
Subject: Re: Perfect line array

Posted by [Steven Homrighausen](#) on Mon, 05 Jun 2006 14:45:24 GMT

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That makes sense to me. With \$500 to spend on tweeters - is it better to have eight PT2's per array, or two Founteks (or one Fountek and save the extra \$250). I understand that a single (or two ribbon/planar stacked) will have a small 'optimal' listening height, while listening height would be less critical for a longer array. I'm trying to fully understand the quality difference between the drivers, and advantage of a longer array. A 3rd option would be a line of ND20FB (rear mount PE tweeter). C-T-C spacing would be 1.5", so comb effects would start around 9040Hz (which is close to the 'relaxed' 10k cited in your whitepaper). 40 per array would be ~\$160 per array. With this driver, the xover would need to be the highest of the three options (due to fs of the tweeter). I'm not sure about the xover for the two situations above - could the PT2 be crossed lower (needing a steeper slope?) since there are eight working together (vs. a single PT2)? How would the efficiency of 40 dome drivers increase in an array? Is it the same as mid-bass/woofers? I know that ribbon/planar drivers have little vertical dispersion, so they don't increase efficiency like dome drivers when in stacked in an array. My theory is that the drivers will have increased efficiency at all frequencies below 9040Hz in the case of the ND20FBs (wavelength = C-T-C spacing). I've read and re-read your whitepaper, and I understand most of what it is saying. I'm just trying to get some of the hypothetical situations straight in my head before moving ahead.
