Subject: Tangband Array & Home theater
Posted by Steve Hutchings on Thu, 03 Feb 2005 18:30:46 GMT
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Hello all!Wow. My first time here. I was doing some research on DIY speaker building for my home theatre and was fortunate enough to find James Griffin's line array document, and this great AudioRoundTable site - I'm impressed! - Thanks!!Now to my questions - (sorry if these have been asked before)1) What has peoples experience been in using line arrays for home theater - ie. using the same line array for each channel (except sub) - how does it sound?2) Has anyone had any good success with using (near) fullrange Tangband drivers to create arrays for home theatre? ..I know there was one on PartsExpress, but I'm curious to hear about others...Thanks,Steve

Subject: Re: Tangband Array & Home theater
Posted by Jim Griffin on Thu, 03 Feb 2005 22:05:00 GMT
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Steve,You need to read my comments on full range drivers in line arrays in my answer to the posting just below this one. You can not get there from here with just the small full range TB drivers used full range. You can use what I call a quasi-line array sources like my Needles as shown in the photo (the Needles are the smaller, skinny arrays) or the larger arrays. The Needles design uses 16 Tang Band W3-871S drivers per side with a ribbon tweeter. Thus, you have line array operation up to the crossover to the tweeter which will get you most of the near field effects of a LA and then you have essentially a point source tweeter so some limitations are imposed on in-room seating for best sound.The best line array implemantation would be a total frequency band line array such as the larger sources (Linus 2) in the photo. Now you can create a HT system with the R and L front speakers as arrays and then more conventional speakers in the center and surround positions. This would generate good sound but perhaps not the absolute best. The center and surround speakers would have a little trouble keeping up with the higher sensitivity of the R and L sources.A better situation is to use 4 line array speakers in the R, L, and surround positions and implement a phantom center channel. If you are using near field line arrays, then the side to side imaging will be broader (less sound falloff R to L) so the absence of no center channel wouldn't be missed. Jim

Subject: Re: Tangband Array & Home theater
Posted by Steve Hutchings on Fri, 04 Feb 2005 01:44:40 GMT
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Thanks Jim for the quick response. This may be a dumb question, but the response specs for the W3-871S go from 110 -> 20kHz - I'm not clear in why a ribbon tweeter is required....I don't mind

using it - just not sure why.Maybe I missed it, but why could you not use a the same LA for the centre channel - and have 5 (in 5.1) or 7 (in 7.1) identical LA's. I have a perforated projection screen, and the speakers are going behind..maybe that's the missing bit?Thanks again!Steve

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Subject: Re: Tangband Array & Home theater
Posted by Steve Hutchings on Fri, 04 Feb 2005 01:51:19 GMT
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Jim - I think I see the answer from the Fostex post... I guess there is cancellation due to the wavelength versus the distance between the drivers... rats. Since there would possibly be 5 LAs, having a pile of ribbon tweeters in addition to the full ranges would end up becoming an expensive project - which is why I was hoping to get away with just the full range TBs. I'm curious - how do the Needles sound? Is there somewhere where I can find out more about them?Thanks!Steve

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Subject: Re: Tangband Array & Home theater
Posted by Jim Griffin on Fri, 04 Feb 2005 03:03:21 GMT
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Steve,I listen to the Needles daily so you can imagine what I think about the sound. They do very well with a relaxed, uncompressed sound that continues even to high SPLs. Lots of detail in the treble with the ribbon tweets. They do need a subwoofer (two would be nice for a larger room) to cover the 30-120 Hz range.The original Needles has an Aurum Cantus G3 tweeter that costs $330 a lick so you could do a lot better these days with a set of the Fountek Neo2.0's at $120 each. Creative Sound Solutions (www.creativesound.ca) did offer a Needles kit but recently took it off their site. The kit was priced at $1000 per pair. CSS still have the drivers and the other parts are mundane. They offer the plans or you can contact me for help if you are serious. Jim
 More Needles Info
