iGuitar.USB Setup:

1. **General FAQ**
2. **Macintosh Setup**

iGuitar.USB Frequently Asked Questions (FAQ) USB only

Q: How long of a USB cable can be used with the iGuitar?
A: The USB specification defines a 5-meter or a 16.5-foot maximum length.

Q: Can I just connect standard USB cables together to extend the total length?
A: Yes, but with limited success. We recommend using an active USB repeater cable. An active repeater cable can extend the length of any USB cable connected to it for an additional 5 meters. So in the case of a standard 16.5 foot USB cable connected to a repeater cable the total length is better than 32 feet!

Q: Can I connect to a USB HUB to extend the length of my iGuitar.USB cable?
A: Yes, the iGuitar.USB's current draw is well below the required 100mA USB Hub powered requirement.

Q: Is the iGuitar.USB a Mono or Stereo audio device?
A: The iGuitar.USB has two channels and can be thought of as a Stereo audio device. One channel is set up for standard magnetic guitar pickups and the other channel is set up for piezo pickups.

Q: How good is the sound quality or frequency response from the iGuitar.USB's audio outputs?
A: The iGuitar.USB is a 16 bit/48K, full 20Hz to 20,000Hz (CD Quality) audio device and will faithfully reproduce the sound of the included magnetic or piezo pickups supplied or any other active or passive pickups installed into the guitar.

Q: Do the controls on the iGuitar.USB work the same as in previous models of Brian Moore Guitars?
A: Yes, the functionality is the same. The ¼" jack controls operate in the same manner as before except now they also function through the USB audio path.

Q: Can I use the USB and ¼" jack at the same time?
A: Yes, but beware of ground loops. We recommend plugging all the computer, audio and guitar amp equipment into the same properly grounded/protected power strip. When using a laptop, work from charged up batteries and unplug the AC charger from the laptop.

Q: Are any batteries required for the USB audio to function?

A: No, the iGuitar.USB derives its power from the USB port itself. Depending on the model, the iGuitar.USB may have a +9 volt battery that is only used for the piezo preamp when the guitar is not being powered from 13 pin cable (ie; power from 13 pin device)

Q: What is the latency of the iGuitar. USB or how fast does it work?
A: The iGuitar.USB has been designed for minimal latency, and when connected to a MAC, will stream digital audio in 1 millisecond packets. This means that you as a player should not notice appreciable delay or latency in audio operation.

iGuitar.USB Frequently Asked Questions (FAQ) USB & 13 Pin

Q: Is there an iGuitar.USB model that can control software or synth type instruments?
A: Yes, the iGuitar.USB with a 13 Pin output option is available. You then use a GI-20 or Axon AX-50 13-pin controller of your choice to control the software instruments.

Q: Do the controls on the iGuitar.USB with the 13 Pin option work the same as in previous models of Brian Moore Guitars?
A: Yes, the functionality is the same. The program up/down, synth volume etc. work the same as a normal 13-pin iGuitar.

Q: Will the iGuitar.USB with the 13 Pin option work without the +9 volt battery?
A: The USB portion will function fine without batteries and in fact will still work fine when connected to a 13 Pin controller. This is because a 13 Pin controller also supplies power to the piezo preamp when connected. If the battery is completely dead, the piezo pickups won't produce their usual great sound.

Q: I sometimes notice hum and noise when connected to both the USB and 13-Pin interfaces at the same time. Why is this?
A: You are experiencing ground loops in your setup. If the guitar amp, stereo monitors, computer and 13-Pin controller are plugged into different AC outlets, many grounds loops may be created. A ground loop is an imbalance in the ground return of analog and digital equipment, i.e., the ground signals are all not at the same level. We recommend using an AC power strip of adequate amperage rating to a properly three-prong wall outlet and then connecting all the computer, audio mixers, guitar amplifiers and 13-Pin controllers into the same AC power strip. This localizes the grounds in the music system and will minimize hum and noise. Also, when using a laptop, work from charged up batteries and unplug the AC charger from the laptop entirely. If all else fails, crank up the noise gate in your software application a bit until the noise is gated off.

Q: Can I use the ¼" guitar output, USB output and the 13-Pin outputs all-together at the same time?
A: Nothing prohibits you from connecting everything all at once, but please realize that the more equipment you have hanging off your iGuitar, the more likely the possibility of introducing grounds loops into your music system becomes. Try to keep it simple. If you really need that kind of a setup we recommend the use of a footswitch A/B output

director where you can switch the ¼" output of the iGuitar in or out of the music system when absolutely needed.

iGuitar.USB Setup Macintosh

On the Macintosh, you will need to run OS 10.3 (Panther) for GarageBand compatibility and 10.4 (Tiger) for all other audio applications. To get the most out of your iGuitar.USB, we recommend that you run 10.4 in order to access all of your new guitar's potential!

I. GarageBand:

Under 10.3, 10.4 or 10.5, the setup is the same. Plug your iGuitar.USB into any free USB port on your computer before launching GarageBand.
Once GarageBand loads, simply use the pull down menu under GarageBand and select Preferences. You can find Preferences by pulling this menu down:

In Preferences, there are several screens, please select "Audio/MIDI" from the top row of icons. You should reach a screen that looks like this:
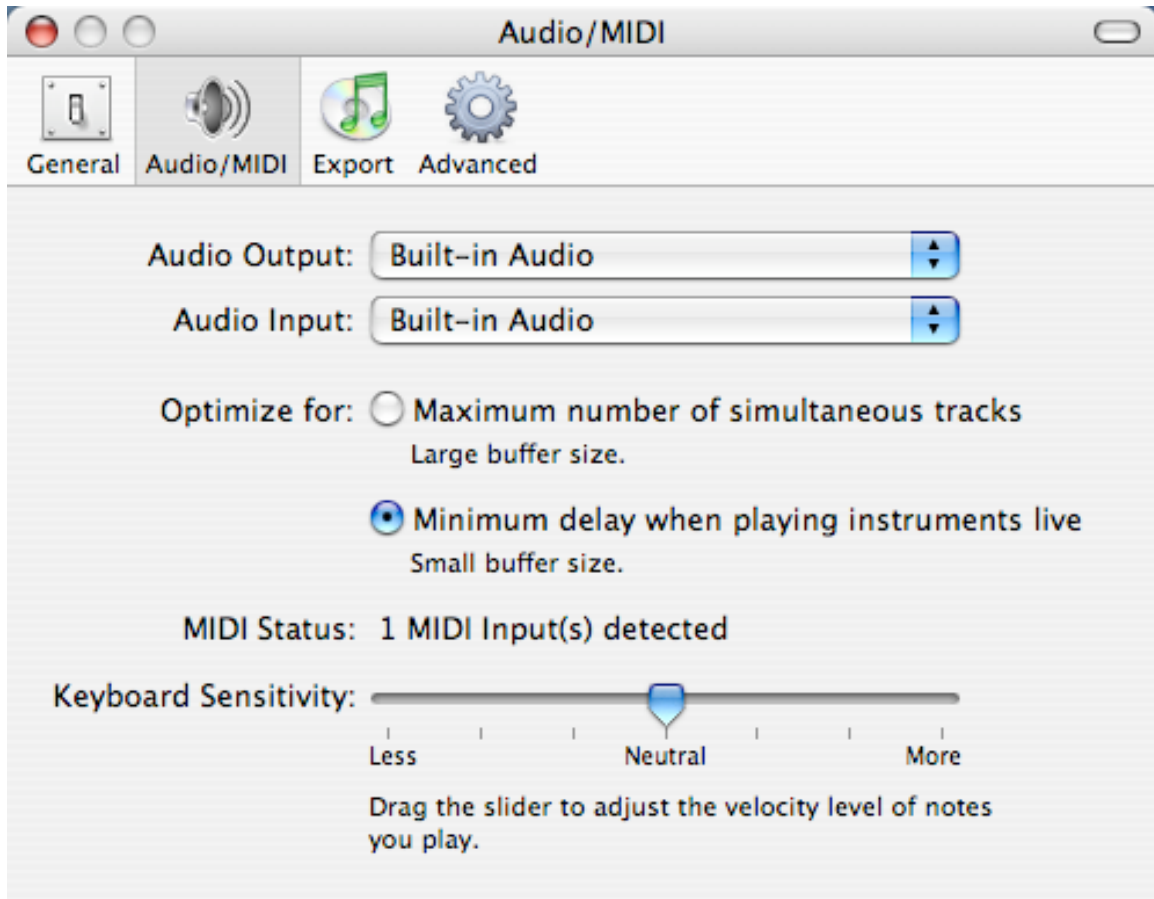
We need to select the iGuitar.USB as our input device. Simply toggle the "Audio Input" to "iGuitar.USB". Since the iGuitar.USB is an input only device, we need to use another output for our audio. Under "Audio Output" Choose either "Built-in Audio" or if you use a 3rd party soundcard, select that. The last thing to do is make sure that you optimize the latency settings. Directly below your input/output settings, there are two choices. Make sure that the choice for "Minimum delay when playing instruments live" is checked off.

If you've done all that, your screen should look like this:
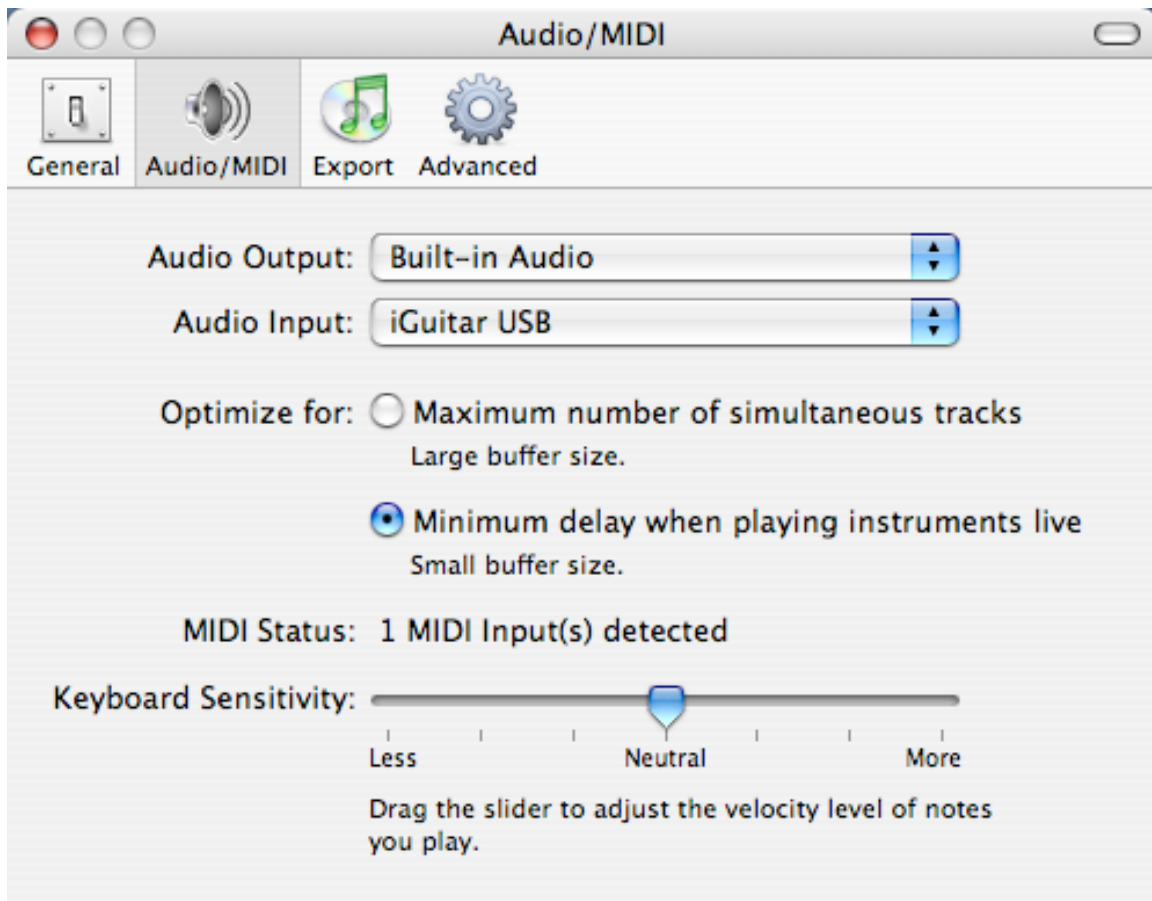
Congratulations! You are now ready to use your iGuitar.USB as a plug and play device with GarageBand! Simply add a real instrument track like you usually do and enjoy the convenience of the iGuitar.USB's plug and play ease and high sound quality!

II. Working With Other Audio Applications:

Setting up Aggregate Devices under OS X 10.4 (Tiger)

The iGuitar.USB is an input only device, meaning that it can stream two high quality channels of audio to your Macintosh without needing any drivers, but some other audio hardware will need to take care of playing back your music. With GarageBand, you can select a different input and output under its audio settings. For all other programs on the Mac such as: Logic, Cubase, Digital Performer, Amplitube Live and Guitar Rig, these applications will not run properly with the iGuitar.USB unless you can provide an input *and* an output.

Thankfully, Apple lets you use multiple audio interfaces together at the same time. This is called an "Aggregate" device. We are simply going to set up one single aggregate device that uses the iGuitar.USB as an input device, and your Built-in audio (or a 3rd party card if you use one) as an output. Doing so will allow you to use the iGuitar.USB as

an input device and your built-in audio as the playback device. Setting this up is simple, and you only need to do it once!

Step one: Launch Audio/Midi Setup.

Audio/MIDI Setup is an application provided by Apple to help you control all of your Audio and MIDI devices. You can find it in your utilities folder, which is found inside your Applications Folder. The path is Applications -> Utilities -> Audio/Midi Setup.

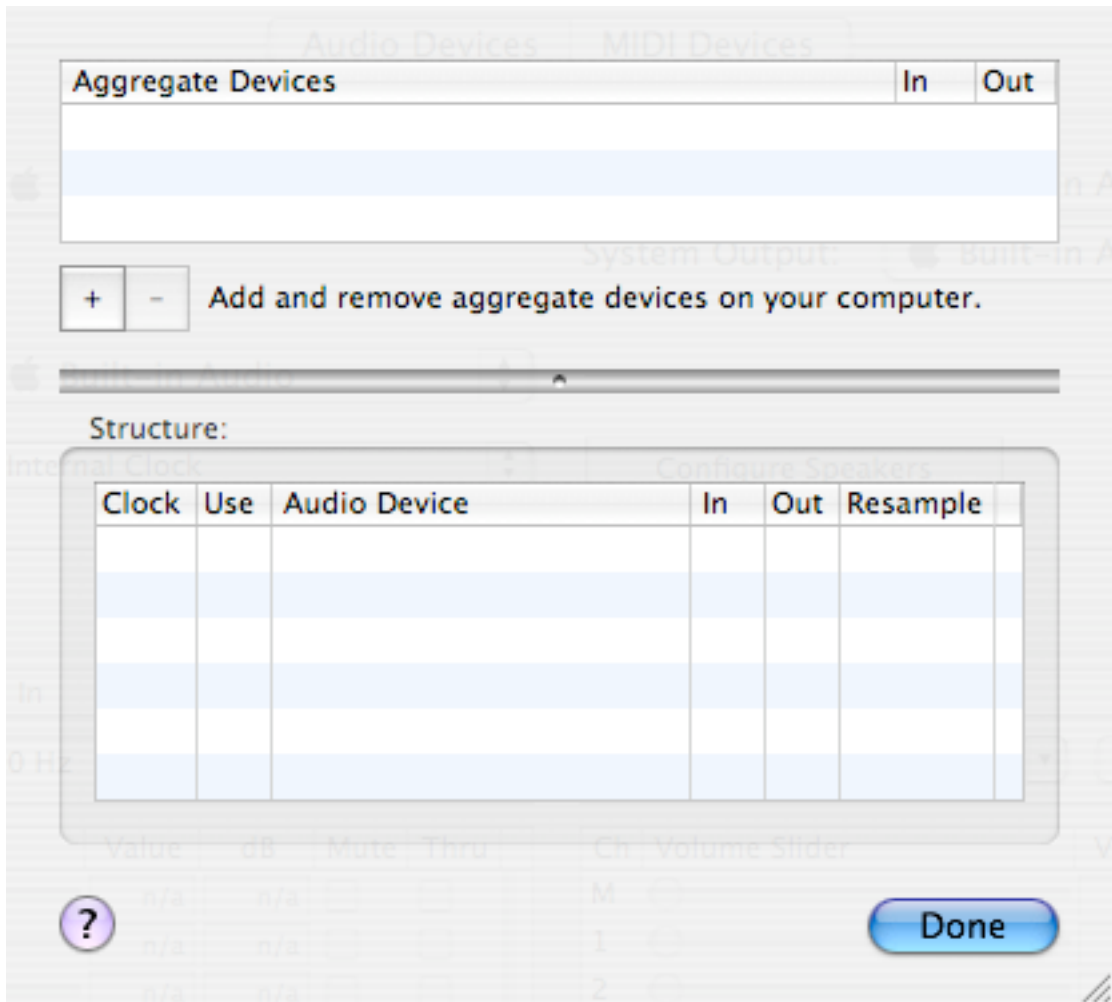Upon launching the Audio/MIDI Setup, you get this screen:
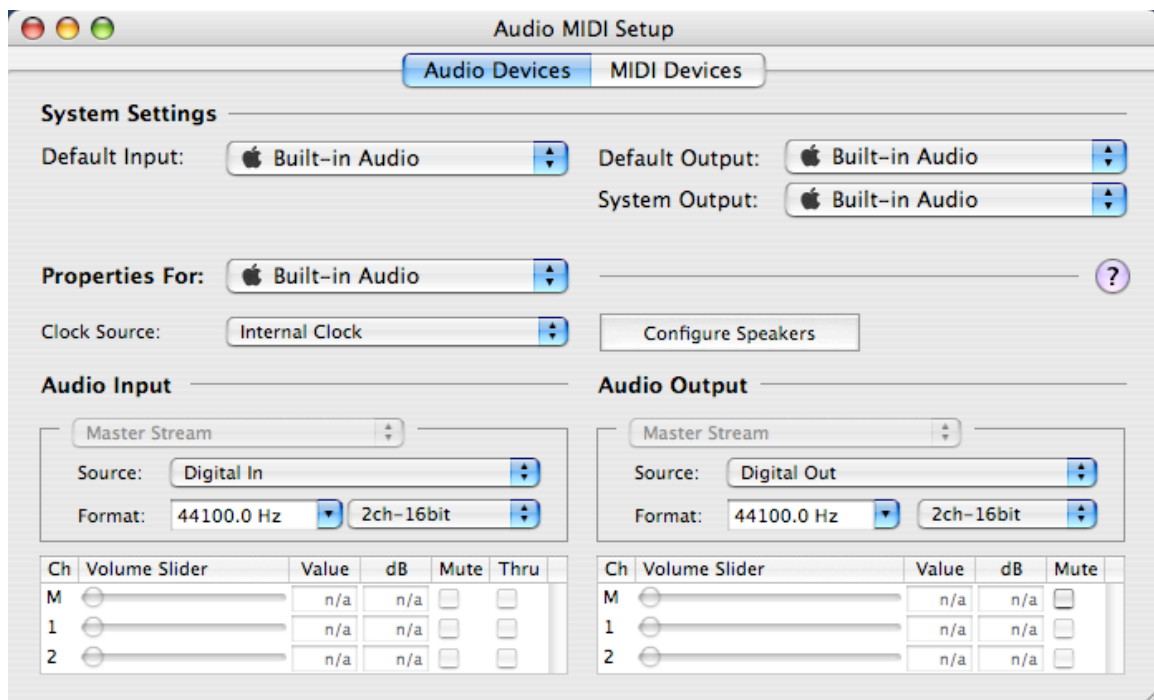
To set up an aggregate device, we can either pull down the "Audio" Menu and select "Open Aggregate Device Editor" like so:
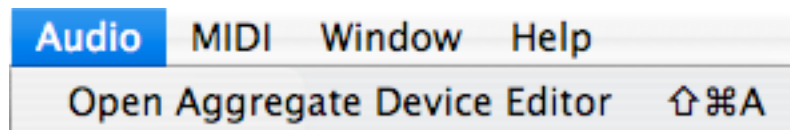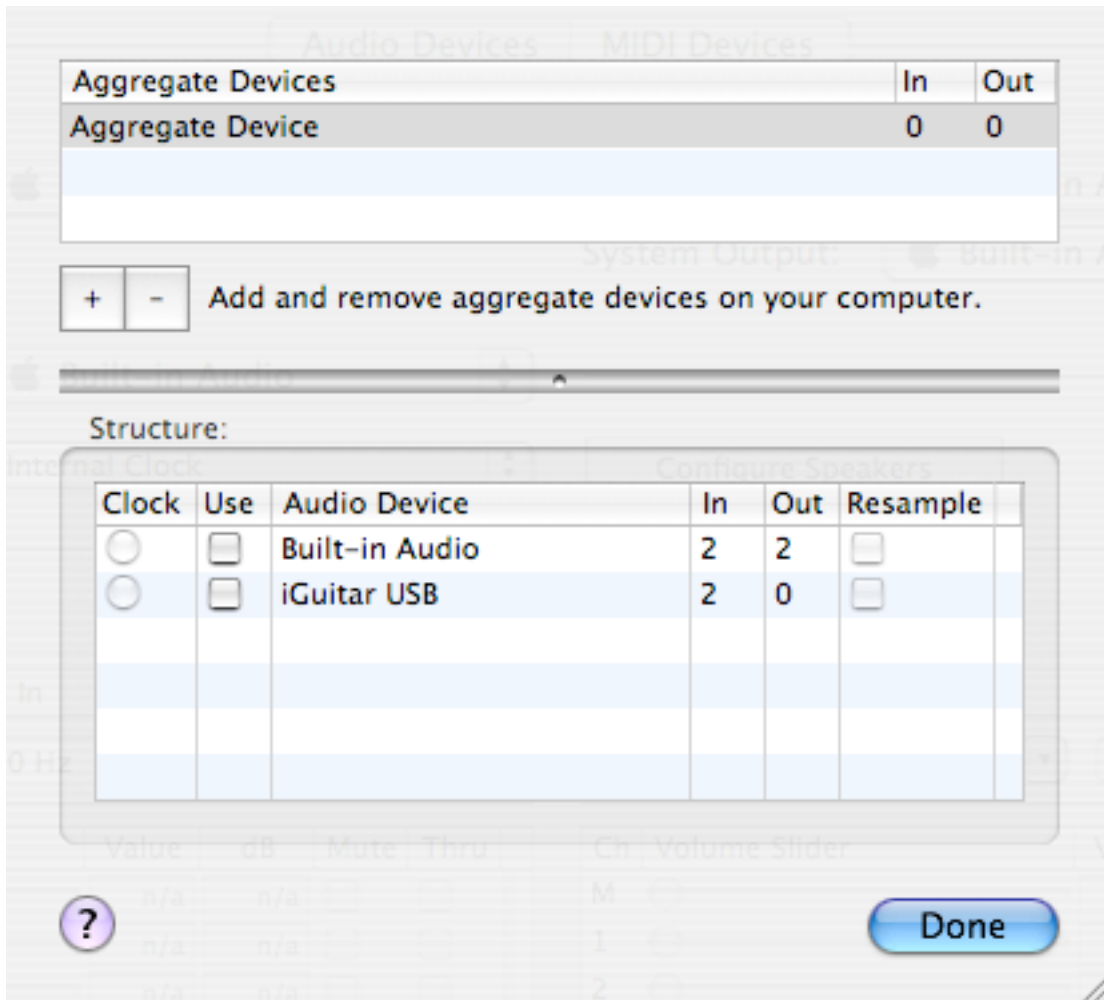

Or we can use the key command (Shift + Apple + A). Either one gets you to the same place.
The aggregative device editor opens up like this:

Aggregate Devices	In	Out

| + | − | Add and remove aggregate devices on your computer. |

Structure:

Clock	Use	Audio Device	In	Out	Resample	

(?)   Done

To add an aggregate device, click on the + button. The screen will now look like this:

Aggregate Devices	In	Out
Aggregate Device	0	0

+ | − | Add and remove aggregate devices on your computer.

Structure:

Clock	Use	Audio Device	In	Out	Resample
○	☐	Built–in Audio	2	2	☐
○	☐	iGuitar USB	2	0	☐

? | Done |

We need to check off the checkboxes for both the Built-in Audio and iGuitar.USB under the "Use" Column. Additionally, make sure you do not select either of the "resample" checkboxes. If you've done this right, your screen should look like this:
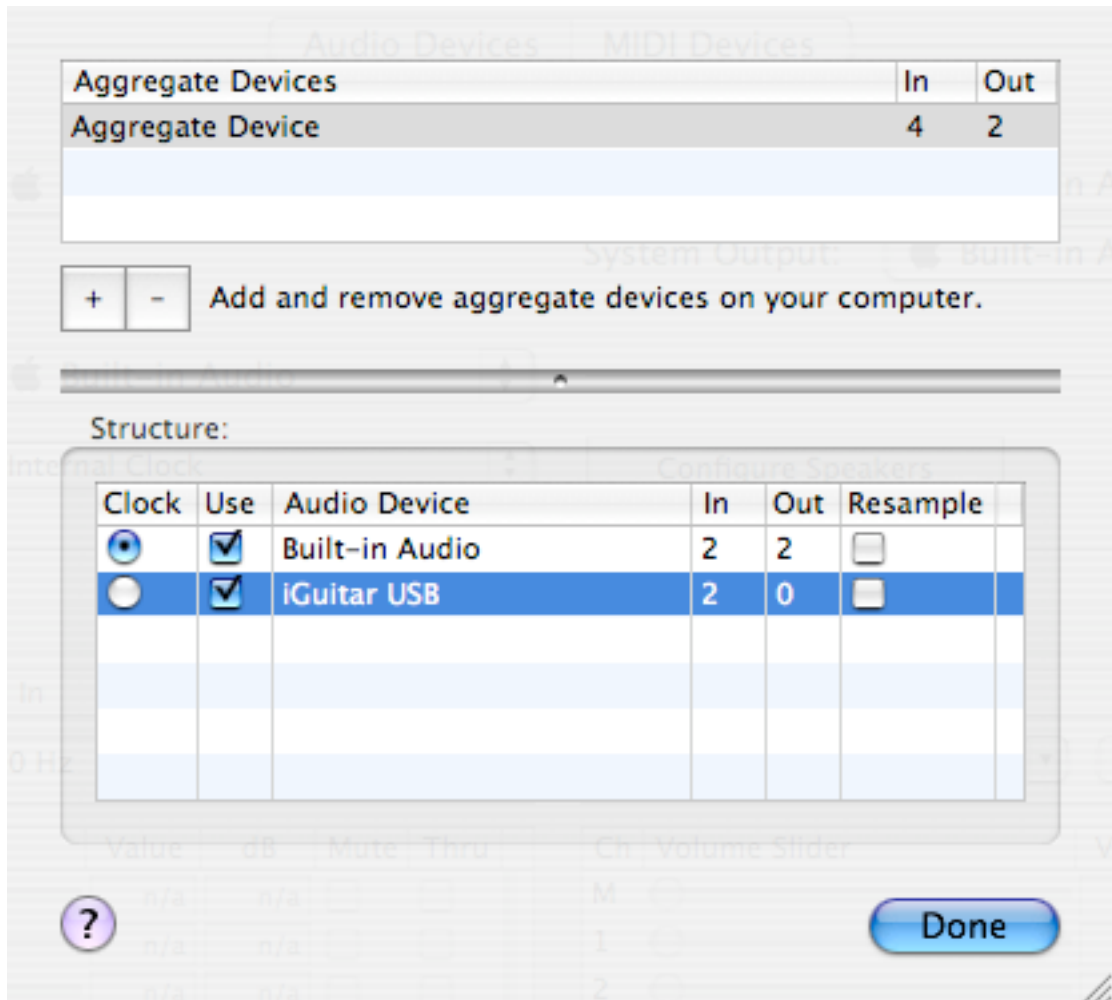
If you've done all this, simply press done and then you can exit the Audio/MIDI setup Program.

Step Two: Using your Aggregate Device.

Let's launch Logic Express as an example, although any audio program will act the same when it comes to using an Aggregate device.

In Logic, we need to select which Audio Interface we are going to use for the program, this is found under the "Audio" Menu pull down under "Audio Hardware and Drivers".

Launching it will bring you to this screen:
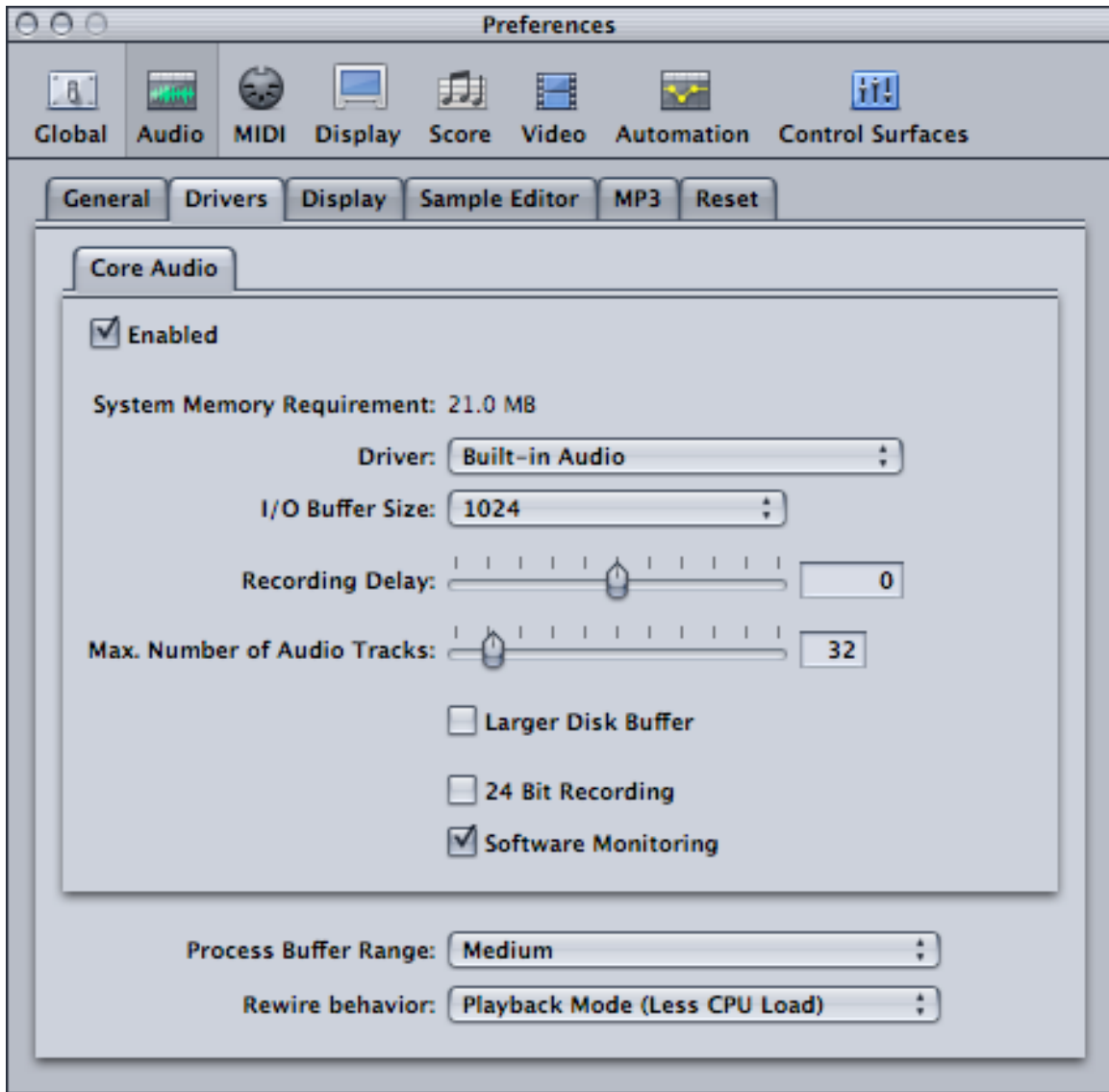
Under "Driver" you will see two choices: Built-in Audio and Aggregate Device. You won't see the iGuitar.USB listed as Logic only recognizes input and output capable devices, but not to worry, we just made one with our aggregate device. Select "Aggregate Device" for your driver. Logic will ask you to reboot the program to take effect, and you should let it!

When Logic does its thing, you will be back at the same screen you started at and you will need to select the appropriate I/O Buffer Size for using the iGuitar within Logic. This is a general tip: Lower numbers give you more realistic feel when recording but work your computer harder, while Higher Numbers will have a delay for your audio signal, but make your computer rest easier. Thankfully, this is a number you can change on the fly as you need it.

Tip: When recording with the iGuitar.USB, you will want the I/O Buffer size at least "256" or lower if your computer can handle it. When you are finished recording, you

should toggle it back up to a higher number so your computer can do more. (The above tip applies to all audio programs on Mac and PC – not just Logic.).

If all went well, your screen should look like this:
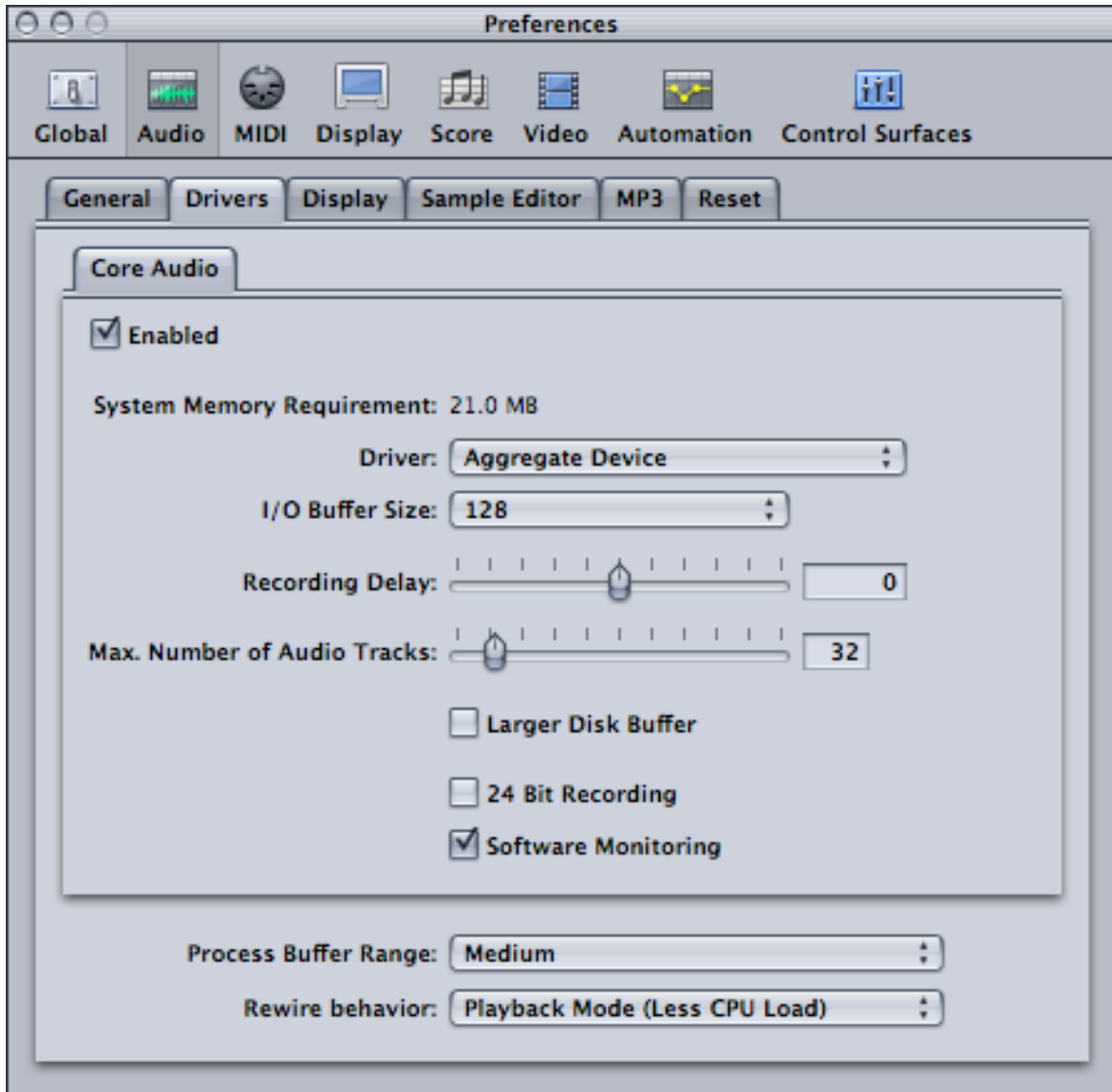
Now you're all set up to use your iGuitar.USB! There's just one more thing to talk about!

Step Three: Understanding Aggregate Device Inputs and Outputs.

When you made your aggregate device, you made an audio interface that had 4 inputs and two outputs. The reason you have four inputs available is that the Built-in audio has two inputs of its own. Here is how the inputs and outputs break down:

Input One: Built-in Audio 1

Input Two: Built in Audio 2
Input Three: iGuitar.USB Magnetic Pickups
Input Four: iGuitar.USB Piezo Pickups (if you have an iGuitar.USB with the .P option)

When you go to select an input to record with, you have to remember to use Inputs three or four to get the iGuitar's sound through. The iGuitar.USB will always be the *last two inputs listed, no matter how many you have.*

For example, if you were to make an aggregate device with the iGuitar.USB and another 3rd party device that offers ten inputs (Such as the Presonus Firepod), the iGuitar.USB would list as inputs 11 and 12.
Just remember: The iGuitar.USB will always take the last two inputs!

We hope this helps you get set up and rocking with your new iGuitar.USB no matter which recording application you choose on the Macintosh.

If you have any questions, or require technical assistance, feel free to email: support@iguitar.com for more help.