

Appendix C

Wiring Diagrams



2 How to Do Everything with GarageBand

There are many different ways to set up your GarageBand studio. In fact, you can make music with just a laptop and a pair of headphones—and nothing else. But peripherals can add a lot of power and flexibility to your setup. This appendix illustrates just a few of the ways you can configure your computer to work in a musical setting. As you look over these diagrams, keep in mind that they’re only suggestions. When it comes to peripherals, you can add or eliminate items as your needs suggest.

GarageBand to Go

Laptops may not boast the horsepower of their desktop counterparts, but for computer musicians, a laptop studio is about as close as you can come to the old troubadour ethic of “have instrument, will travel.”

The setup shown in Figure C-1 is about as basic as it gets, but you could make it even more compact by replacing the hardware controller with an application such as *Midi Keys*, which lets you use your computer’s keyboard as a MIDI controller.

Figure C-2 shows a similar system, but with the addition of a USB audio interface. Typically, this will offer better sound quality and better connectivity than your laptop’s built-in audio I/O. Note that here, both the source instruments *and* the monitor speakers are connected to the USB interface.

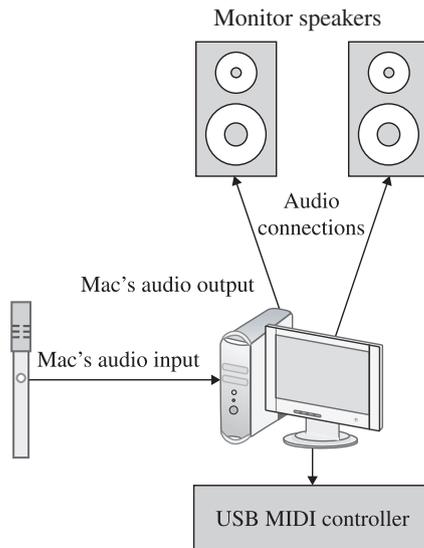


FIGURE C-1 With GarageBand, a laptop becomes a portable studio.

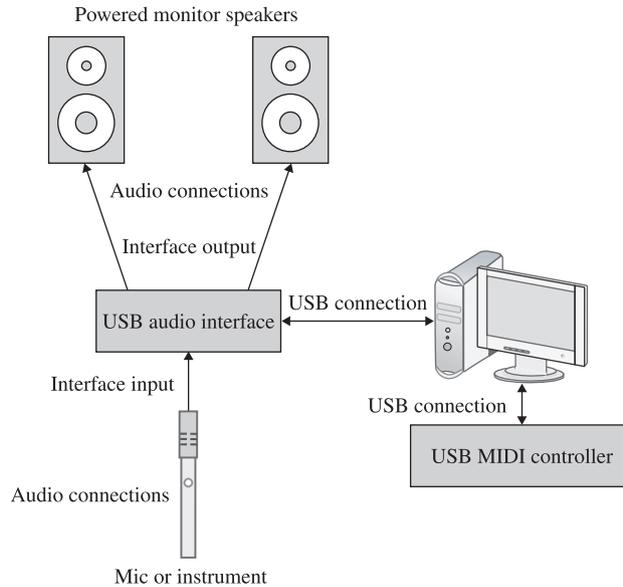


FIGURE C-2 The addition of a USB audio interface gives you more connection options, and, typically, better sound quality.

NOTE

For a more compact system, eliminate the controller or use an all-in-one controller/audio interface.

The Home Studio

GarageBand may be portable on a laptop, but it's more powerful on a G5 desktop. If you're going to make your G5 (or G4 desktop, for that matter) the hub of your home studio, and portability isn't an issue, there are several ways you can set up your system. Figure C-3 shows a relatively compact system. Not only are there more elements than in Figure C-2, but the scale of each component is much larger; a compact MIDI controller has been replaced by a full-sized MIDI keyboard with weighted action; the USB audio interface has been replaced with a high-speed multichannel FireWire unit that may come in handy if we were to add additional software, such as Ableton live, to our rig. Finally, we've added an outboard mic preamp and compressor, to help us get the best possible signal into GarageBand.

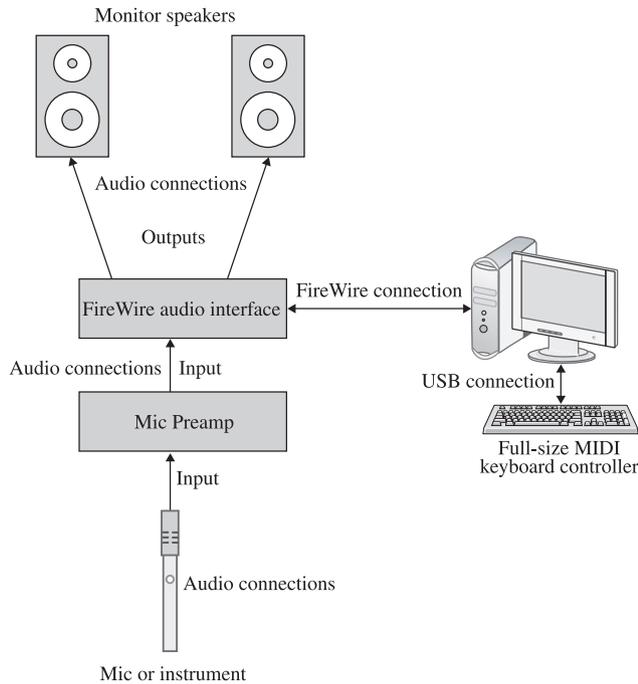


FIGURE C-3 Since portability's not an issue, we've added a full-sized piano-action controller, some high-end signal processors, and a FireWire interface.

GuitarBand

GarageBand has to be one of the most guitar-friendly pieces of music software available. The addition of Amp Simulation to the roster of onboard effects makes the program appealing to a servant of the six-string (or seven-string, or bass, for that matter). But guitarists can also take advantage of GarageBand's mighty Software Instruments by using a guitar that's compatible with a Roland Guitar to MIDI converter such as the GI-20. The Brian Moore iGuitar is one of the leading manufacturers of Roland Ready guitars. Figure C-4 shows how to set things up so that the guitar plays a dual role: the traditional guitar sounds come via the pickups, which feed the computer's audio interface by a traditional audio cable. The "controller" functions are made possible by the built-in pickup, which feeds a Roland GI-20, which in turn, sends MIDI to GarageBand's Software Instruments.

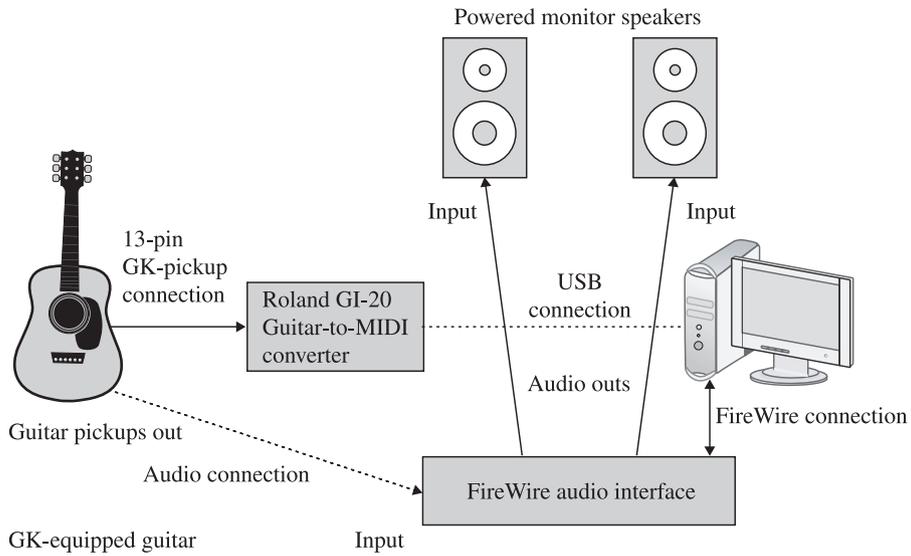


FIGURE C-4 A GK-equipped guitar can play traditional guitar sounds and feed software instruments.