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Subject: Midrange horns

Posted by [Wayne Parham](#) on Mon, 08 Dec 2003 21:14:40 GMT

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Hi Gabriel!! I haven't finished the designs, and basically just have the requirements and some simulations done. My goals make it a little more challenging because I want to be able to use more than one driver, and the ones I'm hoping to use have fairly dissimilar specs. I also have some space constraints to deal with, mostly for aesthetics but also for dispersion sake. And I'm really, really busy right now, so I don't expect to have anything available until sometime in the first quarter of 2004. But generally, a nice horn can be made having fairly simple straight sides and it is easy to model accurately so you can expect performance to be as predicted by the model. Check

and when used with a high-quality driver, they sound very, very good through the vocal range. Definitely "Hi-Fi." One thing about a horn like this is that it covers the vocal fundamentals up through the overtone region, where the tweeter kicks in. You just can't get a modern 1" or 2" compression driver down to the bottom of the vocal range like you can a horn like this. I'd rather push 'em up too high than down too low. As an aside, some say that in high-fidelity applications, pushing a subsystem down below its limits is "OK." But to me, especially in high-fidelity applications, it isn't. Like I said, I'd rather push 'em up high than down low. Adding a horn like this reduces the need to push a tweeter crossover down or a midwoofer crossover up. The system is made more complex, and a crossover point is added. But bandwidth per subsystem is reduced, with the corresponding benefits afforded from doing so. Wayne

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