Subject: Talk me out of this crazy idea
Posted by Bill Epstein on Wed, 09 Dec 2009 12:19:59 GMT
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My kids need a pair of home theatre mains and I have on the shelf 2 Dayton DCS-380 15" subs, 2 B&C 8PE21 8" mids and 2 Vifa XT25G tweets, all leftovers from previous projects.

The Daytons http://www.parts-express.com/pe/showdetl.cfm?Partnumber=295-470want a sealed box of 6.2 cu ft, smoothly down 3dB at 30 Hz, which is close to the size of the 2PI Towers.

The 8" B&C http://www.parts-express.com/pe/showdetl.cfm?Partnumber=294-652 go in a 1/2 cu ft box of their own so the enclosure would be about 18X46X17.

If the Daytons are truly 92dB efficient I shouldn't even need a plate amp? Of course, If I did, there's plenty of room.

It seems like only the tweeter would need a cross-over as well, just run the woof and mid full-range (a small coil on the mid?).

Will this work?

Subject: Re: Talk me out of this crazy idea
Posted by Wayne Parham on Wed, 09 Dec 2009 16:22:32 GMT
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It looks like that might be a pretty fun speaker to build. Hard to know for sure how to crossover without playing with the drivers a little bit, but my gut feeling is you're right on the woofer to mid crossover. Overlap is your friend in the modal in the region because it adds the number of sound sources. I might be tempted to put a coil on the woofer to prevent it from going up too high but as long as you're not worried about over-excursion on the mid, I'd run it as low as possible. The mid-to-tweeter crossover is where I'd pay more attention. That's the place that can really make or break a speaker, in my opinion. If the tweeter does OK down low, you could try a first-order to keep it simple. If not, you might have to go higher-order and dial 'em in to match them up.

Subject: Re: Talk me out of this crazy idea
Posted by spkrman57 on Wed, 09 Dec 2009 18:08:27 GMT
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With the 8" mid being 98db efficient, you might have to pad it down somewhat to match the woofer/tweeter.

Let us know how it works out!

Regards, Ron

Subject: Re: Talk me out of this crazy idea
Posted by Matts on Thu, 10 Dec 2009 20:52:32 GMT
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I agree with Ron about padding the mids, but since it's for a home theater, there's probably a built-in equalizer of some type that you can probably use to fine tune the response as well. Once I had one of these setups (but gave it to son), and I was surprised how much was in there when you opened up all the menus!