

Video Media Support with KHAudio 3 (4.x.x)

Introduction

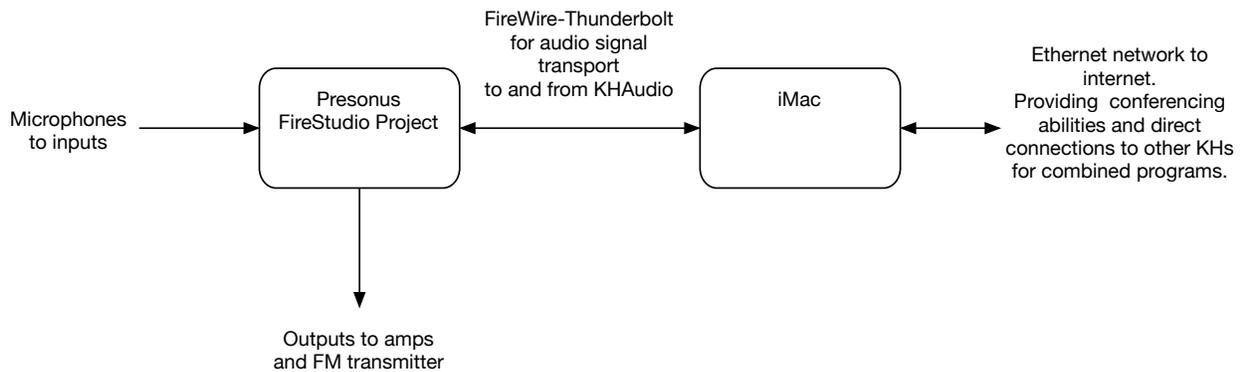
KHAudio now supports the professional presentation of multi-media assets in the form of movie files, pictures in all kinds of formats, PDFs, video streams, and other types of assets.

This document describes how to setup and configure an installation to add that ability to KHAudio based sound systems.

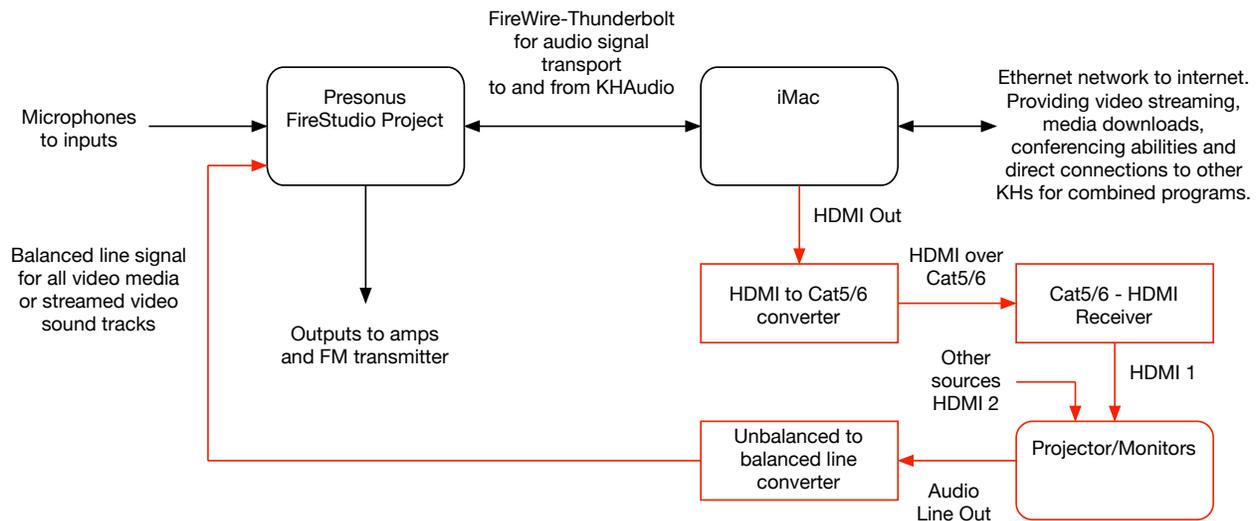
Wherever we are referring to the “Presonus” we do this because in most Kingdom Halls, the installed device for audio interfacing is a Presonus Firestudio Project. However, many other devices are supported by KHAudio including USB and Thunderbolt based devices. In case your installation uses another device like Tascam, Yamaha or any other brand as the main audio interface for KHAudio, just apply the same principles and logic.

Changes to the Installation

For a sound only system, a straightforward installation would now look like this:



To add video projection to a system like this, you would need to add the following:



We know that many variations on this simplified schematic are possible. The reason why you would want the video media audio signal to come from the projector is that ideally you want that signal to be generated by the same decoder that (re-generates) the video. This will prevent sync issues between audio and video. If they are generated by the same sub system, they will likely be in sync.

Unfortunately, we have seen some projectors (Dell for example) that will give you an absolutely horrible sound signal. So you might have to come up with other ways to deliver the video media sound signal to the Presonus input. In some cases (if only the Mac is used to deliver video & sound), the system can be much simpler and you can connect the Line Out / Headphones output via a the unbalanced to balanced line converter directly to the Presonus input. No need to run any wiring outside the sound box.

Configuring the Mac for Video Media Support

It is very important to understand that **KHAudio** should be the **ONLY** application using the **Presonus** device. In each Mac user account where you are planning to use KHAudio for multi-media presentations, you will have to configure the Mac as follows:

1. Go to **System Preferences > Sound**
2. Make sure that under the **Sound Effects** tab, the system will play effects through the **Internal Speakers** only, **NEVER THE PRESONUS**.
3. Under the **Output** tab, select the device that will need to receive the sound tracks from the played video media or the streamed video. **NEVER THE PRESONUS**. Typically you would select the **HDMI Output** to receive those sound tracks.
4. Under the **Input** tab, select the **Internal Microphone**. **NEVER THE PRESONUS**.

By now you are probably getting the message: KHAudio is the only application that should be using the Presonus interface and no other system services should be using it otherwise they will absolutely interfere with proper functioning of your sound system.

One more word **on the Presonus FireStudio Project**: make sure that in **EVERY** Mac user account, the Universal Control app has been started and configured such that **ALL OUTPUT SETS** are set to **DAW** mode with **ALL INPUT SLIDERS** (1-10) set to **INFINITY** (closed, bottom). If you don't have that correct, things will not work right with the sound system as audio routing is done outside the control of KHAudio.

Configuring KHAudio for Video Media Support

Of course KHAudio should already be configured to use the Presonus for its input device and output device.

Now we need to add an input to the configuration to bring in the video sound signals. We do this as follows:

1. Make sure your all your interfaces are connected and your projection system is runningGo to **KHAudio** menu > **Preferences** (you might have to enter the configuration password).
2. In the top left view popup menu, select **Devices** and make sure you have enough Inputs configured to accommodate an additional media input. If you have to change the number of **Inputs**, click **Change** and **Save** (top right).

3. In the view popup menu, select **Inputs**. There you should see an unassigned input which corresponds to the input on the Presonus you plugged the balanced line signal into. Change its type to **Media**, give it a name (Media ?) and select a color if desired. Then click **Save**.
4. In the view popup menu, select **Global Settings**. Make sure **Video Presentations** is enabled.
5. In the view popup menu, select **Video Settings**.

A new Media slider should now show up on the main operator panel.

That is pretty much it. For instructions on how to use the Video Media and Web (streaming) features, please visit:

<http://www.idotechnology.com/jw-developers/audio-systems/>

and check out the instruction videos.

Enjoy !