
Subject: quasi mini array

Posted by [mickey](#) on Sat, 25 Nov 2006 00:29:41 GMT

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Help a newbie with a crossover for a mini-array pls! Here are the drivers. 12 Aurasound NS3-194-8E http://www.madisound.com/cgi-bin/index.cgi?cart_id=1338435.10501&pid=1757 and 12 DAYTON ND20FA-6 <http://www.partsexpress.com/pe/pshowdetl.cfm?&Partnumber=275-030> crossed at 2700Hz. Curt C mentioned that the neos can be crossed lower than 3500 Hz if they are used in multiples and use a higher order (4th) xover. The 12 auras will be wired in 4 parallel groups of 3. Yielding a net sensitivity of 97 dB and final re of 5.2 ohms (accdng. to PCD). The 12 Dayton neos will be wired in 3 parallel groups of 4 drivers. Yielding a net sensitivity of 101.5 dB and final re of 6.9 ohms (accdng. to PCD). Baffle would be 6.5". Of course these are based on the measurements from the websites. Being new to this I don't have measurement stuff to do my own... yet. But I am learning and trying to get my feet wet in this newly found hobby/obsession. That's how I learn the most. Well anyways... so can anyone please help me with the crossovers by modeling one? Since I don't have any measurement abilities yet I don't think textbook crossovers are going to cut it. Yes I did build other people's design and they are great. But not arrays... so a cost effective quasi mini-array (full of tradeoffs of course.. the kits costs are not justifiable to the wife) is the way to go for me. Help a budding diyer anyone? Sorry for the long post. Do you also need BSC in a line array? mickey

Subject: Re: quasi mini array

Posted by [Marlboro](#) on Sat, 25 Nov 2006 04:00:25 GMT

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Have you considered an electronic crossover and biamping? Passive crossovers for line arrays are generally not for beginners. I've crossed my 32/ch neo's at 2650 Hz but I use a Rane 24dB/octave electronic crossover. Are you cutting the neo's flanges to the metal? You will need to do so or comb filtering will start at about 9000 Hz, and will give you a noticeably flat treble with a distinct loss of "air". Cutting them will give you a line of about 13 or 14 inches, which is going to require the nearfield to be much closer than you might think. You don't want one line in the nearfield and one in the farfield. Have you read Dr. Jim Griffin's Line Array White Paper? What are you using for a low end? Marlboro

Subject: Re: quasi mini array

Posted by [mickey](#) on Sat, 25 Nov 2006 04:34:39 GMT

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I have read the white paper. Understood some of it. And yes I will be cutting the neo flanges. Questions: At what frequencies is it going to start comb filtering when the neos are cut to

the metal? About the array, do they need BSC? I am thinking of electronic crossovers but I have to save for that and I will do that when I have enough neos and little woofers to rebuild it. I was thinking passive for the moment but you are right it is not for beginners hence the ask for help from experts if any are so inclined (It would be christmas in my newbie ears). For the low end? A pair of stereo subs. Thanks in advance for any help. Mickey.

Subject: Re: quasi mini array

Posted by [Marlboro](#) on Sat, 25 Nov 2006 05:10:31 GMT

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Comb filtering if you cut is up above 14-15Khz, which gets into the inaudible range for most of us, or at least hard to tell. As to BSC: read below:

<http://www.audioroundtable.com/ArraySpeakers/messages/1235.html> Perhaps someone else can help with passive crossovers. Marlboro
