
Subject: Linus or Bessel? And wassup with these crossover numbers?

Posted by [BillEpstein](#) on Sun, 18 Apr 2004 14:02:46 GMT

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I've got these 24- 87 cent PE 4" speaks (269-570) that are on all the boards. Also have the JBL M115 15" Badboys that were in the 3677s cabinets. I was thinking of a hybrid woofer array with just a 6" wide board sticking up from the back of the 18" or so square box that houses the woof. Do the array speaks need a sealed enclosure? Open baffle would be okay? Could the woofer be mounted on an open baffle, too. Like a 24" wide by 72" tall piece of plywood with all 13 drivers on it? Or maybe a pyrimidal shape so the 4" guys have less baffle around them? And wassup with the crossover numbers I'm getting on the Excel worksheet page? 100's of mH's and uF's with 8 ohm crosses at 125 Hz? Or mebbe I don't need a crossover? Or being hopeless at Math I just don't get it?..... "Roman's plural, Hmmm? The M115 fs 42HzRe 5.3qms 5.1qes .42qts .39vas

0.23 [mH]Ms 0.00 [g]Vas 0.00 [l]dBSpl 0.00 [dB]Cms 0.00 [mm/N]Ma 0.00 [g]FsMa
0.00 [Hz]

Subject: Re: Linus or Bessel? And wassup with these crossover numbers?

Posted by [Bill Fitzmaurice](#) on Sun, 18 Apr 2004 18:33:15 GMT

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I've got a case of the same drivers and I'm thinking TL, which could be real interesting. With so many excitation points along the line you could end up with something that works really sweet, or really crappy, no way to tell till you build it. But for simplicity hard to beat. If it doesn't work just plug the hole. I also have a bunch of the \$.59 tweeters to toss in there too. I use this site for crossover values:

<http://www.lalena.com/audio/calculator/xover/>

Subject: Re: I guess this is why some X-overs use electrolytics:

Posted by [BillEpstein](#) on Sun, 18 Apr 2004 19:26:12 GMT

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Thanks for the site, Bill, but pretty big value on the tweeter, again. C1 and C2 are both 93.75; L1 and L2 12mH. Seems to me I could let the 4 inchers run free. But I really don't want that 115 to have any output in the mid-range. Mebbe I'll just array the 4 inchers and forget about the big woof. TL sounds good, too. Waddya goin' to do? About 40" tall doubled inside to 70 or 80" or so?

Subject: And why subs use 6dB filters.

Posted by [Bill Fitzmaurice](#) on Mon, 19 Apr 2004 11:22:37 GMT

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It's the big coils that cost a lot of money. But with the price on sub amps as low as they are why bother? It's also another good reason to make the sub box a bandpass design to get some acoustic filtering. Plus, if you go with a separate amp for the array it's no biggy to integrate a high-pass filter into its front end. Then again, if you're driving it in a 5.1 system the receiver handles the crossover chores anyway. I haven't given much thought to the T line yet, but assuming I want to get it to a quarter wave at 100 Hz it would only have to go about 3 feet long, which matches well with using eight four's.
