
Subject: need expert advice (and epstein too)
Posted by [replay](#) on Fri, 23 May 2003 23:32:40 GMT
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wayne & fellow freaks, i was at my friends house the other night who runs a pair of jbl 4655's (tent sale 15" 2 way with response to 80hz) on top of a pair of pi-aligned kilomax 18's in a 9 cf box. he's using an electronic x-over between the 2 speakers. we set it at 150hz and it rocks. the x-over has a 24db/octave slope. what x-over point is optimal for this set-up? he's running a pair of heathkit 35 watt tube monoblocks on the jbl's and an adcom monster solid state on the 18's. cheers, george

Subject: Re:In a perfect world
Posted by [bmar](#) on Fri, 23 May 2003 23:55:21 GMT
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I would vote for 80hz. For the rest of the world you need a RTA so you can adjust the crossover to work with the room. The 4655's I have are a little weak on the bottom. Running the kilomax up to 250hz if you like the way they sound over the JBL Tom Edison

Subject: Re:In a perfect world
Posted by [redmeat](#) on Sat, 24 May 2003 00:04:08 GMT
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i adjusted the x-over from 100-500hz and really could not hear a difference. i figured setting the x-over higher would put less strain on the tube amps. i measured the output at the back of the room to be 104db with my ratshack meter. that is very loud! it's funny, the volume measured the same 4 feet from the speakers as at the back of the room. i'd guess the room to be 12ft by 28ft with mostly reflective surfaces. loud & smooth! protein lover

Subject: Re:No notes from Epsteins mother for you, redmeathead
Posted by [JuanEpstein](#) on Sat, 24 May 2003 00:28:58 GMT
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Subject: The Ouija board says...

Posted by [Wayne Parham](#) on Sat, 24 May 2003 03:21:33 GMT

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There's no way to know without modeling and/or empirical testing. The proper implementation of subwoofer crossover depends more on the environment than anything else. Outdoors, you want the subs close together and close to the mains, if possible. The idea is to keep the sound sources

happen. Indoors, it's a whole different ball game. The reflections from walls make lots of virtual

and cold zones in the room at various bass frequencies. The best thing to do it to distribute sound sources to form dense interference, averaging the sound field in the room. You don't want to crossover the subs as much as you want to blend them, the more you have the better it will be. You'll want to place the subs fairly far apart and provide as much bass overlap as possible, up to 300Hz. The trade-off is sound can be localized above about 100Hz, so you don't want a subwoofer placed far away from the mains that is running all the way up to 200Hz or 300Hz. This is a situation of competing priorities. Move the subs further from the mains and run them higher in frequency to smooth room modes, closer and lower to reduce localization problems. You'll have to do some experimentation to find the best combination of subwoofer positions and low-pass frequency and slope.
