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Subject: Re: A fact

Posted by [Earl Geddes](#) on Thu, 22 Dec 2005 12:38:53 GMT

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"What I am saying is that the desired coverage pattern is wider than it is tall in nearly all cases. So I find it desirable to use horns that will provide this."To which I agree, if doing this did not create more problems than it fixes."I prefer to limit vertical dispersion more than a DI matched loudspeaker with an axisymmetric horn will allow. "I prefer the matched DI - we've been through this before."By the way, at 500Hz, with DI at 6dB, the radiation angle is still so wide that early reflections are significant in both the horizontal and vertical axis."True, but not very important, nor is there any alternative. To get a DI < 6 at 500 Hz would require a speaker much much larger, I mentioned this already. A non-axisymmetric horn does nothing to solve this problem. At 500 Hz our hearing and localization is not very sensitive to reflections - not at all like they are above 1000 Hz. You also have not considered that a narrow vertical coverage requires a horn to be twice as wide as mine to control the vertical pattern as well as mine. Thus for a given cabinet size at the crossover, the non-axisymmetric device does not actually work as well for pattern control as the axisymmetric one. If you actually measure the pattern that you get you will find that your narrow device will actually be wider than mine vertically at the crossover. Your "solution", as I keep saying, sounds good on paper, but actually creates more problems than it solves. My solution while not theoretically ideal has a singular problem that is easily fixed in the room itself. Again, we don't agree on this point.

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