Subject: JBL Polarity - may have wired 4Pis out of phase?
Posted by Maxjr on Sat, 05 May 2012 18:46:16 GMT
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Wayne, I just came across one of your papers: http://www.pispeakers.com/JBL_Polarity.pdf I'm pretty sure I wired your crossover assuming the JBL terminals were conventional: positive for red and negative for black. Am I right to ascertain if I did this to my 2226H, it is out of phase? Are there any drawbacks other than the CD and JBL not playing in concert with one another?

Funny thing is, they sound great to my ears! I'm going to take them out of the cabs today to double check with a 9volt battery

Subject: Re: JBL Polarity - may have wired 4Pis out of phase?
Posted by Wayne Parham on Sun, 06 May 2012 03:51:00 GMT
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Yeah, it's definitely backwards. The JBL 2226 is wired with the black connector positive.

What happens when they are mis-wired this way is the forward lobe shifts and makes a funny pattern. There are actually places where the sound is right, even when connected this way, but those places aren't straight in front of the speaker or anywhere along the horizontal axis. But the power response is still pretty flat, so you don't notice it strongly. It's a subtle thing. Still, if you A/B the speaker done right with another done wrong, you'll hear the difference.

Subject: Re: JBL Polarity - may have wired 4Pis out of phase?
Posted by Maxjr on Sun, 06 May 2012 23:49:10 GMT
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Opened one of them up this morning and checked it with your crossover schematic. Turns out that they were wired correctly. Thank you for making the crossover schematic idiot proof for guys like me. I could have saved myself 30 min if I double checked your drawing and saw you had already made provisions for the JBL's reverse colors: JBL Black goes to 2+ and Red goes to 2-.

Thanks again, Wayne for a superb speaker. I love the crossovers you sent me. I had built your upgraded 4Pi's to keep up with a pair of front loaded F20 horns by Lilmike. Now they outshine my two subs and I may need to build more F20s to keep up with the 4Pis!

Subject: Re: JBL Polarity - may have wired 4Pis out of phase?
Posted by Wayne Parham on Mon, 07 May 2012 04:13:04 GMT
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That's great news! Thanks for reporting back.