Subject: HF horn dimentions and low end cut-off
Posted by Chris R on Tue, 10 Feb 2004 19:22:29 GMT
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Hi Wayne, For the 4-Pi's I'm going to start shortly, I ended up gettingSelenium 25-25 horns. Similar to the ones you recommend in dimensions, etc. While trying to pick a horn, I noticed thatsimilar sized horns were rated for pretty dis-similar cut-off, andat the same time, some rather smaller horns were rated for whatseemed like pretty low cut-off. Aren't those specs pretty muchdictated by physical dimentions related to the size of the soundwaves? Any explanation for the spec games?BTW, the Selenium horns are nicely finished, heavy dead aluminum,with a nice wide rim (as opposed to some complaints I've seen aboutone or the other 1" horn you specify). I'll post more once I getthings hooked up.thx, Chris

Subject: Re: HF horn dimentions and low end cut-off
Posted by Wayne Parham on Tue, 10 Feb 2004 21:59:08 GMT
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The performance of an HF horn at low frequencies is very dependent on the space it is used in. Actually, all horns are for that matter. An HF horn that is baffle mounted will generally have smoother response than freespace in the octave above its lower cutoff, particularly if the horn is physically small. And beyond that, the shape of the horn has an impact on its performance at frequency extremes. The throat is most important up high and the mouth is more important down low. So there is some room for interpretation, and particularly in the first octave.

Subject: Re: HF horn dimentions and low end cut-off
Posted by Chris R on Wed, 11 Feb 2004 00:23:56 GMT
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Thanks, About the baffle mounting, is this similar to the extention wingsI've seen on some huge Altec (A-4's???) theater speakers for improving bass response.Chris

Subject: Re: HF horn dimentions and low end cut-off
Posted by Wayne Parham on Wed, 11 Feb 2004 06:12:59 GMT
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Baffle mounting puts the horn in a halfspace condition rather than freespace.