Subject: B&C ME10
Posted by Barry on Fri, 08 Feb 2008 18:40:17 GMT
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Any thoughts on this horn?: B&C ME10
http://www.partsexpress.com/pe/showdetl.cfm?&Partnumber=294-618The goal of this project is line array for PA use. And so cut off the top and bottom of the surrounding frame to merge the mouth of each as close as possible in vertical line array of 4 high. Has anyone any experience at all with this horn?Other ideas are also very welcome. Barry

Subject: Re: B&C ME10
Posted by Crystal on Fri, 08 Feb 2008 20:47:07 GMT
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Do you want 60 deg vertical pattern for an array? Are splaying them?This is interesting and I would like to know more about arrayed horns like this.Crystal

Subject: Re: B&C ME10
Posted by ttan98 on Sat, 09 Feb 2008 00:17:49 GMT
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I own ME10, and I use it in conjuntion with BE10 compression driver. They are well matched.

Subject: Re: B&C ME10
Posted by Barry on Sat, 09 Feb 2008 19:19:57 GMT
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Thanks a lot for the response ttan98. Your input is helpful. "in conjuntion with BE10 compression driver"Perhaps a typo, you meant the "B&C DE10-8 1" Mylar Horn Driver" right? Could you tell me where did you cross it over at? Are you happy with the high frequency extension?That looks like a good driver opinion for line array! Thanks in advance,Barry

Subject: Re: B&C ME10
Posted by Barry on Sat, 09 Feb 2008 19:50:01 GMT

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Hey Crystal.In an array of 4 in one box I would be shooting for a vertical dispersion of much less than the 60degrees of each individual horn. Giving the PA option of tilting each box (one on top of the other) to direct the sound as needed toward the front and toward the rear of the audience. As you may be aware, usually hung with bottom directed to the front and above ones directed toward the more distant in the audience. As you may be aware, vertical dispersion in line array is dependent on frequency. As you may be aware. In a large home theater application with 1 box, you might need to be a fair distance away before your standing verses siting would sound similar in the higher frequency range, due to the narrowed vertical dispersion in the upper range. As you may be aware. It is essential that there is no distance between the horns so the edges if there are any need to be cut off so that the horns will integrate together.Even then one can expect a little comb filtering to occur. In direct radiators like dome tweeters it is more the distance from the center to center of the drivers that determines comb filtering interference between drivers as the frequency rises. IMO horns are superior to direct radiators at reducing comb filtering.This is the reason why side by side positioning of either drivers or speakers is to be avoided if at all possible unless the frequency is limited to bass. [this may be info you are already familiar with, or perhaps you have some different ideas to share]Barry

Subject: Re: B&C ME10
Posted by Bill Wassilak on Mon, 11 Feb 2008 20:09:23 GMT
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I'd be worried about c-t-c distance spacing, even with the frames trimed your still looking at a good 4" ctc. which will cause lobing in the vertical plane at around 4k.

Subject: Re: B&C ME10
Posted by Crystal on Mon, 11 Feb 2008 22:45:50 GMT
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Hi Barry,I do not know much about arrays and would like to learn more. I thought arrays were supposed to narrow vertical to straight on basically so I thought maybe a tall pattern would not be what you really wanted. Not sure how the best way to go would be as I know cones are nearly omnidirectional anyway.Random thoughts, JMHO, YMMV, et cetera.Crystal

Subject: Re: B&C ME10
Posted by Barry on Tue, 12 Feb 2008 00:39:36 GMT
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Hi Crystal,"I thought arrays were supposed to narrow vertical to straight on basically so I thought maybe a tall pattern would not be what you really wanted."Yes, they narrow vertical dispersion. So much so that standing and sitting too near to them can make a big difference in the sound. The nice thing is this tends to keep the upper frequencies from hitting the ceiling so readily. In a church or a hall or anything like that it can be a real plus for the acoustics, especially on voice. In a large room at home they can be nice too. In some PA applications it is difficult to get good sound without using line array. Putting regular speakers on top of each other causes a lot of comb filtering. My long term goal beyond just having fun, is to create many different designs for home and PA for custom building and perhaps even sales of plans over the Internet. A few years away mind you and dependent on many factors.If you have questions I would be happy to try and answer. There may be others here who are more knowledgeable and could give additional input. I'm new to this forum.

Subject: Re: B&C ME10
Posted by Barry on Tue, 12 Feb 2008 01:18:25 GMT
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Thanks for the input.Done 3" spacing with other horn tweeters and not noticed this in home. And the distances in some PA applications tend to minimise this if I remember correctly. Noticed that the Jbl VRX932LAP has 3 tweeters in 13in height.http://jblpro.com/products/portablesound/vrx/vrx932lap.htmlApparently horns do better than cones (or domes) in this domain.Good you bought it up. Important to look for this my experiments.ThanksBarry

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Subject: Re: B&C ME10
Posted by ttan98 on Thu, 14 Feb 2008 03:06:02 GMT
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I bought the combo from PE, the BE10 ia recommended by Magnetar and yes it made from Mylar, I am very happy with it, very smooth even when new. I cross over at the minimun freq.,ie 2.5Khz min freq. recommended by the manufacturer. It sounds fine to me.I have not measured the combo, remember this combo is very cheap and when compared to the expensive brother, BE250(if you have the money buy this unit), I strongly suspect it will dip at higher frequencies, probably above 10-12Khz. I use an active x-over I can easily equalise it.The combo is well worth a try, less than $60 per side.

Subject: Re: B&C ME10

Posted by ttan98 on Thu, 14 Feb 2008 03:09:47 GMT
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Sorry wrong lettering, replace BE with DE, ie DE10 and DE250 are the correct model.

Subject: Re: B&C ME10
Posted by Barry on Thu, 14 Feb 2008 16:46:27 GMT
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Thanks for all the info.It will help me decide whether or not to spend the money on this experiment. Barry