

---

Subject: Re: 4 Pi Design Questions

Posted by [Wayne Parham](#) on Fri, 18 May 2012 03:46:14 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

You may have the woofer or tweeter leads reversed. But redo your measurement first, because measurements made like you are doing always create notches from boundary reflections.

Lay the speaker on it's back and position the microphone one meter (or more) above it, facing the upper half of the midwoofer cone. This orientation will prevent a floor bounce notch, and it puts the microphone in the center of the forward lobe. You can usually get away with indoors measurements when done this way, if all you care about is response in the crossover region, but you'll have no visibility below a few hundred Hertz. It will be peaky if ungated, or meaningless if gated. Of course, it never hurts to take the speakers outdoors, which is truly anechoic. You'll still want to lay the speaker on it's back, or you can put the microphone on the ground and angle the speaker down to face it.

This is what you should expect to see, measurements from two different people using two different measurement systems:

a modded version, but if the only difference is box size, then I would expect most changes to be below 200Hz. So setup your measurement as described above, and if you don't see a chart like this, check your connections and crossover.