



**Configuring BiAmp to work with ASI AVB devices**

Adding an AudioScience AVB device to an existing BiAmp installation is a fairly straight forward process if you are already familiar with BiAmp’s Tesira configuration software. This document will give a brief overview of the steps necessary to add an AudioScience Hono AVB Mini to your setup and assumes you have at least a basic understanding of the BiAmp methodology and software.

**1 Introduction**

All AudioScience AVB devices can be configured to work with any BiAmp AVB capable hardware as either talker (sending) or listener (receiving) nodes as long as all devices are connected using an AVB capable network switch. See the datasheet for your AudioScience devices for recommended switches that have been tested to work well with our devices.

Before configuring your AVB streams, be sure to connect the AVB ports of all your devices to the switch and make sure you have AudioScience’s Hono AVB Controller software installed on your computer. The Hono AVB Controller is installed automatically with our driver when you include the +Network option and choose the AVB add-on so if you already have your ASI AVB devices functioning this should already be installed. For more information on using AVB Controller, check the datasheet here: [http://www.audioscience.com/internet/products/avb/datasheet\\_hono\\_avb\\_controller.pdf](http://www.audioscience.com/internet/products/avb/datasheet_hono_avb_controller.pdf)

**2 Clock synchronization**

To ensure reliable operation, all traffic in an AVB environment must be synchronized to a master clock. Not all manufacturers implement this important feature in the same way. AudioScience devices give you several options to choose from: these include a distinct “Media Clock” channel that can be used exclusively for the clocking signal or for devices that do not support this (such as BiAmp Tesira units) you can set our devices to use any in-stream as a media clock. The important thing here is that something on the network acts as the master clock and all other devices that will be connected to that device are set to receive their media clock from the master clock. Which device on your network you choose as the master clock will depend on a number of factors but when integrating with a BiAmp installation you will need to use a Tesira unit as the Media Clock. The simplest way to do that is to make sure the Tesira has at least 1 AVB output channel assigned and that you have connected that AVB output stream to the “Media Clock Input” stream on your AudioScience device and that the device is set to receive Media Clock on its “Media Clock Input” stream.

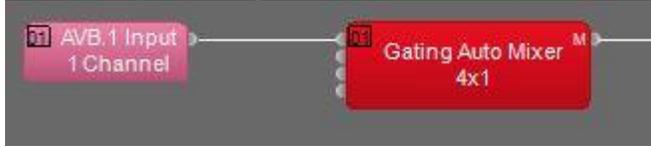
**3 ASI AVB as a talker with Tesira as a listener**

In this example, we will assume you are adding a Hono AVB 4.4M AVB node as a talker to send audio to a Tesira unit. The Mini can be set to send 1, 2, 4 or 8 channel streams, for simplicity sake, let’s assume that you just need a single 1 channel stream. The first step is to ensure your Mini is set to transmit a 1 channel streams on its AVB Talker stream. To do this, open AVB Controller, find the device you wish to configure and double click it in the “Talker” column. Make sure you are on the “Talker” page in the pop up box and set the “Channel Count” value of “Stream Output 1” to “1-Channel” as shown below

Listeners		Talkers		Device Config	AVB Status
Name	Latency	Format Type	Channel Count	Channel Mapping (Static)	
Media Clock Output	2ms	IEC61883-6 AM824	1-Channel		
+ Stream Output 1	2ms	IEC61883-6 AM824	1-Channel	1	

The 'Channel Count' dropdown for 'Stream Output 1' is open, showing options: 1-Channel, 2-Channel, 4-Channel, 8-Channel. '1-Channel' is selected.

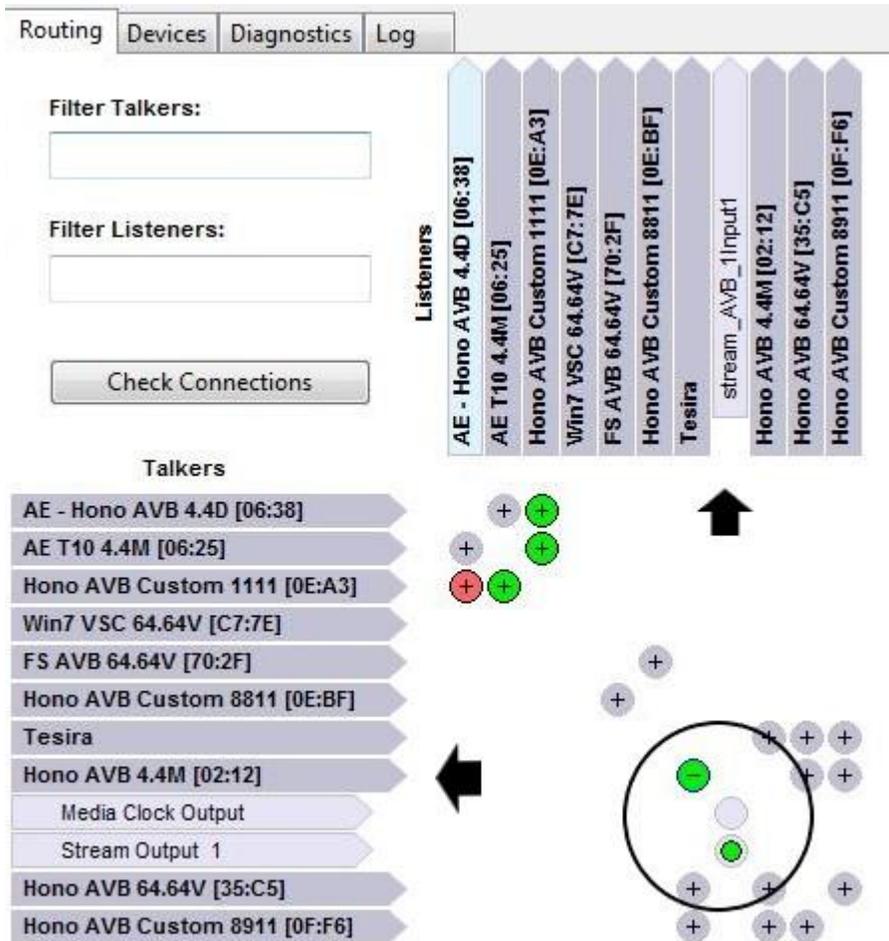
The next step is to make sure that your Tesira is able to receive this signal by adding a 1 channel AVB Listener to your configuration that at its simplest would look something like this:



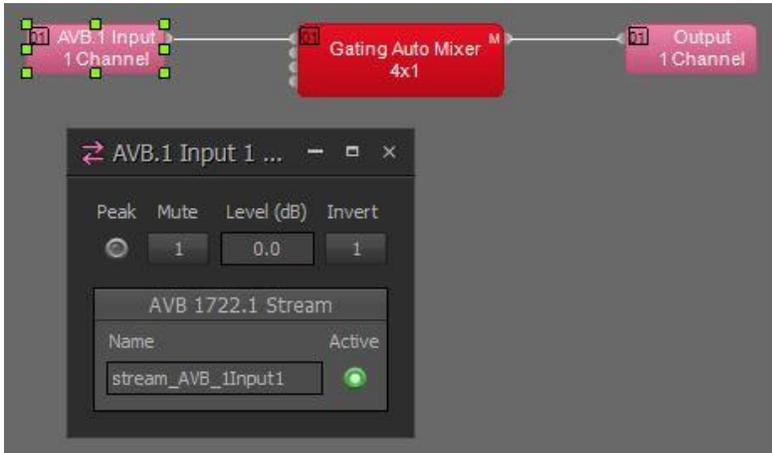
Once you have a configuration that works with your system, simply make sure that is active in your Tesira (see your Tesira documentation for details on how to do this). Once you have sent that configuration to your unit, you now need to connect the output AVB stream on the Mini to the input AVB stream on the Tesira.

#### 4 Connecting the streams

Once you have both your Hono AVB Mini and your Tesira unit configured for AVB streams, you can now connect the streams together to complete the audio path. We will use AVB Controller to accomplish this. The main page of AVB Controller is the Routing matrix. Here you will see all available AVB devices on your network and if they are able to be connected you should see a + circle at the intersection of the 2 devices you want to connect. Click the + to open the connection option available between these 2 devices. Then click the circle that intersects at the "Stream Output 1" of the Hono AVB 4.4M and the "stream\_AVB\_1Input1" on the Tesira unit as shown in the circle below.



You have now connected the units and audio should be routing from your Hono AVB Mini to the available outputs on your Tesira unit. You can check the Tesira to see if there is an active AVB signal by clicking the "AVB. 1 Input 1Channel" module and confirming that the "Active" indicator is green as shown below.



## 5 Conclusion

We have taken a very simple setup and walked through the steps required to make it work. However the concepts here can easily be scaled up for additional inputs and are essentially the same if you wish to reverse the signal path and send from the Tesira to the Mini. They also apply to any other AudioScience AVB devices. Although different devices have different capabilities (and there are also additional options that can be configured in the Mini) the concepts are the same regardless of how complex your system needs to be.

To recap, the simplified process is as follows.

1. Determine which unit is your Talker and which is your Listener.
2. Determine how many channels and streams you require between the two.
3. Set your Talker to transmit the correct number of channels.
4. Set your Listener to receive the correct number of channels.
5. Connect the 2 units using AVB Controller.

## 6 Tech Support

If at any point you need help with this information please contact our Technical Support department at 585-271-8870 between the hours of 9AM and 5PM EST

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