Subject: TC Sounds Array components for DIY
Posted by SE-Raider on Sun, 09 Jul 2006 23:47:26 GMT
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I was curious as to feedback from those here regarding TC Sounds offering line source compponents to the DIY market....http://www.tcsounds.com/linesource.htm

Subject: Re: TC Sounds Array components for DIY
Posted by Jim Griffin on Mon, 10 Jul 2006 20:29:51 GMT
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SE-Raider,I don't see anything else on the TC Sounds site that references the individual components (midbass and full length ribbon) mentioned on the line array overview. TC Sounds may be an OEM to some other company vs. offereing these parts to the DIY market. It is hard to be encouraged about availability of these parts for DIY use at this point. JimPS. You need to come see me again. Upgraded digital active crossover for the near field arrays--much better sounding--and a new Jordan JX92S with a ribbon MLTL.

Subject: Re: TC Sounds Array components for DIY
Posted by SE-Raider on Mon, 10 Jul 2006 21:20:35 GMT
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Somewhere on one of the forums where the new TC site was announced, the company representative indicated that they would be offering the components to the DIY community, the ribbon offered in full length and shorter versions as well, IIRC. I'll try to find the post.I am considering line arrays for my HT room mounted in wall. The BG's are cost prohibitive. I hope whatever TC offers might be more favorable. If you interpolate the products shown on their site I could see the tweeter and mid unit wall mounted with their 3" depth subwoofer mounted below it as having high potential for an exceptional T set up. I would think that line array attributes would translate well to the typical HT listening room. I remember distinctly how musical your line arrays were even from te next room and how close proximity to one speaker doesn't negate the output of the other speaker. This characteristic especially I think would mean that an entire HT listening room within a near field environment would provide a very natural and realistic experience. Another posibility that is intriquing, would be to use te space available between the studs in an inwall application for a transmission line enclosure.I'll have to come check out your new additions. I really appreciated your hospitality and patience.

Subject: Re: TC Sounds Array components for DIY
Posted by SE-Raider on Tue, 11 Jul 2006 22:53:01 GMT
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Jim: I found the reference for the TC line source info at http://www.htguide.com/forum/showthread.php4?t=20515 "As far as line source goes, well I don't want to give too much away, but as shown in the site, we will have 7+ foot tall neodymium ribbon tweeters inside that speaker. We will sell the tweeters on our site for DIY purposes, but I can't give a timeline. But yes, these are 7 feet tall with no breaks, not individual ribbons. We will also have shorter and taller versions too. The speaker in the picture is one of our prototypes, actually that's a rendering of it I did in 3D Studio Max, but it looks the same as the original speaker which was not available for photography..-Kyle @ TC"

Subject: Re: TC Sounds Array components for DIY
Posted by Jim Griffin on Wed, 12 Jul 2006 02:25:05 GMT
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SE-Raider,Thanks for the link. I'm from Missouri until they disclose more stuff. If these long planars are like the long B-G and other ribbons, then they will suffer from low sensitivity and rolled off highs. I would like to be impressed as a long ribbon which has reasonable sensitivity and stellar highs would be a wonderful thing to hear.Jim

Subject: Re: TC Sounds Array components for DIY
Posted by SE-Raider on Wed, 12 Jul 2006 02:43:35 GMT
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Yeah, I hear you. Is there something inerent in the design of long ribbons that makes low sensitivity and rolled of highs likely?I hope they may be on to something, but we'll see. If there's a pre-sale I'll really be suspicious. I'm also curious about what they have planned for mid range units, as they are the most vague about this. jw

Subject: Re: TC Sounds Array components for DIY
Posted by Wayne Parham on Wed, 12 Jul 2006 13:22:13 GMT
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As ribbon size grows, so does moving mass.

Subject: Re: TC Sounds Array components for DIY
Posted by Jim Griffin on Wed, 12 Jul 2006 18:49:18 GMT
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Several factors come to mind. As Wayne points out the moving mass is an issue, sagging in the gap, resistance of the traces (planar implementation), width of the ribbon (wants to be wider for power handling at low end of band but narrow for wide dispersion and frequency coverage across upper end of band), intensity of magnetic field (neo magnets likely will help this sitaution), etc. What often results (B-G 75" planars come to mind) are implementations that have low sensitivity (less than 90 dB SPL), compromised upper end (above 15 kHz), limited dynamic capability/power handling on the low end of the band (below 300-400 Hz), etc. I do like discrete tweeter line arrays made from the 5-7" true ribbons from Fountek and Aurum Cantus. You get excellent horizontal dipersion, high sensitivity, and exceptional sound albeit at a price and coverage only down to about the 1000 kHz area .Jim

Subject: Re: TC Sounds Array components for DIY
Posted by SE-Raider on Thu, 13 Jul 2006 00:44:14 GMT
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So other than that it should be easy lol.Thanks for the explanation.

Subject: Re: TC Sounds Array components for DIY
Posted by SE-Raider on Thu, 13 Jul 2006 00:54:08 GMT
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I guess maybe what I am not understanding is how the long ribbon would be different from an accumulation of shorter ones. I am assuming the long ribbon is not just a larger ribbon on the same structure as the smaller one, but rather is adequately supported by its suspension and magnetic structure. I'm not expressing myself well; I hope you understand what I am getting at. Or put another way, essentially a seriies of the shorter ribbons on the same frame, but with the ribbon continuous rather than segmented.Thanks

Subject: Re: TC Sounds Array components for DIY
Posted by Wayne Parham on Thu, 13 Jul 2006 04:25:40 GMT
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If the motor was made using a longer conductor to span the distance of a larger membrane, then

voice coil resistance would increase and mass would also increase. Both things tend to reduce sensitivity and decrease mass cutoff.

Subject: Re: TC Sounds Array components for DIY
Posted by Anonymous on Thu, 13 Jul 2006 17:00:40 GMT
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Individual elements gives you wiring options. If all are wired inparallel, you get max sensitivity, must make sure you have a goodamp to drive the lower impedance.

Subject: Re: TC Sounds Array components for DIY
Posted by SE-Raider on Fri, 14 Jul 2006 01:14:55 GMT
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I was assuming one large membrane and frame with multiple voice coil/magnet assemblies wich could be wired in parallel/series as with a collection of individual drivers.

Subject: Re: TC Sounds Array components for DIY
Posted by Rick Craig on Thu, 03 Aug 2006 02:46:58 GMT
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I really have my doubts about a ribbon that long if it's a "pure" ribbon only suspended at the ends. I suppose a planar magnetic (ala' BG) would be possible in that length; however, it still will have the problems that Jim noted.A few months back I was sent a prototype of a pure ribbon that was about 24" long. While it sounded pretty good mechanically it was quite floppy. The weight from the magnet structure was about 40 lbs. and it pulled the reversible bit right out of my screwdriver! Not too practical for stacking them to form an array.
