Subject: Pi Crossover

Posted by Adrian Mack on Mon, 01 Dec 2003 20:48:09 GMT

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Hey Wayne,If I plan on using the conical horns, I can probably cross at 1.6KHz and not 1 or 1.2KHz. So if I do this, I'm considering the PXB2-1K6 crossover. I've been reading some of the older posts on this forum, and I think I've got it down. Only thing I wanted to know, is R1, R2, and C1 tweeter compensation components, should they all be connected in parallel with each other (and in any order) and then those three components connected in series with the tweeter horn? Should the woofer Zobel be connected in parallel or in series with the woofer? They are normally in parallel so I was assuming this to be the case. Thanks!Adrian

Subject: You've got mail!

Posted by Wayne Parham on Mon, 01 Dec 2003 21:59:15 GMT

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The components R1, R2 and C1 are connected in series/parallel in the tweeter circuit. The Zobel is connected across the woofer. Check your mail; I'll send you the schematic and you can see how these components are connected.

Subject: Re: You've got mail!

Posted by Adrian Mack on Mon, 01 Dec 2003 22:54:06 GMT

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Hey Wayne, I've made a diagram of it now, its probably one of the worst lookin and messiest diagrams you've seen but messy diagrams don't make it sound bad, right? :P I was just wondering, the picture in a post of yours shown below: Its only got two leads coming off it, it looks different from my diagram above. Is my diagram actually ok? Thanks! Adrian

Subject: forgot to ask......

Posted by Adrian Mack on Mon, 01 Dec 2003 22:56:10 GMT

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On the diagram I made, does the polarity matter of the tweeter and woofer and the connection from the components hanging off the PXB2-1K6 board?

Subject: Things and stuff

Posted by Wayne Parham on Tue, 02 Dec 2003 03:59:49 GMT

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Your diagram is exactly right. On the tweeter cable assembly, there are two leads that connect to the crossover PCB and two leads that connect to the tweeter. As far as polarity is concerned, it doesn't matter as long as something external to the circuit doesn't short it out. Let me tell you why I said that. If you connect all the components on the "+" side of the circuit and then put them all in a metal chassis with the "-" side of the circuit being common and connected to the chassis, everything is fine. But if you were to switch the tweeter cable assembly so that the series components were on the "-" circuit path, then the chassis connection would short these components. Not many crossovers are mounted this way, so it is rarely a concern. But when mounting the HF horns externally, having the crossover in an external box is a good and attractive solution. If the connectors are all mounted on a common metal panel, then this becomes a possibility.