Subject: JBL tent sale - JBL 2226J crossover values
Posted by spkrman57 on Thu, 10 Jan 2002 17:20:43 GMT
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Wayne, I have 4 3677s's that I am replacing the M115 woofer with JBL 2226j (16 ohm) drivers and you said in other post to use 1.4 mh coil. If I use 2 2226J's in parallel for 8 ohms per channel, what would coil value be?????? I am guessing about 1 mh, please advise. I have the dual 15" cabinets that the JBL 2226's came out of and will use Emminence 15" drivers in sealed format. (fs=20hz, Qts =.37, Vas=16' and Eff=93db). I already have used Emmince drivers of this sort, ie: paper cone/rubber surround/38 oz magnet/stamped frame. Believe it or not, these play well if not run hard like the "pro sound" transducers. They will be crossed over 24db/oct @ 300 hz to the JBL 2226/24218(3677s cabinets) which I have crossed over (horn driver w/3 ufd cap). I am using in 12' x 16' living room with 8' ceiling. Since I am using the 2226's in parallel for 8 ohm, I will also put the 2418's in parallel in series with a 6 ohm resistor (10 ohm total). I think the horns efficiency will be sufficient that they will still keep up with the 2226's even with the 6 ohm resistor in series. This is my first attempt with these drivers, If it does not succeed, Then I will just go back to the drawing board. The 2418 horn driver in these units now play much better(higher response IMHO) than the 2416's in the 4655bk's I also bought from the tent sale. I actually am not going to use the horn compensation that pi networks use because I think my hearing can't tell enough to matter. I went to Parts Express online and bought APT-80 supertweeter for use with the 4655bk's and it was helpful, with the 2418 driver I don't use it anymore. Any and all comments from anyone welcome. Happy New Year Audiophiles. Regards, Ron.

Subject: Re: JBL 2226 crossover values
Posted by Wayne Parham on Thu, 10 Jan 2002 18:24:09 GMT
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If you use a single 0.7mH coil, you will be flat to 1.6kHz. That's what the crossover in the Professional Series cabinets uses. This is a pseudo first-order configuration, which doesn't provide the sort of curve you'd expect: It removes about 2dB from 1kHz up - and attenuation is fairly constant above that point. So if you choose to crossover lower, you'll need a different crossover, and you'll probably want to use a Zobel. The single coil pseudo first-order solution does not require a Zobel.

Subject: Re: JBL 2226 crossover values, Uh, Wayne?
Posted by BillEpstein on Thu, 10 Jan 2002 19:02:08 GMT
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As usual, I'm left standing in the middle of the road, eating your technical dust.I ordered 2 more

eminence x-overs pxb2-1k6 as recommended for the Pro 4 and have 2 .47uF caps and the 16 ohm 20 watt resistors. .7 mH what?Can I use what I have on the 2226J/2418H combination?Also, as I will be using these for Home Theatre mains, would the drivers from the 1 Pi sound close enough to these to use as center channel? I'm thinking I could play with the box dimensions to make a center speaker that the TV could sit on.Thanks

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Subject: Pseudo first-order values
Posted by Wayne Parham on Thu, 10 Jan 2002 21:37:38 GMT
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are specified for various drivers used this way:Woofer Motor Inductor L22205H 1.8mH, 5A2226H 0.7mH, 10A2227H 1.0mH, 10ANow then, even though the 2226H uses a 0.7mH coil, if you were to simply remove the capacitor from your Eminence crossover, you would have a single 1.0mH coil and it sounds very good that way. There's only a 1dB difference above 1kHz, and none below that.

Subject: ('Wayne, to himself', " how can I get across to this moron")....
Posted by BillEpstein on Thu, 10 Jan 2002 23:17:31 GMT
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You did it Wayne! All I have to do is snip out the cap, there is only one I hope, re-do the connection, hang the R1-R2 C whatever necklace on the tweeter outs and here's lookin at you kid!Thanks!

Subject: PX-BII1K6
Posted by Wayne Parham on Fri, 11 Jan 2002 02:59:06 GMT
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That's right - In fact, you don't have to even redo any connection. The capacitor of a second-order low-pass filter is in parallel, so all you have to do is pull the cap. No circuit path is disrupted by removing this capacitor. And - Yes - It's easy to identify because there's only one 10uF capacitor on the board. There's 8uF and 22uF in the tweeter circuit which should remain in-line, but only one 10uF capacitor. Remove it for your 2226. Be sure to reverse polarity on the woofer, but in this case since black is positive on the 2226, reversing makes red be positive which is how you

would expect to hook it up anyway.