Subject: lobing in dome tweeters destroying high's
Posted by Marlboro on Sun, 10 Feb 2008 17:26:08 GMT
View Forum Message <> Reply to Message

On the PE forum:http://www.pesupport.com/cgi-bin/config.pl?read=400365Bill Fitzmauice said(Bill told me by private email he won't post here anymore, but wouldn't say why, so we won't get him to reply here): > Isn't it all about center to center distance > in the dome tweeters? "Yes and no. First, combing is not a major issue as far as the horizontal plane is concerned, only the vertical, so in most cases it's moot. What is of concern is lobed response, where the wavefronts aren't integrated at the radiating plane. Eventually those wavefronts do integrate, but if they don't do so well before the listening position then response will be jagged. To be confident of the result map the polar patterns of the individual drivers of the array and be sure that they integrate before the listening position, ideally no more than half the distance out from the array."He's not specific enough for me to know what he's talking about. He does imply that the 30 inch .9 c-to-c distance dome lines(like I have, incidentally) have badly dropped high frequencies. Unfortunately neither me nor any of the people I've had over to hear them have said that. In fact, many have talked about the scintillating highs.What gives here? More people who have never built a line array with no real idea of what exists? Don't know!!

Subject: Mystery solved
Posted by Marlboro on Sun, 10 Feb 2008 21:22:19 GMT
View Forum Message <> Reply to Message

Some guy on the PE forum figured it out, I think. Its probably somebody I talked to since s/he seems to be be commenting on my flange cutting technique with the neo's (though there's some guy in Calfornia who developed a system of tubes almost identical to mine totally independently). Anyway, it looks like Pete and Bill, are hyped up on using ribbon-planars because they are unwilling to go to a 3-way system, and are limiting themselves to the design limitations of a 2-way design.If one does that, then one gets comb filtering unless one uses ribbons.Marolboro

Subject: This will probably get deleted but,
Posted by 99bottles on Mon, 11 Feb 2008 18:52:22 GMT
View Forum Message <> Reply to Message

something tells me Bill will stop posting on PE soon now too.
http://www.pesupport.com/cgi-bin/config.pl?read=400442

Subject: Realistically....
Posted by Marlboro on Tue, 12 Feb 2008 00:45:20 GMT
View Forum Message <> Reply to Message

Realistically, if you want a better tweeter than the Dayton Neo20A, then you have to go to ribbons.In my research, which is considerable, THERE IS NO OTHER AVAILABLE DOME TWEETER than the Neo 20A, which can have its flange cut close enough to make the required center to center distance. The 1.25 or 1 inch models are too big and have a crossover too low, and the .5 inch models have a cross too high. All of them are usually too big to make the c-to-c distance.I have to say that this is the reason why Jim and everyone else chooses ribbons or planars: only one possible choice for domes. And its a pretty inexpensive one. I'd like to find a dome specifically made that has a flange right up against the dome itself, and is more like a $10 quality each.Marlboro

Subject: Re: Realistically....
Posted by Brian Owens on Tue, 12 Feb 2008 17:29:44 GMT
View Forum Message <> Reply to Message

Anyone ever look into domes made for car audio?The Alpine domes in one of my vehicles is cut right up to the edge, and they are an awesome sounding low cost tweeter.Brian

Subject: Re: Realistically....
Posted by Marlboro on Tue, 12 Feb 2008 19:55:56 GMT
View Forum Message <> Reply to Message

What is their diameter? Do you have any specs on them? Can they be purchased individually?Marlboro