
Subject: 4-pi hig frequency response

Posted by [JBLman](#) on Mon, 30 Sep 2002 19:35:37 GMT

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Just finished constructing 4-pi studio monitors with all JBL componments JBL-2226h (15"LF) and JBL-2426 (1"-HF).The speakers sound real good, but when I compare them to the Klipsch Heresy that they replace, they don't seem to have the high end response of the Klipsch. This is most noticable for cymbals. They standout with the Klipsch but are very subdued with the JBL compression driver and H290 hor. Any suggestions. Is this a function of the crossovers and the resistors that that tie to the HF driver??

Subject: Tweeter compensation cable assembly

Posted by [Wayne Parham](#) on Mon, 30 Sep 2002 20:01:52 GMT

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The 2426 has good high frequency response for a 1" exit compression driver. Are you sure you built the compensation network properly? If you have a 12dB compensation network, then cymbals should sound crisp. But if you don't have the network, they will really lack luster. So let's look over the tweeter cable assembly together. Please tell me what and how you have connected.

Subject: Re: Tweeter compensation cable assembly

Posted by [JBLman](#) on Tue, 01 Oct 2002 12:17:58 GMT

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the two speakers are JBL 2226 and 2426. The crossover is of Eminence construction. I'm not sure if you modified it in any way. and I don't have the box (which is at home) so can't provide the nomenclature written on the side. Included with the package are a cluster of six resistor blocks. I connected the blocks to the HF output of the crossover, the other end of the wire, of course, is connected to the HF driver. Does all sound right? Is that the correct crossover?

Subject: Re: Tweeter compensation cable assembly
Posted by [Wayne Parham](#) on Tue, 01 Oct 2002 15:35:29 GMT
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It sounds like you've connected everything correctly. Are these crossovers we built? Did you order anything from us? Or did you build everything yourself? Here are a couple of things to try, and describe what you hear. I think we can narrow this down. 1. Disconnect the tweeter's cable assembly from the crossover, and connect a straight wire from the crossover's tweeter output to the tweeter. This will allow you to compare the uncompensated horn to the compensated horn, and should give us an idea if your tweeter cable assemblies are in good working order. 2. Reconnect the compensation cable assemblies, but do them one at a time and listen to the speakers individually. Listen to one speaker with compensation and one without. Compare the one having compensation, listening for reduced midrange and increased top end. When the compensation cable assembly is connected, you should hear a big difference, so make sure this is true for each speaker. If either one fails to reduce the midrange and allow the highest treble to play much louder - both by a significant amount - then something is wrong with one or both of the cable assemblies. Check those things and let me know, and we'll narrow this down together.

Subject: bypass cap installed on your cable assemblies?(nt)
Posted by [Sam P.](#) on Tue, 01 Oct 2002 18:50:02 GMT
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nt

Subject: That's the most common cause of this symptom
Posted by [Wayne Parham](#) on Wed, 02 Oct 2002 01:59:19 GMT
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I suspect the tweeter compensation cable assembly was built improperly. After we get a response, we'll probably know.
