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Subject: Re: Symmetrical Array (and crossover issues...) Griffen? Craig?

Posted by [Greggo](#) on Mon, 22 Oct 2007 12:38:18 GMT

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Hey Duke, thanks for posting. I am a big fan by the way, of your products and your gracious posts on various forums that bring some much needed class to a sometimes ill-toned space. Should I take it from your reply that it is better to crossover in the 2-3k space than somewhere in the 3-4k space? I am always interested in why good designers pick certain points to target a crossover... does a philosophy in general come into play or is it simply a matter of driver choice and crossing where a particular driver seems happiest? Regarding my design idea, I was actually thinking of a planar tweeter, something like a Neo3 (or something custom, as I am considering) and perhaps with a driver mod to limit horizontal dispersion even a bit more, and then using the midbass on each side to squeeze the tweeter dispersion more into the vertical axis than horizontal axis for even tighter pattern (D'Appolito done sideways...). How much this really works and how close it could every get to something even close to a 90 degree coverage horn or waveguide is the core issue at question for me, and well beyond my knowledge base. Then taking it a bit further, if I tried to find a tweeter or have one custom made that I could slip in between two 3 or 4 inch midbass units, it would have to be quite small so perhaps I would have trouble finding something that would be happy crossed much lower than 2.5 kHz due to the size of the diaphragm, motor, flange, etc... so I thought, why not combine the issues and let the mid basses run all the way up to 3.5kHz so long as their c-t-c mounting would be possible to allow such a range and then have the tweeter just take over from there. The bottom line for me is trying to explore the issues here to see if the symmetrical mounting dual midbass lines, one on each side of the tweeter line, along with a very small but carefully chosen tweeter, and very tight frame to frame mounting of drivers across the board, would combine to form a somewhat "controlled directivity" line array. I know this is almost antithetical to the concepts of a line array to begin with, but I am curious and wondering if any of the better minds out there on the web have thought about it, experimented at all, or simply have an informed opinion to share. I do love line arrays, and I am somewhat torn between chasing this style of speaker design/build or doing something more in line with what you, Olsen, and Shaw seem to be focusing on, which I also find very appealing (really wish I could have made it out to RMAF this year to hear your latest Dream Makers, I visited your room last year and really liked what I heard...) Regards, Greggo

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