1   Introduction

This note details how to set up AudioScience sound cards to be used with Adobe Audition version 2.0 and higher in Windows 7.

For further information on the ASIO driver, please see AudioScience's Windows ASIO Driver datasheet.

2   Driver Information

2.1 The ASIO interface was added to all AudioScience driver types starting with version 3.02. The ASIO interface is supported in AudioScience sound cards from the 5000-series and up. The 4000-series sound cards do not support the ASIO interface.

2.2 The AudioScience ASIO driver presents all AudioScience adapters in a machine as one ASIO device. The adapters need to be all of the same type and use a common sample rate clock source.

3   Install the correct software

3.1 Adobe Audition 2.0/3.0 requires a driver that has ASIO or native DirectSound support. The ASIO driver interface is implemented as an add-on to the AudioScience Windows Combo driver. Our Combo drivers provide DirectSound Support. The ASIO interface is preferred and will give better performance.

3.2 NOTE: Some customers have reported issues attempting to use the AudioScience WDM interface with Audition 3.0 in a Windows 7 environment. See notes in "Configuring Audition…WDM interface" section below for more information. Because of this error we do not recommend using the WDM interface in a Windows 7/Audition 3.0 environment.

4   Configure Audition v2.0 and Higher for the AudioScience ASIO interface

4.1 Once you have installed the driver and verified your AudioScience sound card is working, launch Adobe Audition.

4.2 Go to MENU: Edit -> Audio Hardware Setup and select AudioScience ASIO driver from the Audio Driver List.

4.3 Uncheck "Release ASIO Driver in Background".

4.4 Click on the Control Panel button to change the AudioScience ASIO driver settings:
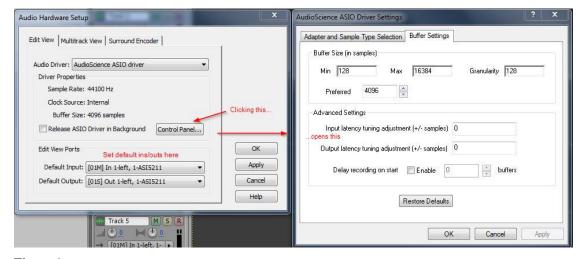

Figure 1

4.5 In the "Edit View Ports" section, click the drop down box to select the Default Inputs and Outputs that you would like Audition to use. Click "Apply" to save your changes.

4.6 Click the "Multitrack View" tab at the top and set the preferences there using the same methodology.

5   Configure Audition 2.0 and Higher for the AudioScience WDM interface

NOTE: Some customers have reported an issue when trying to configure the "Audition Windows Sound" driver in older versions of Audition (3.0 and older). When clicking the "Control Panel" button as detailed in section 5.3 below, Audition will lock up, forcing you to "End Task" from the Windows Task Manager. This appears to be an issue with the way Audition 3.0 works in Windows 7 and is not something that can be addressed with a driver update. Due to this we do not recommend using the WDM interface in Windows 7 and suggest you use the ASIO driver as detailed above. Instructions below are included for reference.

5.1 Once you have installed the driver and verified your AudioScience sound card is working, launch Adobe Audition. You may get the following warning message: "The audio input is not activated. Recording audio is not possible. Please check your input configuration." Click OK. The message may come up a second time; click OK again. Audition should now launch.

5.2 Go to MENU: Edit->Audio Hardware Setup and select Audition Windows Sound from the Audio Driver list.

5.3 Click on the Control Panel button and make sure that for both playback and record devices, one of the WDM versions is selected: **NOTE**: This is where you are likely to see the error listed above.
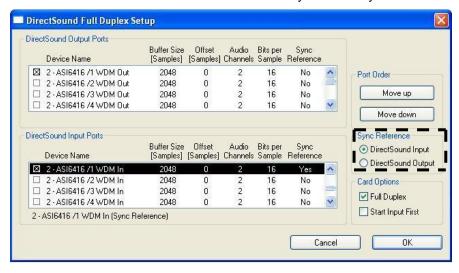

Figure 2

6   Troubleshooting for the AudioScience WDM interface

6.1 If you hear dropouts in playbacks and/or recordings:

6.1.1 Increase the buffer size for the input and/or output devices in Audition. Double click the "Buffer Size" number to edit it. AudioScience's internal testing has had success with a buffer size of 4096, but this may need to be adjusted for specific hardware platforms.

6.1.2 Under "Sync Reference", select either DirectSound Input or DirectSound Output as needed (this area is inactive until you select a WDM device.)

7   Configuring Audition and Windows 7 to work together

7.1 It can sometimes be tricky getting Audition 2.0/3.0 to work the way you want in Windows 7. Keep in mind that these versions of Audition were released prior to Windows 7 and were not designed to work in that environment. As such they are not technically supported by Adobe for use in Windows 7. That's not to say you can't use them, but some quirks are to be expected. Most of these issues can be addressed by taking steps to configure your environment properly using Windows Sound settings, ASIControl and Adobe's Audio Hardware Settings. Some of the key settings you will need to consider to get things working include the "Windows Default Device", the volume and Recorder "Muliplexer" options in ASIControl and the Audition default inputs and outputs (as mentioned above).

7.1.1 Setting the Windows Default Device. The Windows Sound "Default Device" is the device that Windows will use when playing audio using software that may not have its own "sound settings" options. (your internet browser and Windows Media Player are good examples of this) One of the quirks to this setting introduced with Windows 7 is that Windows does not always pick the device you would expect as its default; usually it will end up choosing the last device in the list which may not work as you would expect. For example, in the case of an AudioScience card that presents 4 Players to Windows, it will usually choose Player 4 as its default device. If Player 4 is not set to send its output to your Line_Out in ASIControl, you will not hear it and you may think it is not working properly.
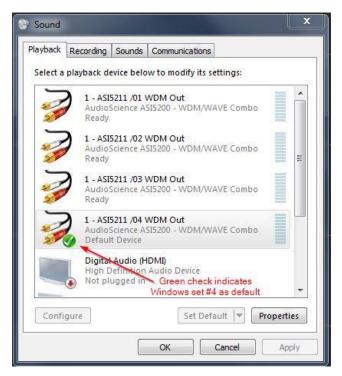

Figure 3

This is easy to change but choosing the best device does require some thought and planning. There are 2 ways to correct this situation

1.   Change the default device to 1st device (In the above example it would be "1 – ASI5211 /01 WDM Out") which is set to send its output to Line_Out 1 by default in ASIControl.
2.   Leave the 4th device as the default and send its output to Line_Out 1 in ASIControl.

The most commonly used solution would be #1 above but that can create problems in software that is not designed to share resources well. Audition 2.0/3.0 does tend to have problems with this solution. Usually this will cause problems such as "Device in use" errors or you will notice that moving back and forth between different software will cause playback/record to stop. For example, say you want to record the output of Windows Media Player using Audition. You start playback on Media Player and switch to

Audition to click record and Media Player stops playing. No matter what you do you can't get them to both work at the same time. That's because Audition and Media Player are both trying to access the same device at the same time. In this case, solution #2 is the better option, as explained below.

7.1.2 Setting up ASIControl. In the scenario above we stated that option 2 was the better solution. This is because it allows us to work around the limitation of the software by utilizing the multi-player capabilities of the AudioScience line of products. Essentially this allows us to use different devices for different purposes so that "sharing" is not a problem. There are many settings in ASIControl that can affect the output you will hear in your speakers. In this particular case there are 2 we will need to keep in mind. Volume of the player in Line_Out and the "Mulitplexer" setting of your Recorders.

      7.1.2.1 Volume setting. By default the player volumes are not set to send audio from all the available players to the output as that could cause a cacophony of sound in the output if all players are being utilized at the same time. This can be easily changed however. Open up ASIControl and click "Line_Out 1", this will change the right pane to a selection of volume sliders. Raise the volume for "Player 4" to an appropriate level. You should now hear it in the output of Line_Out 1. This solves the problem of using a device other than the first device as the Windows default. (See Figure 4)
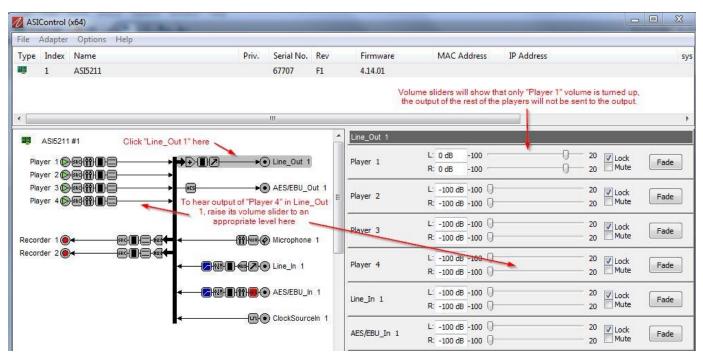

Figure 4

7.1.2.2 Recorder "Multiplexer" settings. Setting the volume above will allow us to hear the output of Player 4 in Line_Out 1 but how do you record that output internally using Audition? If you look at the "Audio Hardware Setup" in Audition you will see the options that set the inputs and outputs that Audition uses but there is no option for "Player 4" or anything else that appears to be related to the players on your AudioScience card. In fact the only options shown appear to indicate that you can only record the "Line_In" signal coming from the physical inputs on the card. This setting is fine and can be used if you have your cabling routed in such a way that allows you to send the output of the ASI card back to the input (perhaps using an external mixer) but what if you don't have it connected that way? This also sends your signal out of the card and back in which can introduce unwanted noise or other audio artifacts. Fortunately, there is a way to set ASIControl to record this signal internally without having to send your audio out of the card. Open ASIControl, click "Recorder 1", the right pane will change to the Recorder 1 settings, open up the "Multiplexer" control and change it to "Player_4". Now whatever is being sent out or played on Player 4 will be sent to "Recorder 1" which can be set as your default input in Audition by selecting the corresponding input. (See Figure 5)
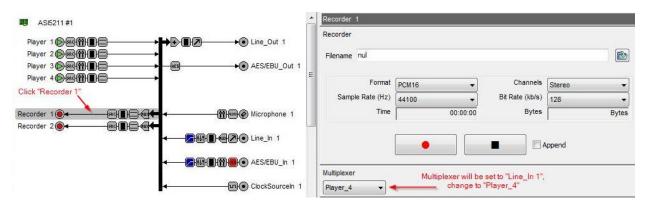

Figure 5

8 Summary Using the techniques above should allow you to setup Audition 2.0/3.0 to use your AudioScience card in Windows 7 (this assumes there are no other software issues and that you have Audition installed properly). The examples above show this being done with an ASI5211 but the principle is the same regardless of which card you are using, just keep in mind the number of Players and Recorders can be different depending on the model you are using. It's best to use this as a general guideline and not necessarily as a step by step solution as every individual scenario can introduce its own complications.