Subject: Playing with Mcbean

Posted by adavis464 on Sun, 16 May 2004 15:30:45 GMT

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What can I expect compared to the simulations if I make two side of the horn parrallel or even go one side with the flare. Also my room is 12by 14 I'm not planing to move soon can't I just build it into the room. I could start Both horns at one end and fire them to the front And the mouth of both horns would be half the size of the front wall. Would it operate more like an infinit horn. If I set my main horn cluster in front of the sub horn will it effect it response much or at all. Lots of questions? fun program when you learn to use it. regards tim

Subject: Re: Playing with Mcbean

Posted by Wayne Parham on Mon, 17 May 2004 02:44:48 GMT

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With two sides of the horn parallel, there are notches in response at frequencies determined by the distance between side walls. It may be a non-issue depending on your design, as the frequencies may be outside the passband of the device. For formulas and brief explaination, see the paper below. Acoustic High-Pass, Low-Pass, and Band-Stop Filters, by Daniel Russell

Subject: To elaborate further

Posted by Bill Fitzmaurice on Mon, 17 May 2004 20:35:05 GMT

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I've found that parallel walls are of no consequence up to about 300 Hz or so but they will really foul up response above 500 Hz, so they're OK for basshorns but absolutely verboten for midrange or HF use. Putting the mid horn in front of the basshorn is OK, as the low frequencies from the basshorn will find their way around obstacles. From a time align standpoint it is best to have the actual distance from the driver diaphraghms to the listening position the same, which usually would mean placing the mid horn in front of the basshorn would be a good thing, as long as it doesn't interfere with the room furnishings or exacerbate the WAF.