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Subject: Re: Why won't a single driver speaker do metal?

Posted by [Retsel](#) on Fri, 05 Aug 2005 13:56:43 GMT

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Ed has provided many of the same reasons I would give. First, lets start with the Hedlund Horns. Just listening to them makes the reasons obvious. I had a couple audiophiles over about a month and a half ago and their jaw was on the ground after listening to my system, and my subwoofer was in disrepair so all they heard was the Hedlund Horns. To me, the lack of deep bass makes the system lacking, but 70 hz and up, the sound is simply glorious. Besides the world class SACD player, preamp and amps, the Hedlund Horns with DX4s are wonderful. It is useful to compare how the Lowthers mate with the Hedlund Horns compared to open baffles. I will refer you to a post which Paul Joppa made on the Magnequest forum because he knows a lot more about the theory why BLH work so

well:<http://www.audioasylum.com/forums/magnequest/messages/2737.html> And Paul is right, with the Lowthers in Hedlund Horns, the response is flat. Thus there is no need to add crossover components. The added energy and efficiency of the backhorn down to below 100 hz allows for using subwoofers for what they are designed for, reproducing the lowest frequencies. Now I am experimenting with open baffles. I need to work on my baffles more, but there are differences which I can comment on. The open baffles are more transparent and for sounds above the horn region of the Hedlund Horn (which is around 250 hz), the open baffle seems to be better. I might give the nod to the Hedlund Horn below this frequency, but it is too soon in my experimentation to say all this with conviction (I still need to finish my experimentation with the open baffle first and then put the Hedlund Horns back in place before I can decide for sure). The open baffle system needs an inductor to roll off the higher frequencies starting at about 500 hz. I am only using a single inductor instead of the much more complex crossover which Dick Olsher has in his plans for the Basszilla project. I am highpassing the Lowthers in the open baffle about 100 hz, and still the cone moves a lot. But I hope that I can live with this as I have a pair of 15 inch drivers and also a set of Avalanche 18 inch drivers which I hope, together, will allow me to get sufficient bass from 20 hz or below up to 100 hz as dipole woofers. I am a little worried that the Avalanche drivers will be too "slow" crossing them over at 100 hz. If so, I can always revert back to the Hedlund Horns which can go deeper. Considering that open baffles are fairly easy to implement, and I already have the Hedlund Horns, I would not even consider trying a simple box. I would do the open baffle before trying a box. I have a set of Fried C5s, which are VERY high quality transmission line mini monitors. I thought about trying the Lowthers in those boxes, but I believe that they would not be a good match for transmission lines. Retsel