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Subject: Re: Questions on some mid horn alternatives...

Posted by [Wayne Parham](#) on Sun, 19 Sep 2004 19:17:57 GMT

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Sounds like a great idea. Adrian Mack did something like this, making a smaller horn for a 6" driver. I think he used the Eminence Alpha 6, but there are no doubt other suitable drivers. Fostex seems a likely high quality candidate. Personally, my goal was to have a midrange horn that could crossover very low, so to cover the entire midrange band. The note C below middle C is 130Hz, so you can easily see that male voice has a lot of energy in this range. Wavelengths are long at this frequency too, so spacing and overlap are not nearly as critical. I felt I could use a larger horn and crossover lower with a shallow first-order slope for a seamless transition down low and keep all the vocals and midrange in one driver. With a 1.6kHz upper crossover frequency, I didn't really need to reach very high with the midrange horn. That's where I spent most of my time, working on the aspects of the subsystem at this frequency. I am pleased with the transition between mid and tweeter horns, truly the most critical part. But anyway, I think it would also make sense to use a smaller midrange and push the crossover points up an octave or so. You could probably get a smaller 6" driver to go up to 3kHz, and maybe even further with a phase plug. That would then allow other choices for tweeters, so the idea certainly has merit in my opinion.

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