



## **Model 3 Speaker Assembly and Installation**

### **Introduction**

This procedure will guide you through the installation and setup of the Gilmore Audio Model 3 speaker system. You must seek out the assistance of a friend to help you remove the panels from the shipping crates, install the stands and insert the spikes in the bottom of the stands. This is not a one-man operation.

### **Speaker Removal from Shipping Crates**

Open the top of the crate and remove the foam top covering the speaker panel. (We recommend that you store the crates for future use, since using anything but the factory supplied crates to transport or ship your speakers may void the warranty). You'll notice four hand hold cut-outs in the bottom foam supporting the speaker panel. Two people are required to remove each fully-assembled speaker panel. One must lift at the bottom of the panel (the straight side) and the other at the top (the curved side). Gently lift the panel out of the crate, working in tandem with your assistant.

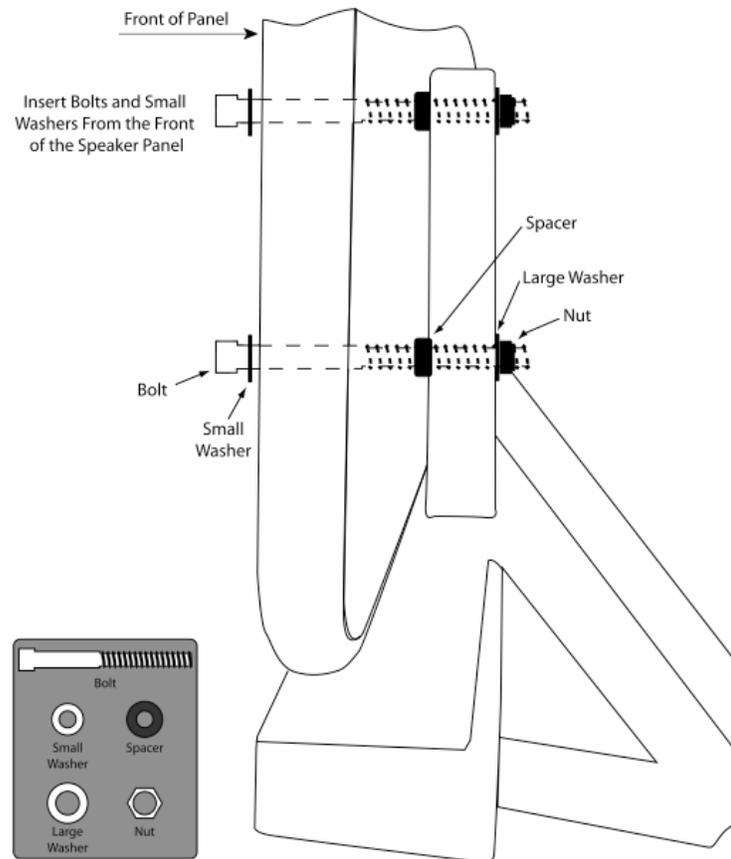
Avoid holding the speaker on the ribbon side of the panel to reduce stress to the panel. Hands should be placed more towards the center of the panel. Care must be taken to avoid scratching the Corian panel, so assembly should only be done on a carpeted floor. Should a carpeted floor not be available, a thick blanket is also a good choice. Once the panel is lifted from the crate, position it vertically on its non-curved (straight) side in preparation for the stand installation.

### **Stand Installation**

Have your assistant continue to hold the panel perpendicular to the floor and then carefully position the stand behind the panel. Refer to figure 3 for a pictorial of the stand positioning and installation. Insert the four bolts through the small washers and then insert the bolts through the holes in the panel. Install the four black spacers on the bolts and then install the stand assembly. Install the four large washers at the end of the bolts.

Next, finger-tighten the four nuts on the end of the bolts. Tighten the four bolts with a 7/16" end wrench and the supplied hex (Allen) wrench. Make sure the bolts are good and snug, but do not over-tighten, to avoid compressing the stand pillars or damaging the Corian panel.

**Figure 3: Stand Installation  
(Cut-out View)**



### **Preliminary Speaker Panel Positioning**

Stand the speakers upright and position them with about 6 feet between them and about three feet from the back walls. Toe in each panel equally, toward the center a few degrees to start. Although very little energy is directed towards the side walls, due to the speaker's dispersion pattern, it is still recommended that the edges of the panels be positioned at least three feet from the side walls.

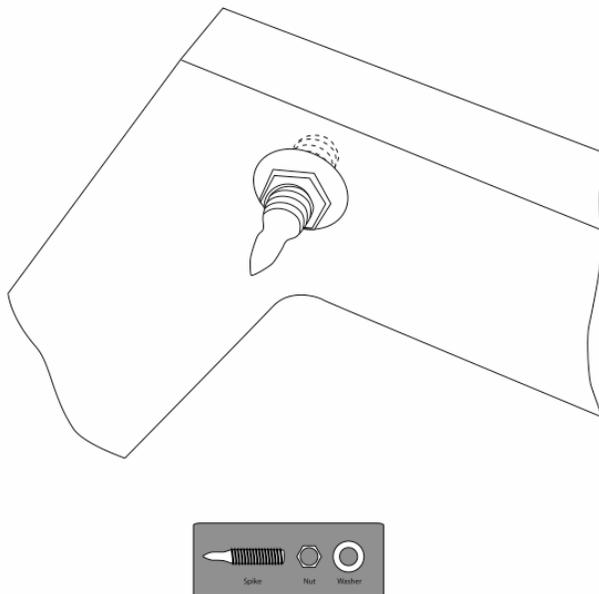
The speakers perform best on a carpeted floor because floor reflections are greatly reduced. The rear wall is also best when it is equally absorptive and reflective. A material such as wall-board or dry-wall works well. Windows, brick walls, and the like are not recommended. This preliminary positioning is recommended for best performance, but please feel free to experiment with final positioning once the whole speaker system is up and running.

## Spike Installation

Enlist the help of your friend once again to tilt the panels forward so that you can install the two spikes in the rear of each stand. The spikes screw in underneath the stand. Refer to figure 4 showing proper spike installation. The washer should go between the nut and the bottom of the stand.

If you have a solid floor, start by screwing the spike in most all the way into the stand, so that the top of the spike is level with the top of the top of threaded part of the stand. If your floor is carpeted, then start by screwing in the spike so that is about halfway into the bottom of the stand. Finger-tight is good at this juncture. If you have a protractor, adjust the spikes so that the panel is at about 7 degrees from vertical towards the rear wall.

Figure 4: Spike Installation Under Stand



Acoustic measurements have proved this is the optimum angle. Once final positioning is complete, you should tighten the nut with a 5/8" end wrench, to avoid possible resonances and be sure the panel is mechanically coupled into the floor. Mechanical coupling is optimum when the weight of the panel is in physical contact with the floor, so the spikes should penetrate the carpet and come in direct contact with the floor underneath. If the panels are allowed to "float" on a hard floor or carpet, the energy from very low frequency energy is dissipated throughout the panel and not the floor below as desired.

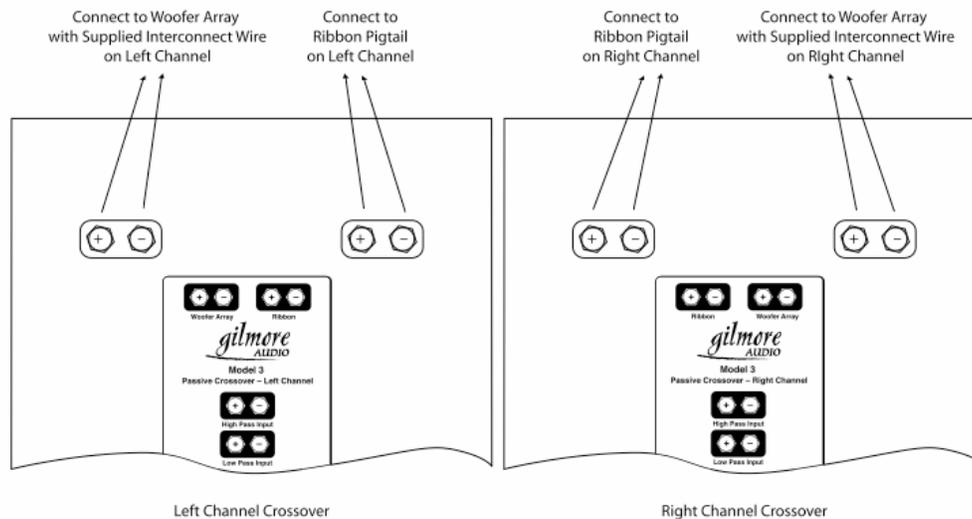
## Crossover Installation and Wiring

Place the left channel crossover behind the left channel speaker and place the right channel crossover behind the right speaker. You'll notice that each channel is a mirror of the other. Position each crossover so that the bottom of the crossover is about a half inch from the back of the stand.

Also, position each crossover so that they are aligned with the edge of the stand on the ribbon side of each panel. Refer to figure 1 and 2 showing the wiring diagram. A 7/16" end-wrench is needed to tighten the terminals on the woofer array and the crossover. Be careful to get the terminals nice and snug, but do not over-tighten, to avoid stripping the terminals.

You'll need the two interconnect wires, included with each speaker, to wire the woofer array to the crossover. These wires are shown in black on the diagram.

Figure 2: Hooking Up Crossover to Speakers

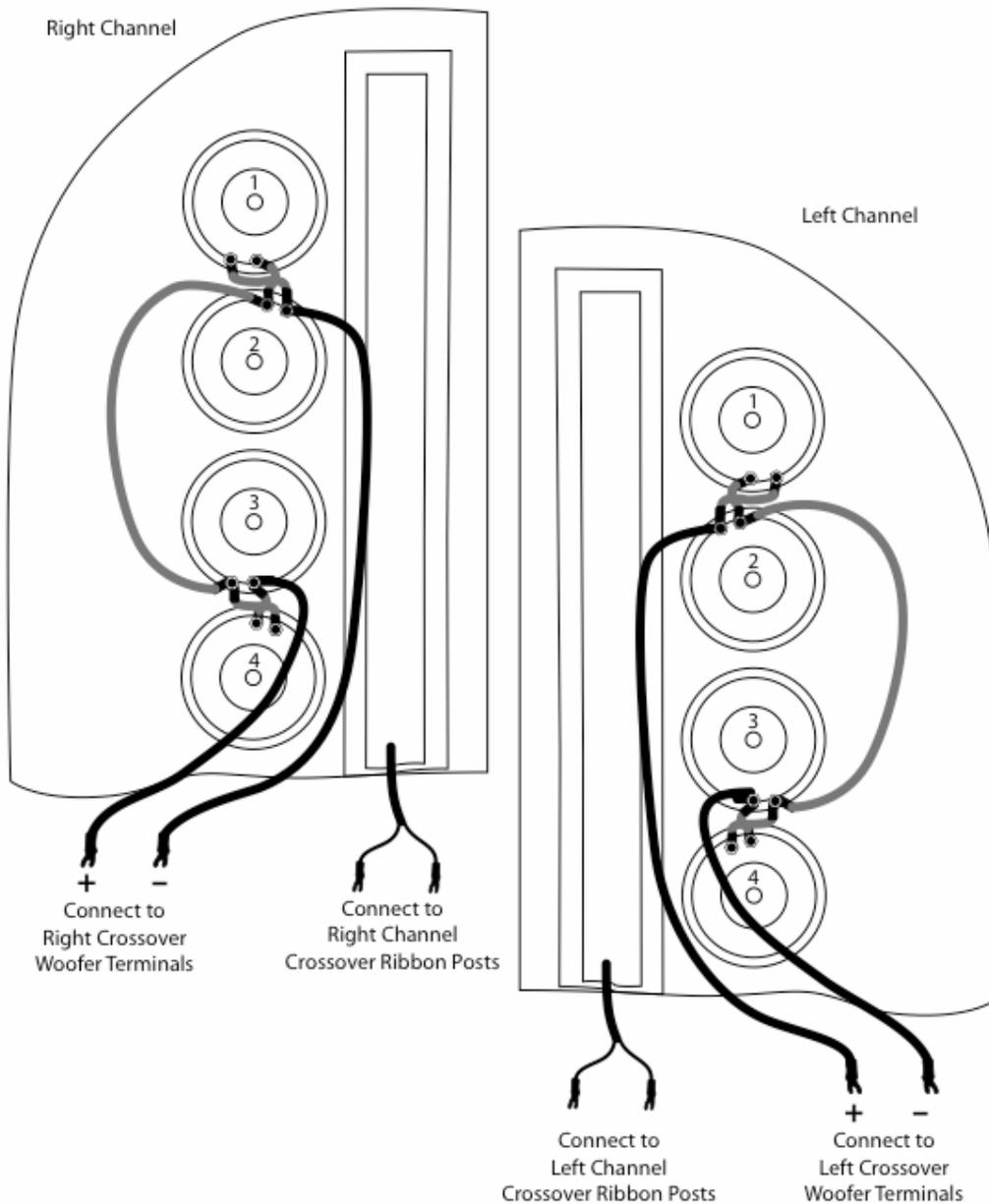


Install the longer wire on appropriate terminal shown on woofer number 2. Install the shorter wire on woofer number 3. Observe the proper polarity. The longer wire on the right channel, goes to the negative side of the woofer array, and is then connected to the negative side of the associated crossover terminal. The left channel is the mirror of the left, so the longer wire on the left channel woofer array must be connected to the plus side of its respective crossover terminal.

The ribbon pigtail is connected to the ribbon terminals on the crossover, observing proper polarity (negative to negative and positive to positive).

The gray interconnect wiring, shown in figure 1, between the terminals of the woofer array, is factory installed. There is never any reason to remove these interconnect wires and it is only shown for reference.

**Figure 1: Speaker Wiring  
(As Shown From Behind Speakers)**



The crossover is designed to be bi-amped, or in other words, driven by two separate amplifiers. If you want to use separate amplifiers, first remove the jumpers between the High Pass Input and Low pass Input terminals. Then connect one amplifier to the High Pass Input and another to the Low Pass Input. The chosen amplifiers must be gain matched so that uniform frequency response is preserved.

The crossover also includes a ribbon attenuator, so you can manually select 0, 2, 4 or 6 dB of attenuation. This attenuator adjusts ribbon output in relation to the woofer array. The woofer array always remains constant.

It is often useful to add some ribbon attenuation if your room is too bright. You can also tame CDs that are a bit too strident, due to excessive distortion and HF energy. Digital sources often exhibit these distortions due to poor engineering and production processes.

Revision 2  
12-21-06  
MG