Subject: Re: 7Pi Build 2014 Posted by Wayne Parham on Sun, 05 Oct 2014 13:51:04 GMT View Forum Message <> Reply to Message

If the measurements are right, it looks to me like there are at least three things happening.

First is the midrange doesn't look attenuated to match the other drivers. So I would look at the R4/R5 resistors. Make sure they're installed correctly and not shorted. That's a kind of easy problem to solve because it's just attenuation.

Second, the 300Hz peak. Something is going on there, probably a panel resonance. You might want to damp panels one at a time with a pillow or your hand and see if you can identify the cause. That one could be a measuring artifact too, so move the speakers and microphone and measure again. Best to measure outside. But I suspect that one is a panel resonance.

Third, the lack of treble, and the overall downward sloping trend. I see that a lot with measurement problems. Sometimes I see it with microphones overdriving the input amplifier. One would think the extra harmonics would artificially show excess HF, but I often see that problem cause a downward slope. Or it could be something else in the measurement system. But this could be confirmed by measuring something else and seeing if the downward trend existed there too. If it's truly the speakers, then the tweeter circuit or compression driver is off.