABLE OF CONTENTS

<i>INTRODUCTION</i>	3
<i>HOME and BROADCASTER VERSION SETUPS</i>	3
<i>CONFIGURATION OPTIONS DEFINED</i>	4
<i>BASIC (QUICK) CONFIGURATIONS</i>	5
<i>HEADPHONES</i>	5
<i>EXTERNAL MIXERS</i>	8
<i>MICROPHONE</i>	11
<i>LINE INPUTS</i>	12
<i>ADVANCED CONFIGURATION</i>	13
<i>BASIC (QUICK) CONFIGURATIONS</i>	13
<i>ADVANCED</i>	14
<i>REWIRE</i>	18
<i>RECORD LOOPBACK</i>	19
<i>TIMECODE</i>	20
<i>BASIC (QUICK) CONFIGURATION</i>	20
<i>ADVANCED CONFIGURATION</i>	21
<i>CALIBRATION</i>	22
<i>SOUND CONFIGURATION ERROR MESSAGES</i>	26
<i>LEGAL INFORMATION</i>	28

# INTRODUCTION

VirtualDJ's sound configuration options can be found in the Configuration (Settings) dialog under the tab labeled "Sound Setup". Depending on platform version you are running there are different options you may have to choose from.

By default, when VirtualDJ is first installed, the SIMPLE configuration setup is used. Simple configuration uses the system identified "Primary Sound Driver" as the Master Output. Typically, this is the built-in sound card of the computer system as seen in the figures below.

For HOME and BROADCASTER versions the options are kept simple for quick configuration.

- Simple Output – no Headphones (default installation option)
- Simple Headphones configuration using
  - Desktop - 4.1 sound card
  - Laptop - USB sound card
  - Laptop - Split signal with a Y-cable



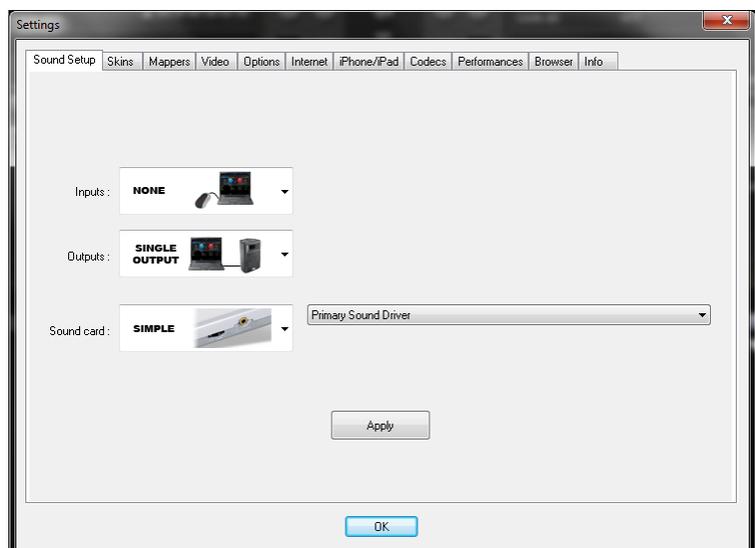
With the Headphone options please consider the following:

- Desktop - 4.1 Sound card – use the standard speaker line out (FRONT) for the main output mix and the REAR Channel for the headphones
- Laptop - USB Sound card – use the headphone line out for the main mix and the speaker out (Channels 1&2) of the USB device for the headphone mix
- Laptop - Y-cable – with a Y-cable plugged into the headphone line out, the Left channel (white) is the main mix and the Right channel (red) is the headphone mix

For PRO BASIC and PRO FULL versions there are more options available to customize VirtualDJ to your hardware –

- Basic (Simple) setup
- Quick select advance setups
- Timecode Configuration
- Advanced Configurations
- Rewire Support Setup

**\*\*Note: these options are available in HOME and BROADCASTER versions for a limited period of use by clicking on the [More...] button.**



## CONFIGURATION OPTIONS DEFINED

When working with the PRO BASIC and PRO FULL versions, it is important to understand the various elements of the Sound Setup tab as these become important in getting to the more advanced setups.

- Inputs – select the type of input devices to be used
  - None
  - Single Timecode
  - Timecodes
  - Line Ins
  - Microphone
  
- Outputs – select the output paths to be used
  - Single output
  - Headphones
  - External Mixer
  - 3-Ch External Mixer
  - Advanced Config
  
- Sound card – select the sound card type (drivers) to be used
  - Simple (Only available when Single Output is selected)
  - Mono-separated
  - 2-cards
  - 4.1 capable sound card
  - ASIO (PC Only)
  - 4-out (Mac Only)

**\*\*\* Screen captures throughout this guide are from the PC version of VirtualDJ and are identical to those when using the Mac version. Where necessary to show unique differences on the Mac version, additional screen captures are provided. \*\*\***

---

## BASIC (QUICK) CONFIGURATIONS - HEADPHONES

Basic computer setups are configured for using one Master output and a Microphone input. So the default SIMPLE configuration will get you started initially. But, if you wish to use headphones or an external mixer, so that you can play one track to the crowd and listen to the next track in headphones; you will need to utilize one of the following configurations.

### HEADPHONES WITH 1 OUTPUT

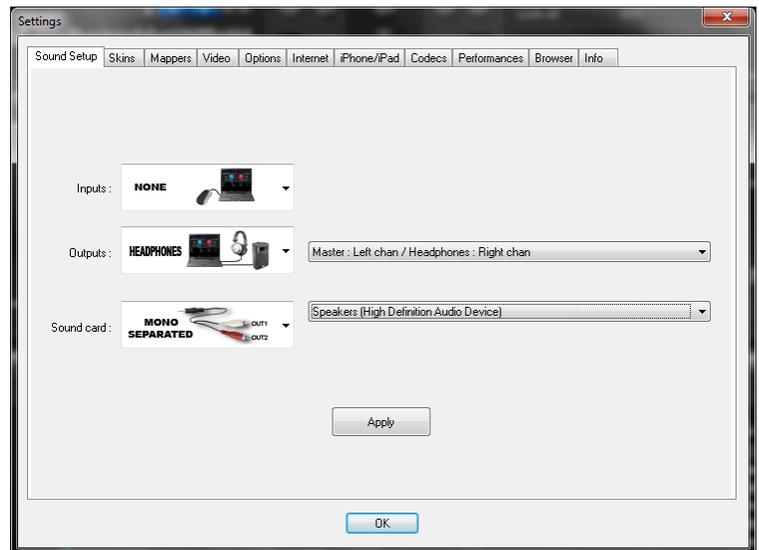
Change the Outputs option from Single Output to Headphones. You will see that the Sound card option automatically changes to Mono Separated. This configuration requires the use of a 3.5MM (1/8") splitter (pictured below) from your headphone jack.



3.5MM Male to Female Splitter

The Left channel output is connected to your speaker's and the headphones are connected to the Right channel output.

After making the connections they are reversed, then easily correct this within VirtualDJ by changing the output assignments. Use the drop-down to the right of the Headphones selection and change to Master: Right chan / Headphones: Left chan.



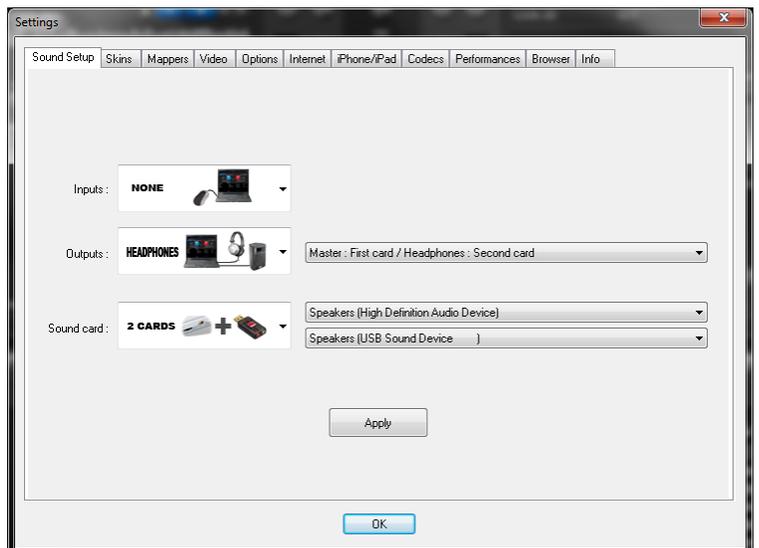
This configuration is most common when using standard computer speakers and not connecting to a PA system or external mixer.

### HEADPHONES USING TWO (2) SOUND CARDS

Similar to the Mono Separated, but with 2 sound cards you will not need a splitter. VirtualDJ splits the output based on the selection of the sound cards.

To the right of the sound card option drop-down, the 2 additional drop-down identify first and second cards. Top option is the first card and bottom option is the second.

Again, if the connections made are backwards, use VirtualDJ to swap the connections by changing the Output options to Master: Second card / Headphones: First card.



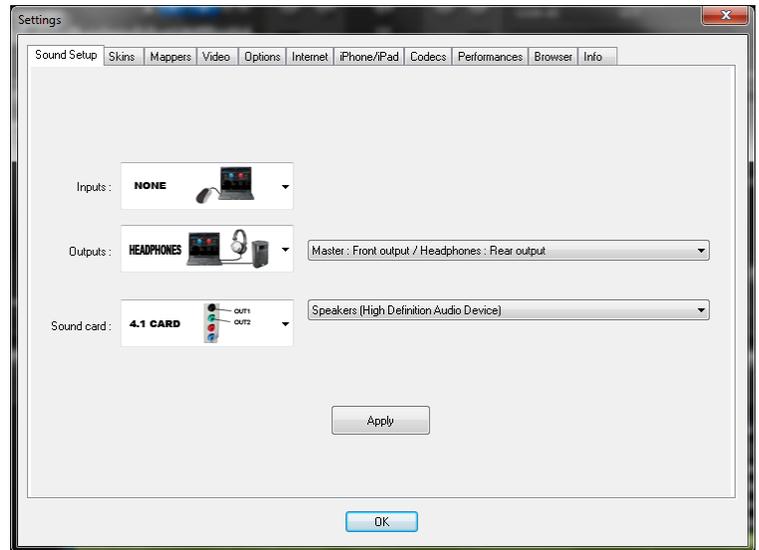
# BASIC (QUICK) CONFIGURATIONS - HEADPHONES

## HEADPHONES USING 4.1 SURROUND (or better) SOUND CARD

With surround sound capable cards, VirtualDJ can use the Front, Center, and/or Rear channel assignments for routing the Master and Headphone outputs. When using this configuration, it is important to ensure that the sound card is properly configured to use the multiple outputs. By default, most surround sound cards are only setup for one Master output (Headphones/Speakers) and a single input (Microphone). Please consult your sound card documentation to properly setup the card with your operating system for 4.1 or better surround sound settings.

With the card properly configured in the operating system, select the 4.1 Card option from the sound card drop-down.

The output options for Headphones will change to Master: Front output / Headphones: Rear Output. Make the appropriate connections of the speakers to the designated Front output of your sound card (typically the same as you normally plug your speakers into, the 'green' output jack) and connect the headphones to the designated Rear output of your sound card (typically the 'black' colored output jack).



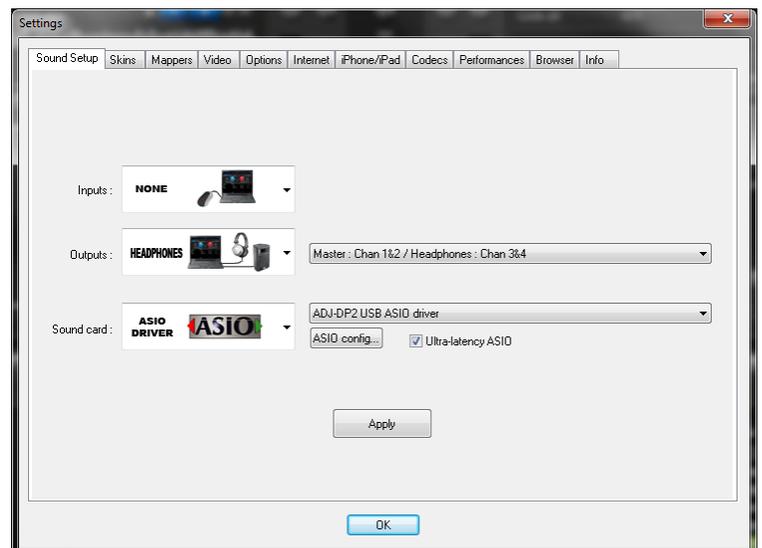
If you need to swap the outputs then the following options can be selected from the drop-down:

- Master: Front output / Headphones: Rear Output
- Master: Rear output / Headphones: Front Output
- Master: Front output / Headphones: Center Output

## HEADPHONES USING ASIO SOUND CARDS (PC Only)

Typically, ASIO sound cards are used when connecting the system to external mixers or when a hardware controller has a built-in sound card that provides Master output and Headphones or separate deck channel output.

Similar to the prior configurations, choose the ASIO soundcard option and appropriate card driver. The Headphones option will change to Master: Chan 1&2 / Headphones: Chan 3&4. If they are reversed after making the connections, use VirtualDJ to swap the assignments by selecting Master: Chan 3&4 / Headphones 1&2.

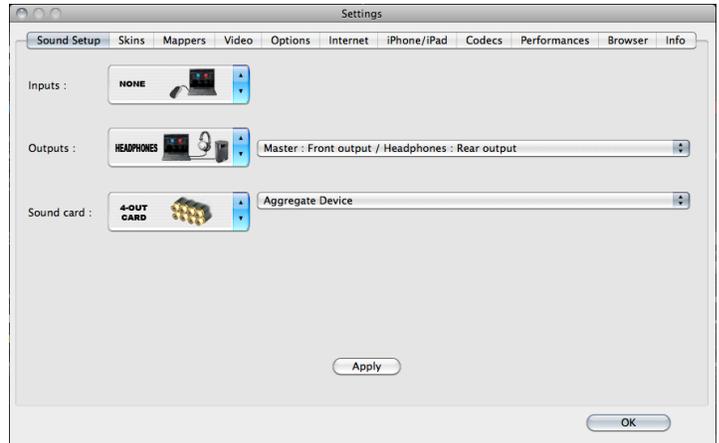
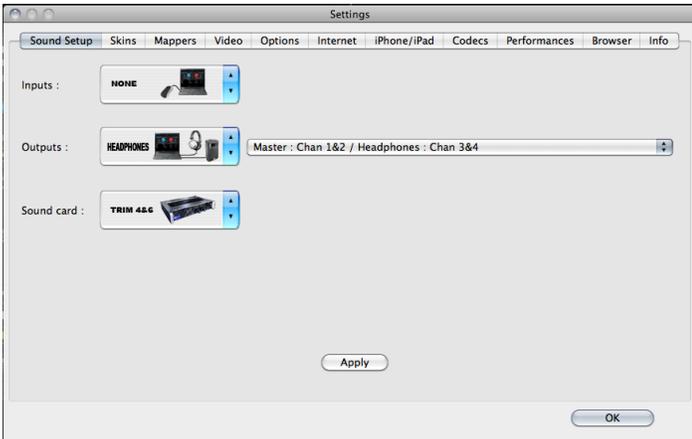


# BASIC (QUICK) CONFIGURATIONS - HEADPHONES

## HEADPHONES USING Core Audio SOUND CARDS (Mac Only)

In most cases to properly use a multi-channel sound card in OSX, you first need to create an aggregate device for that sound device. Depending on the OSX version you are using the Aggregate Device setup is slightly different, so please search the Apple support pages for your OSX version and correct Aggregate Device setup instructions.

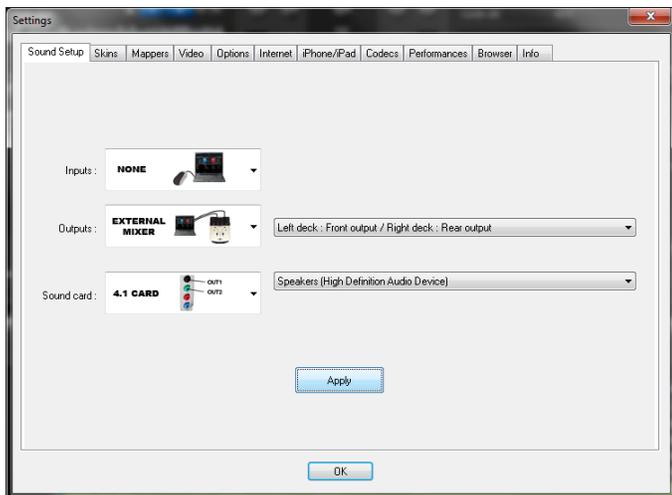
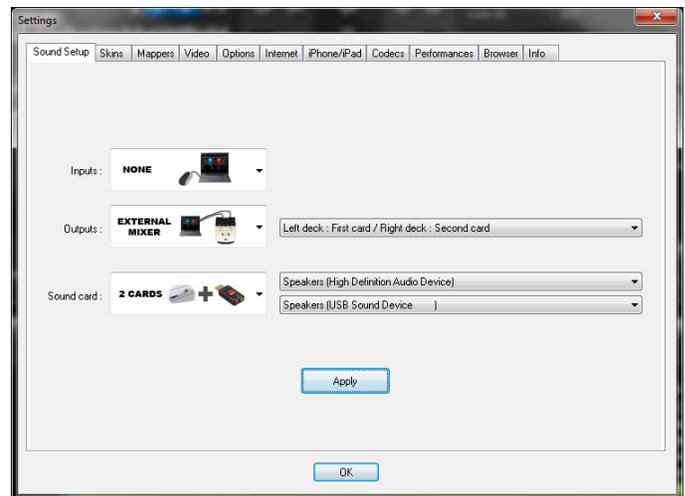
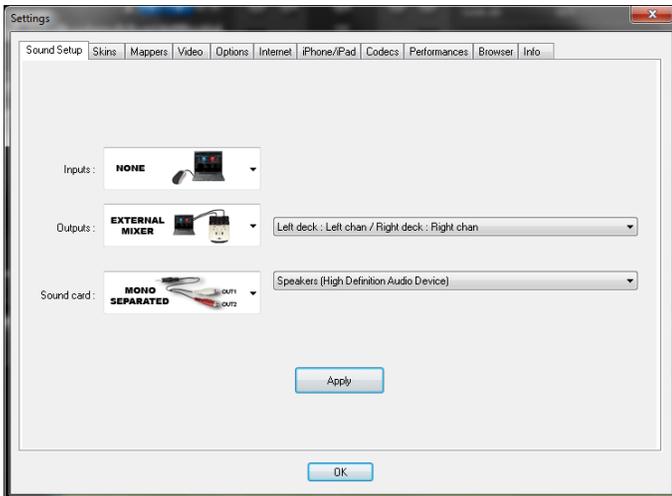
The options for setting up Headphones in the Mac version are similar to those of the PC version. The following screen captures show setups using the Hercules DeeJay Trim and an Aggregate Device.



## BASIC (QUICK) CONFIGURATIONS – EXTERNAL MIXER

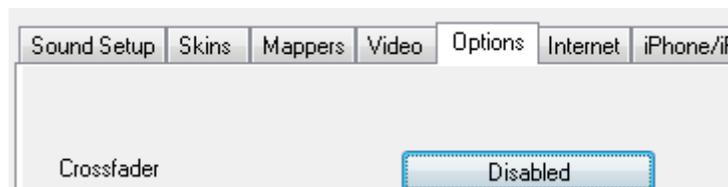
When planning to use an external mixer, one of the following configurations might be used. All are very similar to the Headphone options just covered. However; instead of splitting the signal to have Master and Headphone outputs, the two virtual decks are routed to their own audio channels which are then mixed together by the external mixer.

You can see in the following screen captures that Mono-Separated, 2-card, and 4.1 Surround sound cards the options are not much different. Instead of the Master and Headphone outputs, VirtualDJ is now sending the audio from Left Deck and Right Deck to the selected options.



Mac OSX with 4-Out Card

In all these situations, it is important to understand that when using an external mixer; VirtualDJ's internal mixer is not necessary. Most importantly, you should disable VirtualDJ's internal crossfader to ensure 100% output is provided to each of the assigned deck outputs. Disabling the internal crossfader is done by selecting the Options tab from the configuration dialog, then clicking on the Crossfader option button until the word "Disabled" appears.



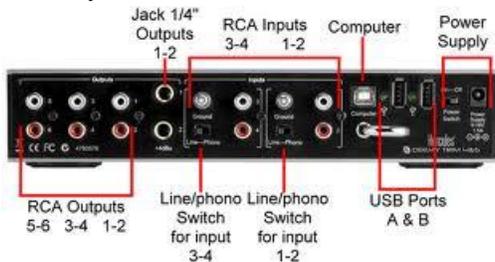
## BASIC (QUICK) CONFIGURATIONS – EXTERNAL MIXER

The most common External Mixer configuration is using the ASIO driver (PC) or 4-out Card (Mac) option.

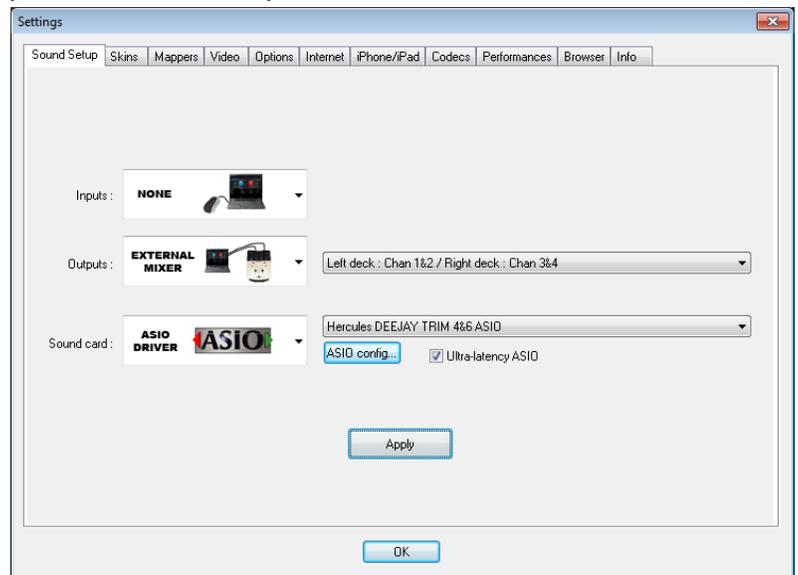
In this configuration, the sound card of choice typically has multiple stereo out combinations. Most common are 2 stereo (4 mono) outputs. In the following examples, we use the Hercules DeeJay Trim 4&6 sound card for the various external mixer combinations.

### EXTERNAL MIXER – LEFT DECK AND RIGHT DECK ON SEPARATE OUTPUTS

With Inputs set to None, Outputs set to External Mixer, and Sound card set to ASIO Driver; this is the most common configuration that will be used. For the Outputs the assignment is Left Deck: Chan 1&2 and Right Deck: Chan 3&4. In this configuration, connections from the 1&2 and 3&4 outputs of the DeeJay Trim are connected to the appropriate Line level input channels on the mixer.



Hercules DeeJay Trim (back)



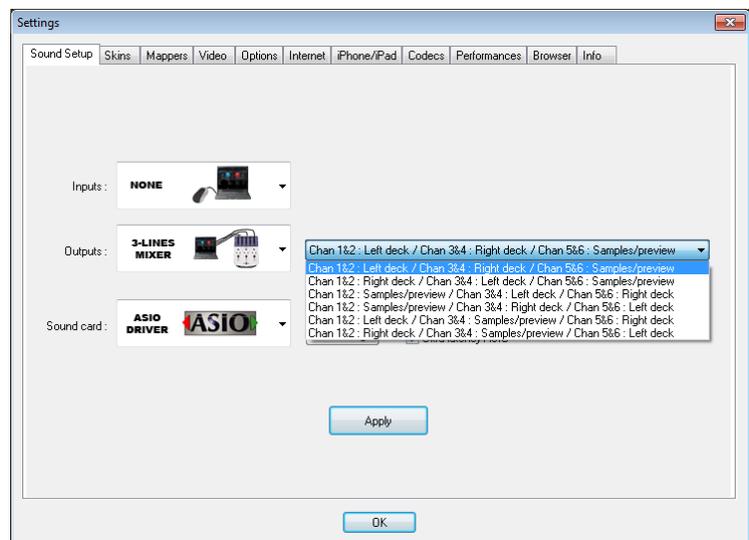
The left deck of VirtualDJ will play out the channel 1&2 stereo output while the right deck will play out the channel 3&4 stereo output.

Just like with the Headphone setups, if you get the connections backwards; use VirtualDJ to reverse the assignment by changing the output drop-down to Left Deck: Chan 3&4 / Right Deck: 1&2.

### 3-CHANNEL EXTERNAL MIXER – LEFT AND RIGHT DECKS WITH SAMPLER

Similar to the standard 2 channel output, the 3-Lines Mixer option allows for the output of the sampler and track preview deck to be sent on a separate channel.

By default the options are Chan 1&2: Left Deck / Chan 3&4: Right Deck / Chan 5&6: Sampler/Preview. From the output drop-down (shown at the right) there are several different choices to select, should the connections be incorrectly connected to the mixer.



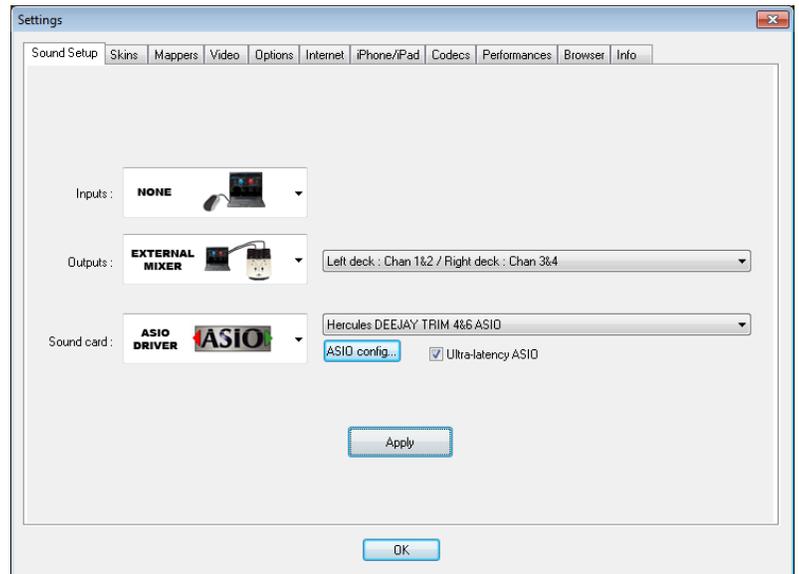
# BASIC (QUICK) CONFIGURATIONS – EXTERNAL MIXER

## EXTERNAL MIXER – LEFT DECK AND RIGHT DECK ON SEPARATE OUTPUTS

With the Mac version, the same options as before; Inputs set to None, Outputs set to External Mixer, and Sound card is set to 4-out Card. For the Outputs the assignment is Left Deck: Chan 1&2 and Right Deck: Chan 3&4. Again with this configuration, connections of the 1&2 and 3&4 outputs of the DeeJay Trim are connected to the appropriate Line level input channels on the mixer.



Hercules DeeJay Trim (back)

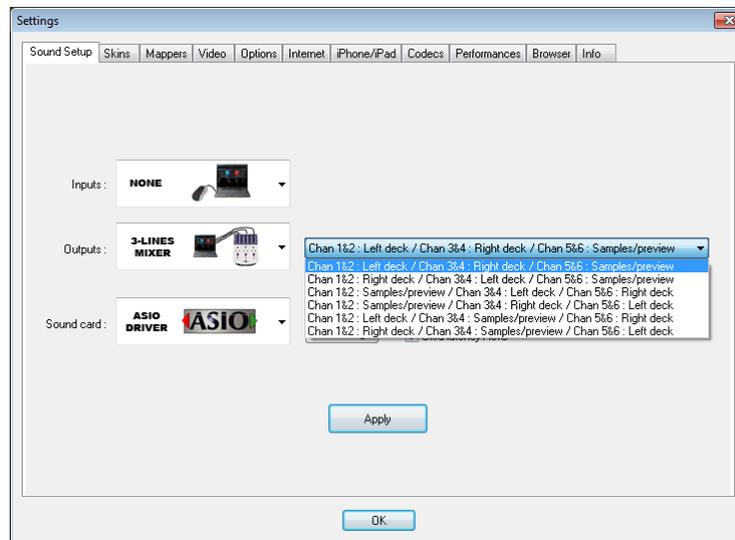


And as previous mentioned, if the connections end up reversed; use VirtualDJ to correct the assignment by changing the output drop-down to Left Deck: Chan 3&4 / Right Deck: 1&2.

## 3-CHANNEL EXTERNAL MIXER – LEFT AND RIGHT DECKS WITH SAMPLER

Again, similar to the standard 2 channel output, however; the 3-Lines Mixer option allows for the output of the sampler and track preview deck to be sent on a separate channel.

By default the options are Chan 1&2: Left Deck / Chan 3&4: Right Deck / Chan 5&6: Sampler/Preview. From the output drop-down (shown at the right) there are several different choices to select, should the connections be incorrectly connected to the mixer.



## BASIC (QUICK) CONFIGURATIONS – MICROPHONE

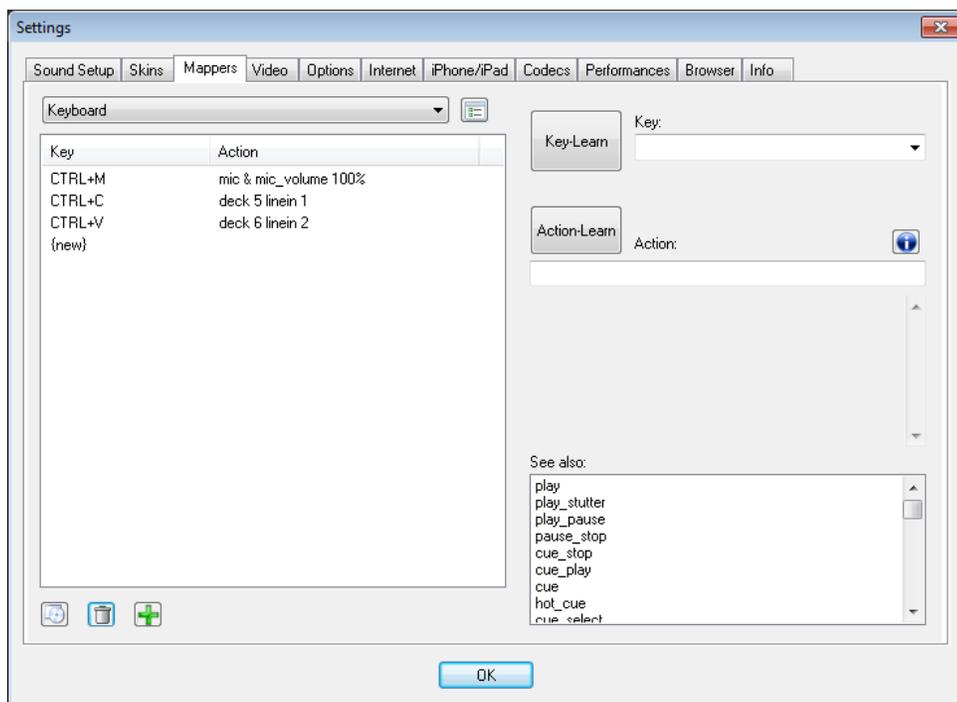
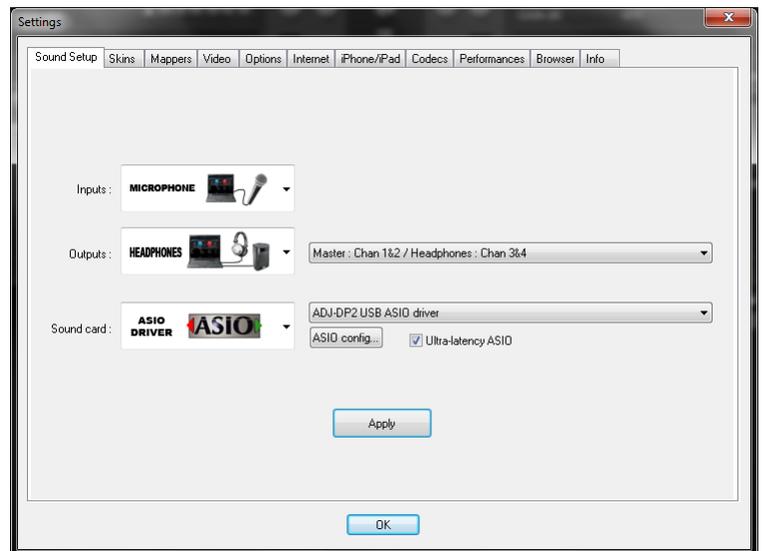
With some sound cards or hardware controllers with built-in sound card capabilities, there may be the need to route the microphone input through VirtualDJ. This can be done by selecting the Microphone option from the Inputs drop-down.

This is only necessary when the device containing the microphone input requires the software to provide the routing of the input to the software's master output.

For example, using the American Audio DP2, the unit contains a built-in microphone that relies on the software for configuration and routing to the Master Output. In this situation, simply choose from the Input drop-down the Microphone option.

Additionally, a keyboard shortcut (as shown below) for enabling/disabling the microphone input will need to be configured using the VDJScript action 'mic'. This action can also be mapped to a button on the controller, if available.

When the mic action is enabled, it will open the microphone's input to be routed to the Master Output. The VDJScript action mic\_volume can be used to control the level of the microphone's output, as shown below.

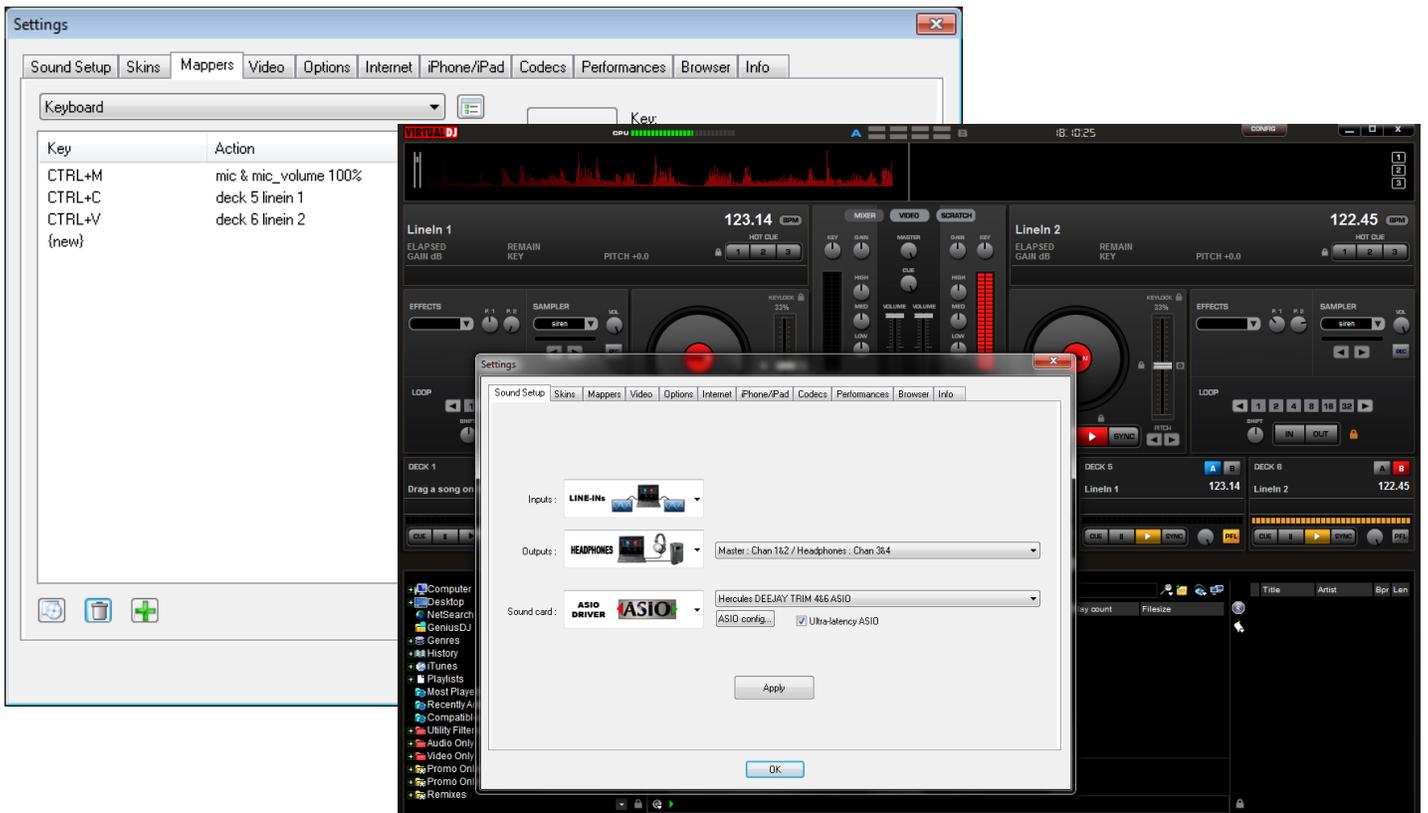


## BASIC (QUICK) CONFIGURATIONS – LINE INPUTS

VirtualDJ can also be configured to pass the line inputs of the sound card through software interface. As depicted in the below images, the sound configuration being used is with the Inputs set to the LINE-INS option.

Then by assigning the VDJScript action 'linein' to an available deck, the audio sent in on the line input will pass through VirtualDJ providing a rhythm wave display and dynamic BPM display on the deck.

The appropriate VDJScript syntax is "deck # linein #" – replacing the # symbols with the appropriate deck and line numbers. The example below is using a 6 deck skin and assigning decks 5 and 6 to line inputs 1 and 2 respectively.

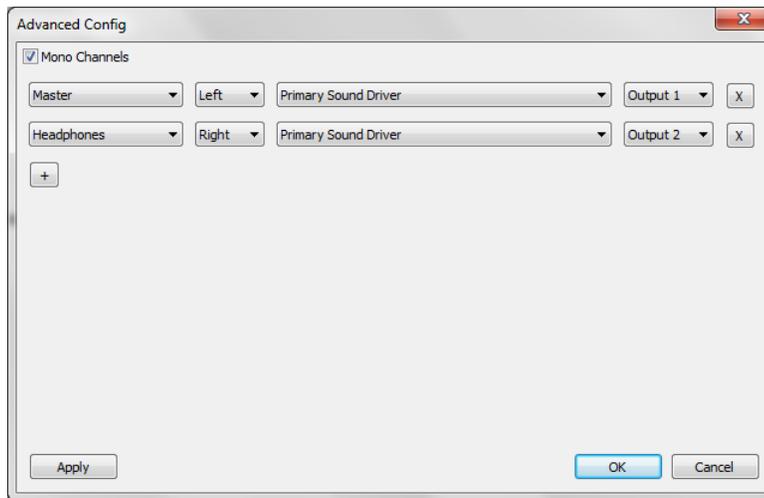


## ADVANCED CONFIGURATIONS

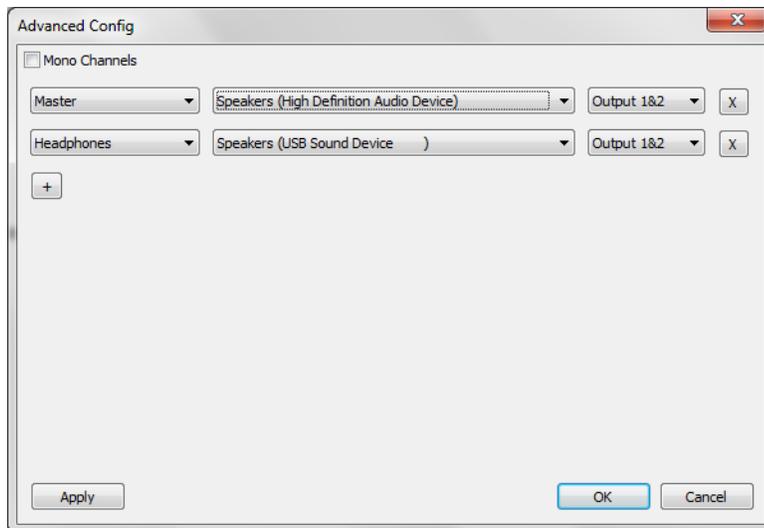
Advanced Configuration is accessed by changing the Outputs selection to Advanced Config choice. In this configuration mode, you are able to select multiple configurations using a single or multiple sound cards with VirtualDJ. It is recommended to use the Quick Setup options if possible.

First take a look at how some of the prior Quick Setups are configured, if using the Advanced Config options.

**HEADPHONES WITH 1 OUTPUT** - Using your built-in headphones jack. Key here is using the MONO check box in the top left so you can 'split' the single stereo output into separate Left and Right outputs.

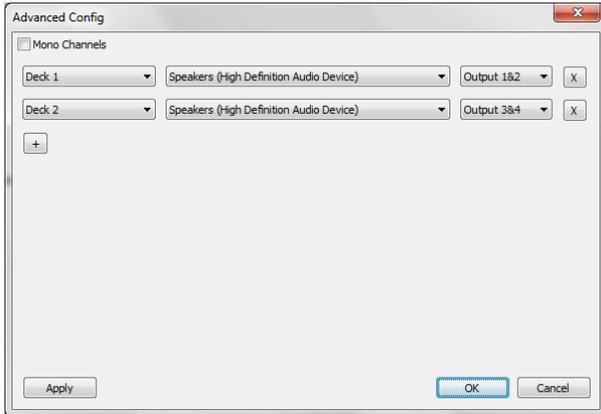


## HEADPHONES USING TWO (2) SOUND CARDS

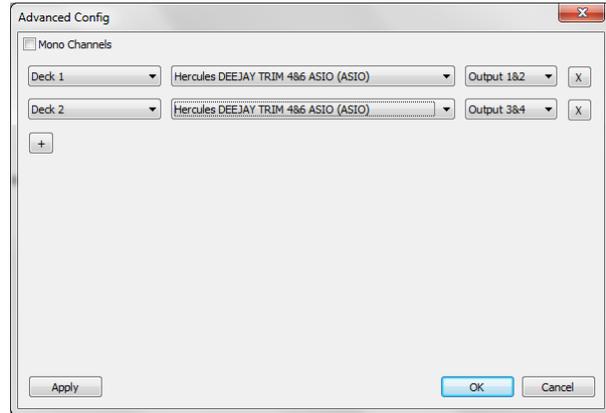


# ADVANCED CONFIGURATIONS

## EXTERNAL MIXER – LEFT DECK AND RIGHT DECK ON SEPARATE OUTPUTS

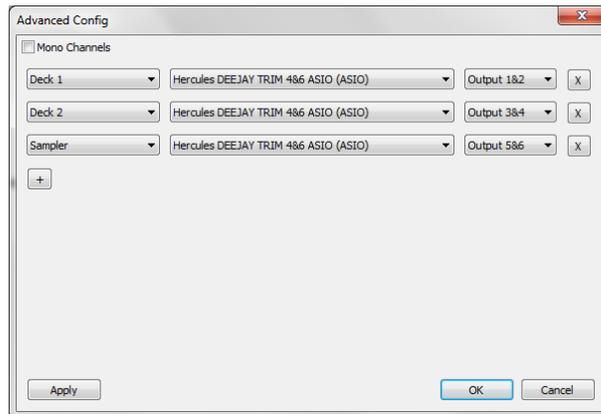


USING WDM DRIVERS



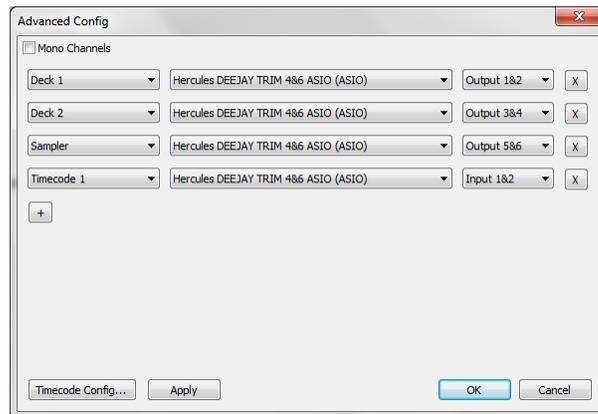
USING ASIO DRIVERS

## 3-CHANNEL EXTERNAL MIXER – LEFT AND RIGHT DECKS WITH SAMPLER



USING HERCULES DEEJAY TRIM IN 2IN/6OUT MODE

## TIMECODE (SINGLE DECK) CONFIGURATION



The above examples are just some of the Quick Setup options to demonstrate how easy the choices translate when using the Advanced Config option.

## ADVANCED CONFIGURATIONS

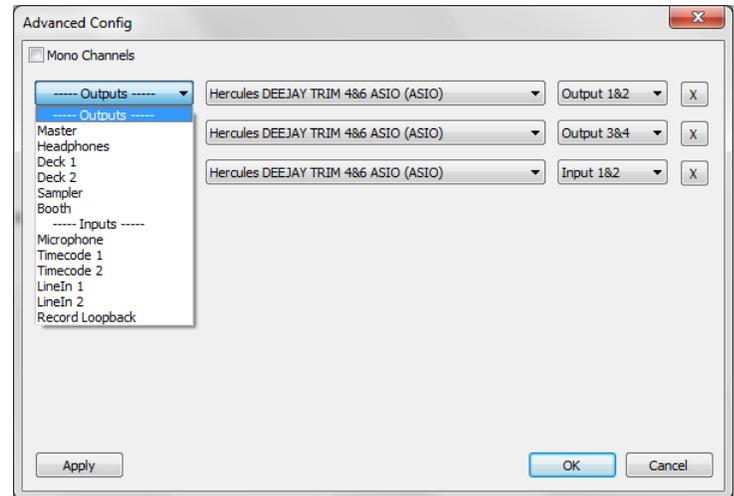
With the Advanced Config, you can route some more complex options based on your available sound card outputs and inputs or in the case of using multi-deck skins. As shown in the prior screen captures, it is first important to understand the options that are available for assignment of the Outputs and Inputs. Based on selection of skin the choices of Outputs and Inputs will vary for routing of the skin elements displayed. And, depending on the sound card's capabilities routing of the element to an Output or Input will vary.

For the traditional 2 deck skin the elements to output are:

- Master
- Headphones
- Deck 1
- Deck 2
- Sampler
- Booth

And, the elements to use for Input are:

- Microphone
- Timecode 1
- Timecode 2
- LineIn 1
- LineIn 2
- Record Loopback



The Deck, Timecode, LineIn options will increase to match the number of decks that a skin provides access to for routing.

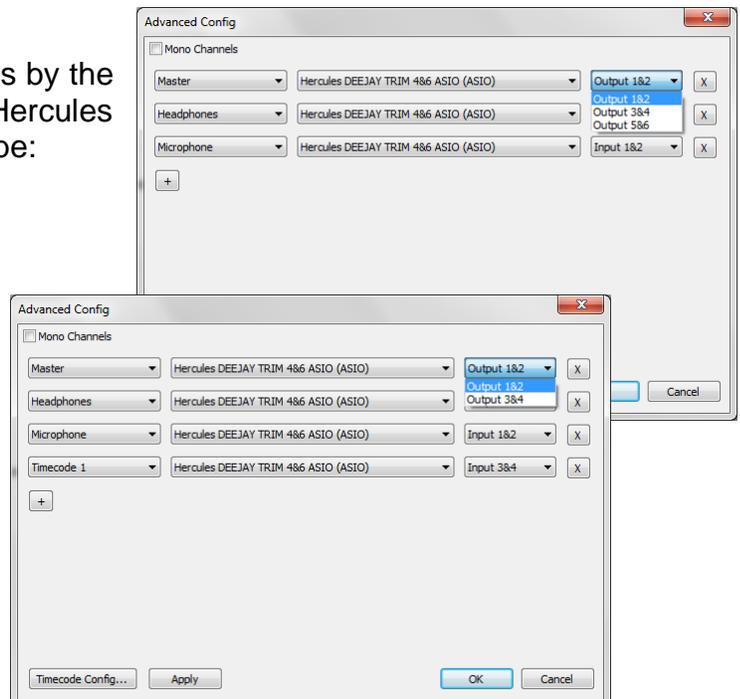
## SOUND CARD

Depending on the sound cards registered abilities by the driver the routing options will vary. For the Hercules DeeJay Trim in 2IN/6OUT mode the options will be:

Output to Channels 1&2, 3&4, 5&6  
Inputs from Channel 1&2

With the Hercules DeeJay Trim is set to the 4IN/4OUT mode, the options are:

Output to Channels 1&2, 3&4  
Inputs from Channel 1&2, 3&4

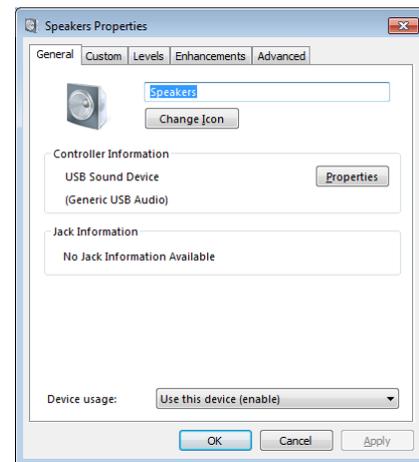
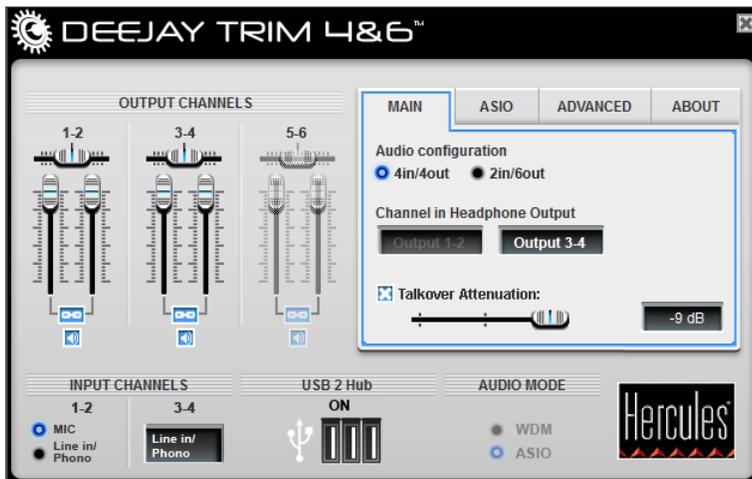


## ADVANCED CONFIGURATIONS

Now take a look at how a 6 deck skin could be setup using the Hercules DeeJay Trim in 4IN/4OUT mode along with a second card. This setup will include the ability to use the 2 stereo (4IN) inputs for routing the microphone and using a single deck timecode or line in and route those two inputs to the second sound card. The control of the inputs will use Decks 5 and 6, while the remaining 4 decks are used for regular track playback.

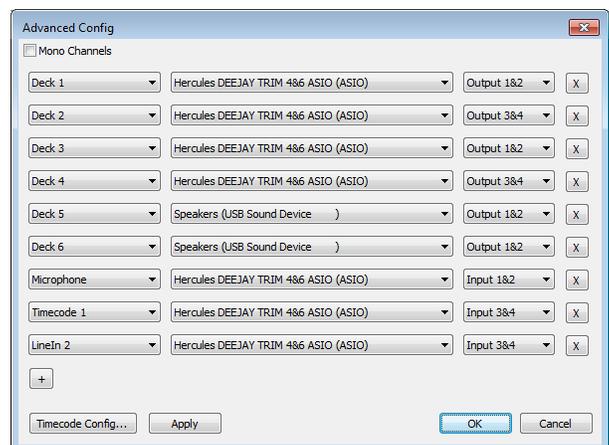
The Hercules Control panel below shows Line 1&2 are in Mic mode and Line 3&4 are used as Phono or Line (the switch on the back is on Line). And, the sound card is in 4IN/4OUT configuration.

While the second sound card is a simple USB device that is identified as a USB Sound Device (Generic USB Audio) and has just 1 output.



In VirtualDJ the following Advanced Config selections are made:

- Deck 1 / Hercules DeeJay Trim (ASIO) / Output 1&2
- Deck 2 / Hercules DeeJay Trim (ASIO) / Output 3&4
- Deck 3 / Hercules DeeJay Trim (ASIO) / Output 1&2
- Deck 4 / Hercules DeeJay Trim (ASIO) / Output 3&4
- Deck 5 / Speakers (USB Sound Device) / Output 1&2
- Deck 6 / Speakers (USB Sound Device) / Output 1&2
- Microphone / Hercules DeeJay Trim (ASIO) / Input 1&2
- Timecode 1 / Hercules DeeJay Trim (ASIO) / Input 3&4
- LineIn 2 / Hercules DeeJay Trim (ASIO) / Input 3&4



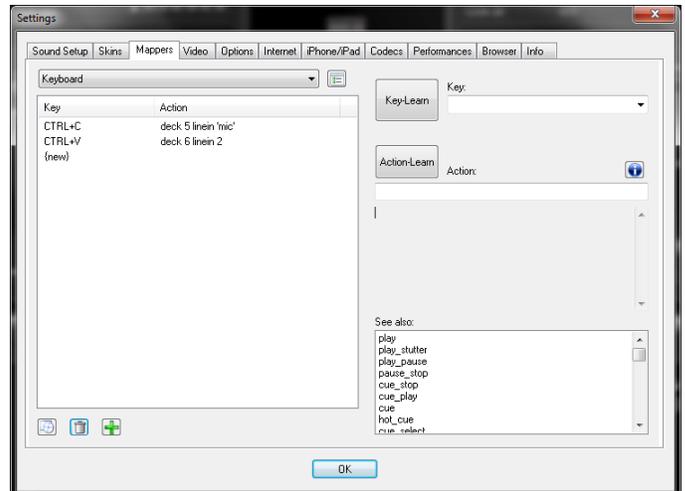
These options provide the ability to have the output go to 3 separate channels on the mixer. Two outputs from the DeeJay Trim with one from the second sound card. The Inputs of the DeeJay Trim allow for the use of the Microphone using the deck volume controls and effects on the microphone's output. The Input for the Timecode could be used as a normal line in to play regular CDs/Vinyl depending on the type of player used. This also gives the ability to apply VirtualDJ effects to the line in when play normal tracks.

## ADVANCED CONFIGURATIONS

To make this all work correctly, a couple keyboard shortcuts will need to be made. The example to the right shows CTRL+C and CTRL+V, but you can choose any key combination best for you.

Assign one shortcut to the VDJSript of – deck 5 linein 'mic' and the other the VDJSript of – deck 6 linein 2.

This will assign the two decks the respective inputs so VirtualDJ's volume controls and effects can be applied to the inputs.



When looking at the 6 deck skin and after activating the shortcuts, the Microphone is being passed through Deck 5 and LineIn 2 is being passed through Deck 6. Decks 1 through 4 are left to be used like normal decks.



To disconnect (deactivate) the Microphone and/or LineIn 2 from their respective decks, press the shortcut keys again and then decks become free to use for normal playback.

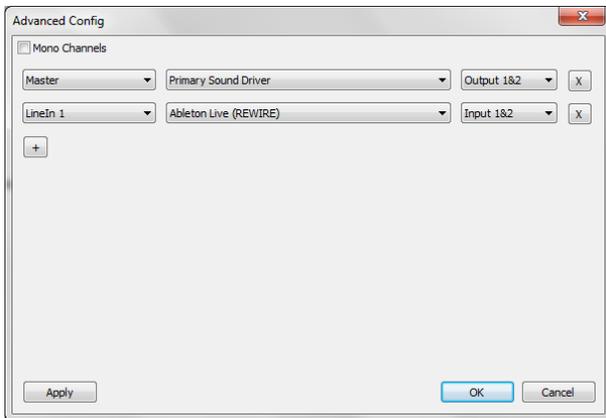
In this example, a six (6) deck skin was use but you can do the same with any skin with any number of decks when using the Advanced Config for setting up the routing of the Inputs and Outputs used by VirtualDJ.

## ADVANCED CONFIGURATION - ReWire

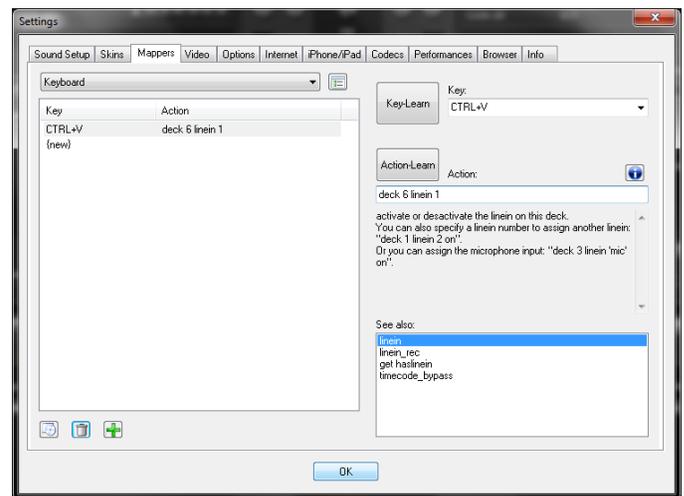
VirtualDJ can interface with ReWire capable applications. Setting up VirtualDJ to use ReWire is the same as routing a sound card's input to be used with an available deck, except you are routing the ReWire output (usually the Master Out) of the application; through one of VirtualDJ's decks.

- Before setting up the ReWire routing in VirtualDJ, install and configure the ReWire capable application first.
- Before using ReWire with VirtualDJ, VirtualDJ needs to be configured and open before running the ReWire application as VirtualDJ works as the Master application.

To setup the ReWire capabilities in VirtualDJ, first configure a LineIn channel using the ReWire application as the source. In the following example, Ableton LIVE is the ReWire source, with input from channels 1&2 and assigned to LineIn 1 as the VirtualDJ source.



Now, create the keyboard shortcut to assign LineIn 1 to a specific deck – in this example Deck 6 is being used.

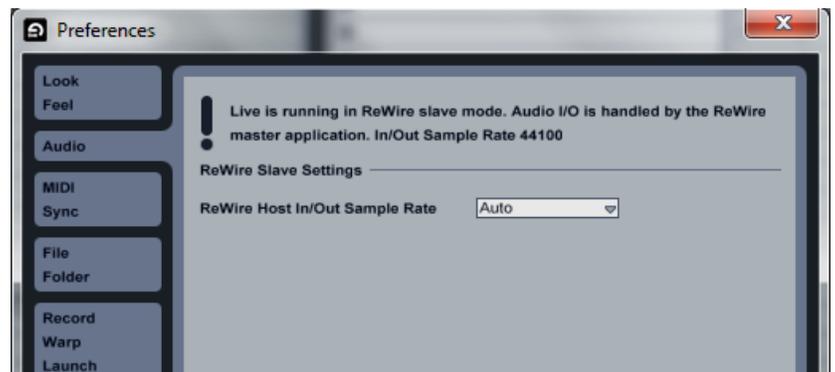


Now activate the shortcut so Deck 6 is using LineIn 1 as the source.



Then open Ableton LIVE and look at the Audio Preferences. The preferences will show that Ableton LIVE is working as a ReWire slave application.

With everything set in place, you can now load beats, tracks, or any other production material into Ableton LIVE and have it routed through VirtualDJ for playback.



## ADVANCED CONFIGURATION - ReWire

With the setup complete, VirtualDJ can be used to perform the following actions using the assigned deck:

- Control Play/Pause of the playback
- Apply VirtualDJ effects to the playback signal
- Use the Pitch control to change the pitch of the incoming source
- Sync the playback deck's pitch to other decks

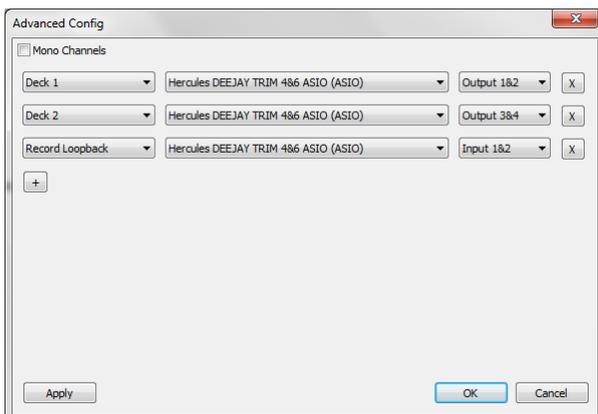


## ADVANCED CONFIGURATION – RECORD LOOPBACK

VirtualDJ has the ability to record your mixes when using the internal mixer capabilities. However, when using an external mixer VirtualDJ's internal crossfader is not used. So, within the Advanced Config, you have the ability to route an input of a sound card to VirtualDJ's recording engine.

On the Advanced Config dialog, select the option 'Record Loopback' in the first drop-down. Select the sound card with the Line Input from the second drop-down. And, select the Input channel combination from the last drop-down.

Now, just setup the 'Record Audio' options using the Config... button and press the 'Start Recording'. For instructions on using the 'Record Audio' features, see the 'Recording and Broadcasting' section within the User Guide.



# TIMECODES

Timecode setup can be used with either the External or 3-Lines Mixer option. To setup VirtualDJ for use with Timecode Vinyl or CDs, change the Inputs option to Timecode.

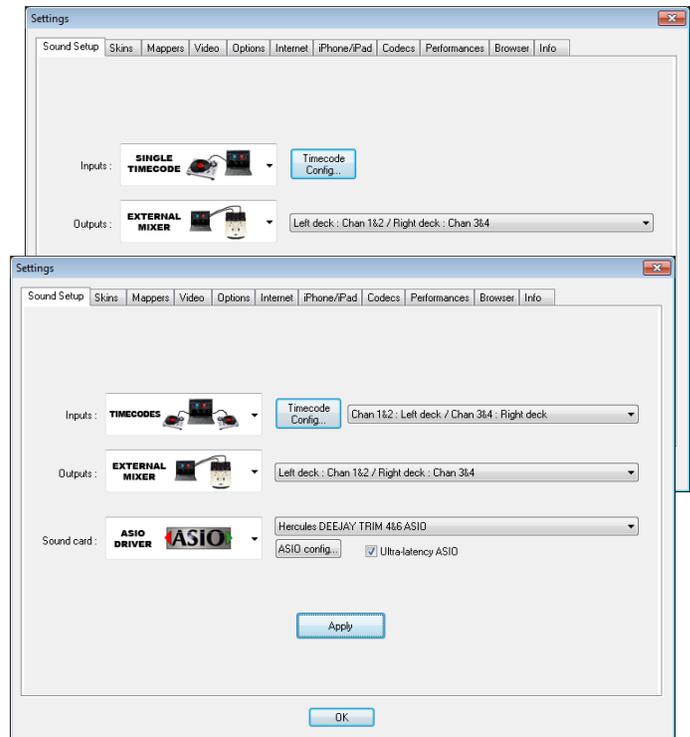
## TIMECODE (SINGLE DECK) CONFIGURATION

For use with a single timecode source, chose the Single Timecode option from the Input drop-down.

## TIMECODE (DUAL DECK) CONFIGURATION

For use with 2 Timecode input sources, choose the Timecodes option from the Input drop-down.

Just like in changing the outputs around if the connections to the input sources are incorrectly connected, you can choose to reverse the settings from the input drop-down from Chan 1&2: Left Deck / Chan 3&4: Right Deck to Chan 1&2: Right Deck / Chan 3&4: Left Deck.



## \*\* ADDITIONAL NOTES \*\*

Setting up additional manufacture sound cards are done in the same manner as described above. The limitations on choices will be based on features of the sound cards and the operating systems supported.

Some important notes about using ASIO cards:

- In order to use VirtualDJ's timecode capabilities, the sound card must be able to provide a stereo signal on the appropriate input channels. Mono input of a timecode signal is not supported.
- During configuration of your sound setup, if the message "Not enough channels" is displayed then you have selected a configuration that cannot be supported by your sound card. If you find this to be incorrect, then consult the manual for your card to ensure that all settings are properly made within the card's configuration before attempting to setup your card in VirtualDJ.
- While configuring your ASIO card, if the message "Error in ASIO driver" is displayed then VirtualDJ is unable to connect to the selected ASIO card. This can be a result of the card incorrectly being connected to different USB port, card is not connected, or the cards configuration has changed since last use.

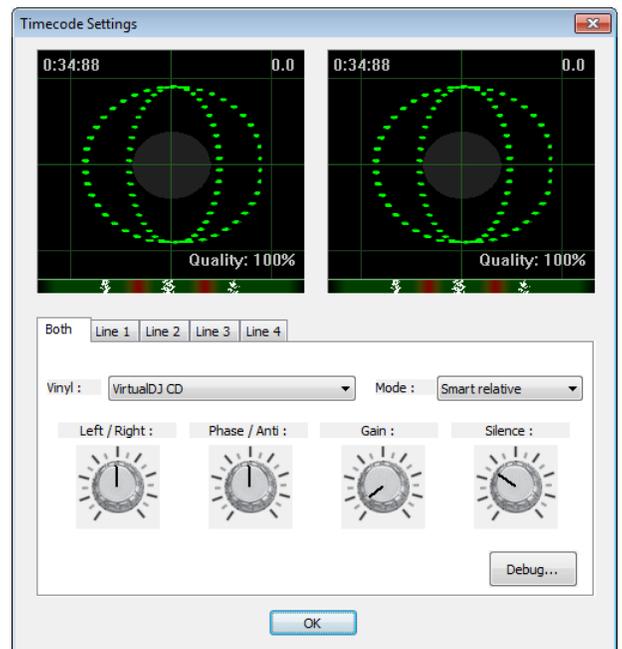
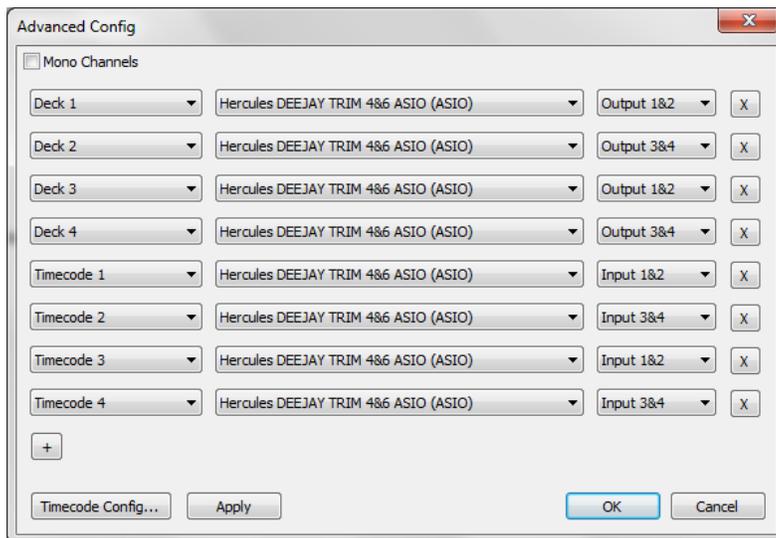
## TIMECODES – ADVANCE CONFIG

With VirtualDJ's Multi-Deck features, you may want to use a single sound card or multiple sound cards providing multiple inputs. Using the Advanced Config, you can setup each timecode input to be used by VirtualDJ. Just like the Deck output options the Timecode input options will vary based on the number of decks available on the used skin. The following example uses a 4 deck skin to configure a Timecode source for each deck.

In the Advanced Config, select from the left column the 4 deck assignments and then the 4 timecode assignments. From the center column select the appropriate sound card(s) that will provide the output and inputs for the decks. The far right column select the appropriate output and inputs for each.

To configure and calibrate each Timecode listed, click on the Timecode Config button to show the Timecode Config dialog.

The Timecode Config dialog will have an individual tab for each Timecode entry listed.



## TIMECODE SETUP AND CALIBRATION

After clicking on the Timecode Config, you will see the configuration dialog below. Start playing your Vinyl or CD to see the signal level information in the configuration display.

For a 100% quality signal, you may need to adjust the following options:

**Vinyl** – Select what kind of timecode control record you will be using.

**Mode** – Select what timecode mode you want to use.

Options available are –

- Smart Relative (default)
- Relative
- Absolute

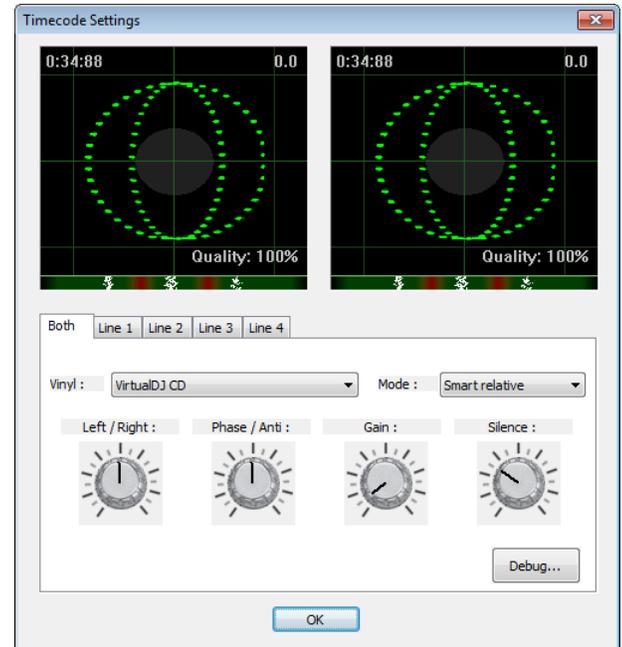
**Left/Right** – If the graphic shows an flatten circle (egg shape) instead of a concentric circle adjust this setting until the signal graphic is more circular.

**Phase/Anti** – Use this knob to adjust the phasing of the signal. If the graphic shows a tilted egg instead of a concentric circle adjust this setting until it is vertical.

**Gain** – This option is used to adjust the signal graphic if the concentric circles are small or too large in the display window. Adjusting the setting does not change the level of the signal being received by VirtualDJ from the DVS control vinyl or CD this must be done at the sound card.

**Silence** – Use this knob to adjust the gray zone on the graphic, so that it doesn't touch the green circle while in normal operation, but completely covers the green lines when you stop the turntable.

If necessary you can select the individual deck tabs to fine tune each deck with the same options.



# TIMECODE SETUP AND CALIBRATION

## DEBUG

The Debug button provides access to additional fine tuning options for gaining a better quality signal of your DVS and its control of the VirtualDJ interface. The following visuals are available and features that can be adjusted to obtain better DVS performance.

**Signal Grid** – displays the DVS signal being read by VirtualDJ. By adjusting the various settings you should see concentric circles displayed in this area.

**Data Stream** – displays the data stream being sent as dotted lines, you should see two lines outside the center zone and one or two lines (depending on timecode being used) within the center zone near the green line.

**Stereo Waves** – shows a received signal from the DVS in a sine wave with the silence zone in the center. If either channel is not properly sending a signal, you may see a flat line or sine wave smaller than the other channel.

## CONFIGURATION OPTIONS

**Invert Signal Stereo** – check if the input cables are crossed and the track moves in reverse when the DVS signal is played.

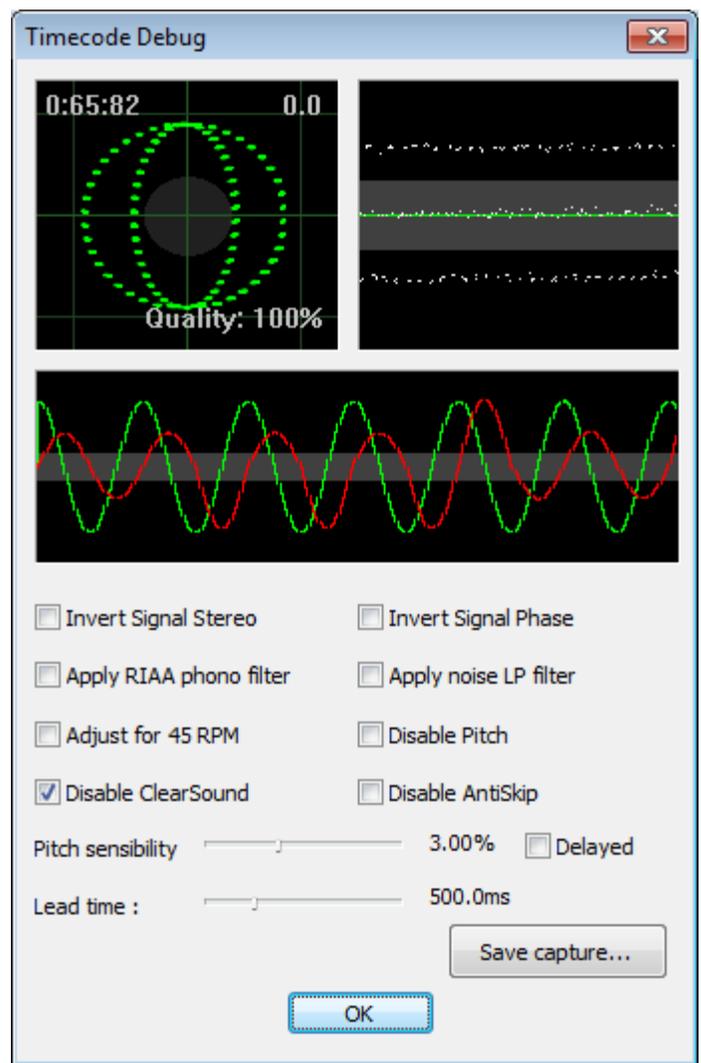
**Invert Signal Phase** – check if the cables are correctly connected, but the phasing of the signal is reversed.

**Apply RIAA phono filter** – if your soundcard does not provide a RIAA pre-amp capability, use VirtualDJ's software RIAA pre-amp to attain a stronger signal when using a vinyl record for the DVS. If using a CD DVS signal this should not be checked.

**Apply noise LP filter** – use VirtualDJ's Low Pass filter for removing the low end signals from disrupting the DVS signals quality.

**Adjust for 45 RPM** – when check VirtualDJ will compensate reading of the control signal if a speed of 45 RPM is used.

**Disable Pitch** – If you disable SmartPitch, the pitch slider inside VirtualDJ will not move to reflect the pitch on your turntable, and the BPM of your song will not reflect the pitch change on the skin's interface.



## TIMECODE SETUP AND CALIBRATION

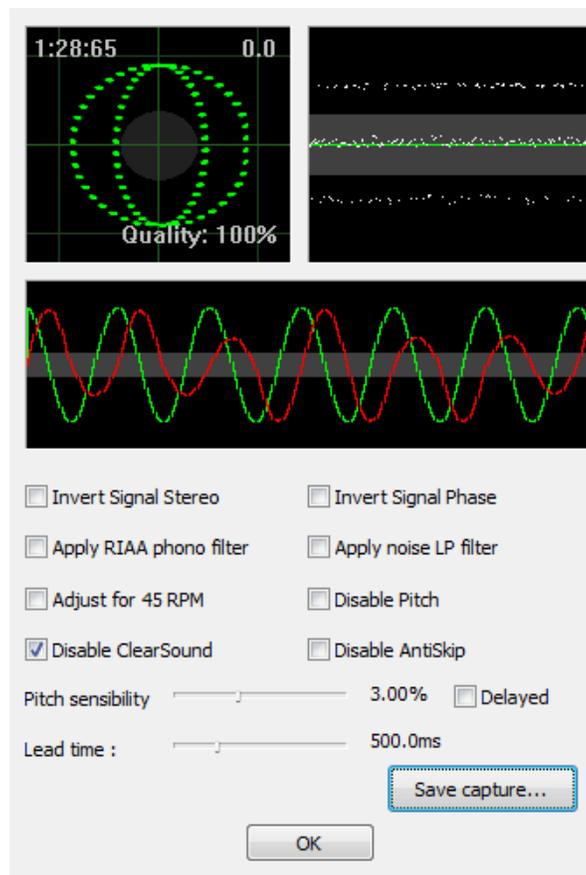
**Disable ClearSound** – ClearSound uses a technology that gives a better sound when you don't scratch, at the expense of a very small delay when you scratch. When playing certain types of heavy tremolo music pitch changes with the DVS can cause artifacts in the sound quality.

**Disable AntiSkip** – uses a technology that will ensure that VirtualDJ will not skip even if your needle skips on your record. Skipping of a DVS control vinyl can occur do to various reasons, if minor skips occur while using the DVS control vinyl, VirtualDJ will compensate for the minor occurances. This feature can typically be disabled (checked) if using DVS control CDs.

**Pitch Sensibility** – The Pitch Sensibility is used to adjust how much the pitch slider in VirtualDJ should follow the turntable speed. If set too low, the pitch slider will take some time to adjust. If set too high, the pitch slider will move when you just want to scratch.\n(remember, with the Timecode technology, a software has no clear way to know the difference between a disc turning faster because of the turntable's pitch being moved, or because of the disc being nudged or scratched. both result in the timecode signal coming faster.)

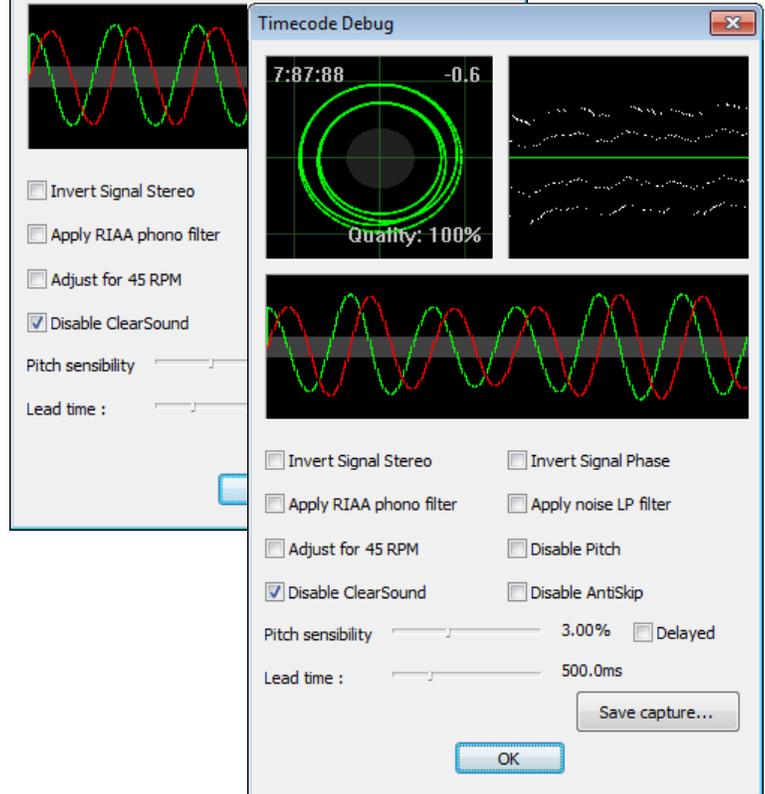
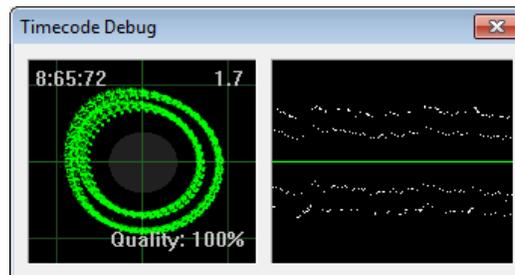
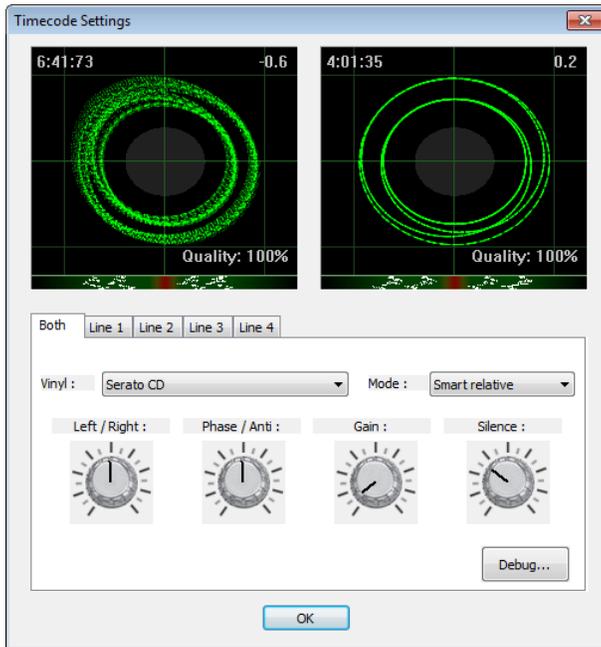
**Lead Time** – Adjusts how much lead time is used on the vinyl before the start of the song. This is used so that VirtualDJ can track timecode movement before the actual start of the song.

**Save capture ...** – Use this button to save a .bmp file (see below) of timecode config dialog. You can then upload this image on [www.virtualdj.com](http://www.virtualdj.com) forums if you need to ask for help to configure/optimize your timecode signal.



# TIMECODE SETUP AND CALIBRATION

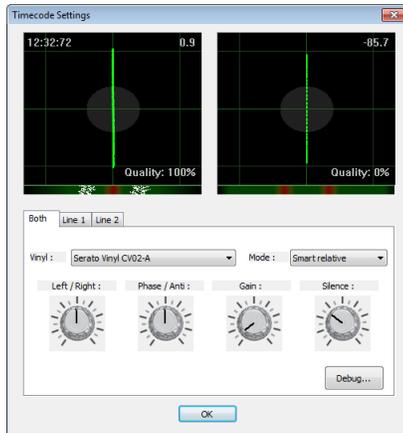
VirtualDJ supports other manufactured DVS formats. Here are a couple screen captures using the Serato DVS Vinyl or CD format. The left is vinyl the right is CD.



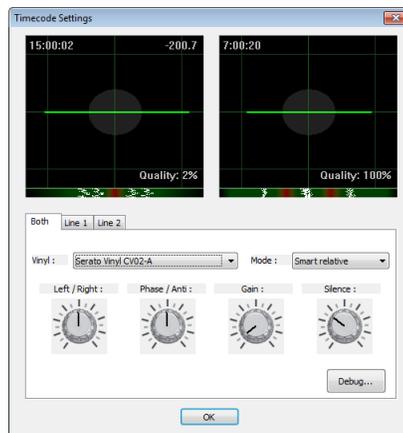
# TIMECODE SETUP AND CALIBRATION

Here are some examples of poor signal setups that may be encountered.

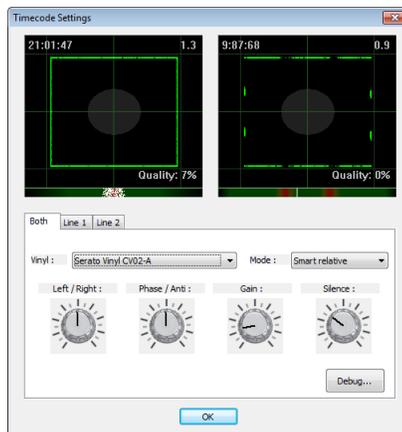
Poor cable signal – left cable unplugged or not sending a signal



Poor cable signal – right cable unplugged or not sending a signal



Gain to high – if the signal is box shaped then the input signal from the sound card is too high. Adjust the sound card's gain level until the signal changes to concentric circles.

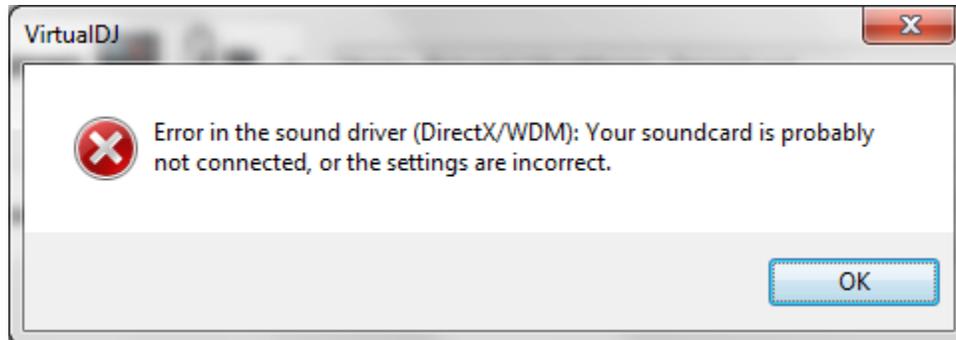


## SOUND CONFIGURATION ERROR MESSAGES

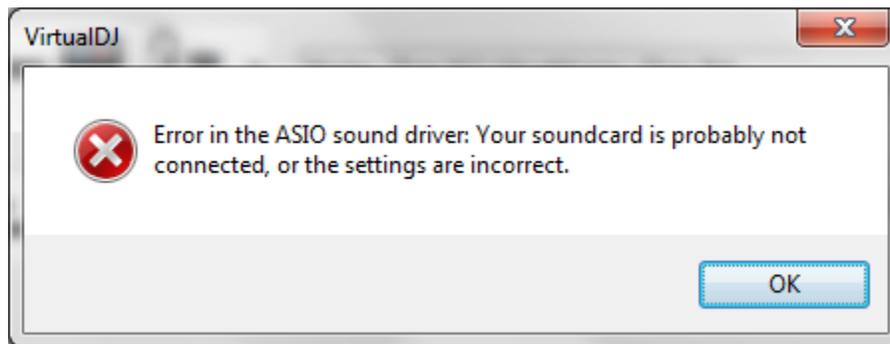
When configuring VirtualDJ there are some common messages you may encounter when things are not properly configured. Here we explain what those messages mean and how to get VirtualDJ properly configured.

The most common is when VirtualDJ cannot find the selected sound card or, if using the Advanced Config; you have selected an invalid Output or Input for the card.

For cards using DirectX/WDM (Windows Direct Media) drivers, you will receive the following error dialog.



For cards using ASIO drivers the following similar error dialog is displayed.



A common skin interface response to an incorrectly configured card is where the track loads to the deck but when you try to play the track the Play button shows active but nothing beings to play.



## LEGAL INFORMATION

<http://www.atomixproductions.com>

<http://www.virtualdj.com>

### **Atomix Productions Inc.**

Los Angeles CA 90036, USA

### **VirtualDJ Copyright:**

Copyright 1997-2010 Atomix Productions

All Rights Reserved

Number IDDN.FR.001.040012.01.R.C.2000.000.31400.

### **Trademarks:**

The VirtualDJ Logo is a registered trademark of Atomix Productions

VirtualDJ is a registered trademark of Atomix Productions

### **License and restrictions:**

According to the EULA (End User License Agreement) accepted by every user upon installation of VirtualDJ:

You **MAY NOT** make or distribute copies of VirtualDJ, or electronically transfer VirtualDJ from one computer to another over a network.

You **MAY NOT** decompile, reverse engineer, disassemble, or otherwise reduce VirtualDJ to less than human perceivable form.

You **MAY NOT** modify or create derivate works from VirtualDJ.

You **MAY NOT** sell, to rent, to transfer or sublicense the software. You may not sell, to rent, to transfer or sublicense hardware on which the software is installed, without written prior agreement of Atomix Productions.

**Reproduction of this manual in full or in part without written permission from Atomix Productions is prohibited.**

**VIRTUAL DJ**

**VIRTUAL DJ**