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Subject: Need help from the "crossover" experts!  
Posted by [Paul](#) on Mon, 17 Feb 2003 21:36:57 GMT  
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Tested the speakers (Watt/Puppy clones) range with Stereophile CD Test disc 3, and the woofers are covering whole range to 4khz!! According to the x-over schematics, they should only go up to 150hz! What went wrong? I made shure all the values are correct and connections too. I am confused! Any help would be appreciated!Paul P.S. I guess i could have posted the sch. in the previous forum

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Subject: First-order with conjugate Zobel  
Posted by [Wayne Parham](#) on Tue, 18 Feb 2003 01:48:57 GMT  
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The crossover you have drawn is essentially a first-order network with a Zobel. There is a second circuit formed by the 100uF and the 12uF capacitors (forming 112uF) that is probably used to connect an external midrange or full-range speaker. The conjugate Zobel network on the woofer was a good idea to remove LC peaking, but the circuit will still pass considerable energy to the woofer at high frequencies.

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Subject: Re: First-order with conjugate Zobel  
Posted by [Paul](#) on Tue, 18 Feb 2003 10:57:10 GMT  
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You are correct Wayne, as this graf is showing (another dude explained this on the other forum). Also those two other caps are filtering signal to the separate box with the mid/tweeter. I saw same graf regarding Wilson Sophia, but 10" woofer cut-off at 1kHz (i guess that was the limit?) Isn't the "first order" good thing, and what would you suggest? Thanks!

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Subject: Re: First-order with conjugate Zobel  
Posted by [Wayne Parham](#) on Tue, 18 Feb 2003 20:38:13 GMT  
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You might want to use a shunt damper on the mid/tweeter. This will reduce peaks from crossover/driver interaction. The 10" driver looks like it works well as a midrange, so I see no

problem running it up to 1kHz. And from casual inspection, it looks to me like the full-range system matches pretty well with the woofer. I think you have a pretty good system and I'll bet it sounds great.

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Subject: Many thanks...!

Posted by [Paul B](#) on Tue, 18 Feb 2003 21:39:52 GMT

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Thanks for your time, and as you said i cannot complain about the sound but of the hazards of this hobby, that everything has to be disected to the lowest common denominator. Now when i heard things from the expert (You) i am going to spin some records with peaceful mind! Thanks for your kind replay! Paul Bukowski

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