Subject: Suitable tweeters for LA.
Posted by Armand on Mon, 14 Apr 2008 00:51:06 GMT
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I am in the process of planning my listening room. After reading Mr. Griffins paper I decided to go for "in-wall" line arrays. Since I am Norwegian (and a patriot I have already bought 24 5" Seas Excel drivers. I am now looking for suitable tweeters. The Bohlender Graebener RD75 seems llike a good choice and would simplify mounting. Or will I run into problems above 12-15kHz ? Is it possible to solve that with an addition of a single supertweeter per array?Other suggestions of good drivers? NEO 8 ?? Price up to about 1500$. I have planned the tweeter line to be around 120 cm. (50 inches)I plan to use software based filtering and EQ and a firewire 16 channel DA and lots of Hypex UcD400 amps. I am also playing with the thought of digitally delay the outer drivers in the LA to compesate for propagation delay. Has this been done before? Thoughts?This was maybe many questions, but I am curious to hear the thoughts of other dedicated line array enthusiasts.best regardsArmand

Subject: Re: Suitable tweeters for LA.
Posted by Aaron D on Mon, 14 Apr 2008 03:43:03 GMT
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The BG's generally aren't the best choice. They do have the high end deficiencies that you mentioned but they also do not have the sensitivity necessary to match the Seas line. In my opinion the Fountek NeoCD2.0 is the best choice for most La's when budget isn't the primary concern (w/in reason of course). At current prices it will run about $1800 to run 8 drivers per side (just over 50"). Rick at Selah audio has done several designs w/ these, and at least one w/ Seas woofers I believe.Check out www.selahaudio.comKeep us updated on your project.Good luck,Aaron

Subject: Re: Suitable tweeters for LA.
Posted by Rick Craig on Mon, 14 Apr 2008 15:23:54 GMT
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The RD-75 will work but you sacrifice quite a bit of sensitivity. I like the Founteks best.

Subject: Re: Suitable tweeters for LA.
Posted by Danny Richie on Fri, 18 Apr 2008 20:54:58 GMT
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Hello Armand,There are better choices than the large RD series drivers. One problem is the really low sensitivity. Power handling limits the overall output as well. The use of Multiple Neo 8's are a much better choice. The moving mass is much lighter and control is much better as well. The smaller Neo's also sound much better than any other alternatives. Plus they can be crossed fairly low in the 800 to 1000Hz range and distortion is still kept really low. The pdr version will give you better dispersion but gives up sensitivity.I had a custom version built for our LS-6 and LS-9 models that utilized a dense felt on the front side like a pdr version but not on the back side. I also had them leave in all 5 rows of magnets to keep sensitivity high. Then I had them make me a 8 ohm diaphragm so that more of them could be paralleled and less of them in series. These are good from 800hz to 40kHz. The price is the same as a standard Neo 8. Since you are using a metal cone woofer I wouldn't recommend running them up very high as they tend to ring in the upper ranges. I wouldn't want to push those past 2kHz. In fact they will sound much better if you can limit them to 1kHz or less. The true ribbons really aren't capable of crossing that low as their power handling goes away quickly and distortion shoots up in a hurry if they exceed anything below the 2kHz range. They are also quite fragile, and I wouldn't recommend them in a line source application. Danny Richie

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Subject: Re: Suitable tweeters for LA.
Posted by Rick Craig on Sat, 19 Apr 2008 23:48:52 GMT
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If the true ribbons by Fountek are so fragile in a line array application Danny then why have I not had one failure? For the record I probably have used more of them than anyone in the USA outside of a large pro audio company that uses them in sound reinforcement arrays. Reliability is paramount in PA speakers and I'm sure they wouldn't be using them unless they were very robust.

Subject: Re: Suitable tweeters for LA.
Posted by Armand on Sun, 20 Apr 2008 19:22:09 GMT
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Thank you all for your help and suggestions. It seems the best option is to go for Neo2. 1800 dollars is quite expensive, so I will have to save some mosy first. I will post a new message when I have some progress.best regardsArmand

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Subject: Re: Suitable tweeters for LA.
Posted by Anonymous on Mon, 21 Apr 2008 02:30:20 GMT

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Which pro sound company uses ribbons ?

Subject: Re: Suitable tweeters for LA.
Posted by Rick Craig on Mon, 21 Apr 2008 03:07:06 GMT
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Here's the link http://www.sweetwater.com/store/detail/Versa112/SLS also uses the planar magnetics.

Subject: Re: Suitable tweeters for LA.
Posted by Danny Richie on Tue, 22 Apr 2008 15:57:58 GMT
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What would make you lean towards the Neo2 as a best option? The BG Neo's sound considerably better, they have lower distortion, can be crossed much lower and will considerably improve the imaging by the use of the lower crossover point. They are also less expensive.

Subject: Re: Suitable tweeters for LA.
Posted by Rick Craig on Tue, 22 Apr 2008 19:39:39 GMT
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If the BG tweeters are superior Danny then why did you choose to use the Aurum Cantus true ribbons in your top-of-the-line Criterion monitors instead of the Neo3PDR? Did you change your opinion after you failed in your quest to become the sole Aurum Cantus USA distributor?

Subject: Re: Suitable tweeters for LA.
Posted by Danny Richie on Wed, 23 Apr 2008 00:58:37 GMT
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That's hilarious! You never cease to amaze me with the stuff you come up with. I never had any quest to become a dealer for Aurum Cantus let alone the sole distributor. If you check my site on

those archived models then you'd see it was a joint offering with Creative Sound Solutions. They were in fact dealers for Aurum Cantus and wanted to use the ribbon tweeter in those designs. It was a nice ribbon and worked out well in those models. You can view them here: http://www.gr-research.com/index.asp?PageAction=VIEWPROD&ProdID=127http://www.gr-research.com/index.asp?PageAction=VIEWPROD&ProdID=128Still, a BG Neo 3 pdr, and custom variants that they do for me, easily out perform them in a number of ways. Oh yea, I was also a distributor for the Raven ribbon tweeter as well. I have been there and done that with all of those drivers.