Subject: Subhornor bass horns only
Posted by adavis464 on Mon, 26 Sep 2005 13:04:37 GMT
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Horn expansion is the volume of the expansion the important part.In other words when shape start to effect the response.I used Mcbean to calculate the expantion of a sub horn using JBL2240 I am limited to 21" in width and let the expansion from there.At what point if I made it lets say 18" would this be worst or no different.Its built Ijust need to make th back chamber and stand.It's 5'by5'21" wide regards Tim

Subject: Re: Subhornor bass horns only
Posted by Wayne Parham on Mon, 26 Sep 2005 17:34:35 GMT
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The truth is, when a segment expands with a straight-sided expansion on one side and no expansion on the other, it is really a parabolic expansion, not conical. Conical expansion requires linear expansion in both axis. Exponential or hyperbolic requires even more. But by using several sections, you can approximate the flare you want, even with straight side walls. Also, there will be a notch in output at the frequency where the side wall distance is 1/4 wavelength, so consider this when choosing a crossover frequency. If it's a basshorn, it probably won't be an issue, and may help increase rolloff above the passband.

Subject: I didn't know about the parabolic expansion
Posted by adavis464 on Mon, 26 Sep 2005 23:50:29 GMT
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That's very interesting.I have another question about covering the mouth of the sub see I have a cat and I think she's going to love it in there ;)So grill cloth it is.What effect will it have.I try to measure and post the data and pics.Regards Tim

Subject: Re: I didn't know about the parabolic expansion
Posted by Wayne Parham on Tue, 27 Sep 2005 02:25:08 GMT
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I think the grille cloth will probably be just fine. I've heard of people using a metal grille mesh to keep debris (beer bottles, cigarette butts and ashtrays) out of horns used in clubs. I think that's just fine too, but I think it must ultimately reduce mouth area. Some meshes have probably 50%

of the area covered, so that's something to think about on horns with limited mouth area to begin with. But in a club, I think it's probably a good idea and boundary loading will help offset the impact of reduced mouth area. If the horn is designed for halfspace, indoor boundary conditions will probably more than offset the reduction of mouth area. Still, it's something to think about if you're looking at options.

Subject: Re: Use 'hardware cloth' nt
Posted by Bill Epstein on Wed, 05 Oct 2005 08:46:05 GMT
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