Subject: Bill: Re: Your Line Array Design Paper for AudioExpress? Only if no one ever makes another 4 incher Posted by Jim Griffin on Wed, 14 Jul 2004 20:03:54 GMT View Forum Message <> Reply to Message

Bill. The facts are that if you buy another 4" driver (from among the various ones you suggest), it is very likely that you would need to redo the crossover network and perhaps more of your line array design. You acknowledge yourself that the drivers you used are no longer available--hence, your design is clearly obsolete even now. That to me, suggests a new design would have to be developed by the readers of your article who wish to pursue a line array design. Others would have to have enough knowledge to select drivers that would meet the target performance of your design or have the ability to derive an iterative design. Hence, your article would only be useful as to how to generally approach a line array design. But, no one could duplicate your design without reworking it. That does not serve the person who lacks the test equipment and the expertise to develop a new crossover design. Line arrays are difficult enough to measure and implement a crossover for knowledgeable designers much less someone who wants to achieve good results without having a lot of speaker design expertise. Furthermore, I would suggest that your line array design as you have presented in the photo and replies on other forums has significant shortcomings in my opinion. First, the woofer line is too short to function as a near field line array which has significant advantages over a line array that functions mainly in the far field (I'm sure that you have read my near field line array white paper to understand my viewpoint why near field operation is better for a home application). Second, the spacing between the drivers will cause comb lining effects from both the woofer and tweeter lines in your design (again see my white paper for suggested spacings and crossover frequency limitations). Third, the sound quality of the drivers you are suggesting (that is if someone else could purchase/duplicate equivalent performance) is certainly not going to yield a speaker that exhibits even mid-fi or better performance to the listener. Sure it would be nice to have another technical paper to add to your resume. To me your line array paper would be just entertaining reading but not a template for others to follow. I dropped my subscription to AudioExpress a couple of years ago because this publication ceased to be useful to me (and others) as you can attain more current and more useful information from the internet for the price of logging-on. Jim Near Field Line Array White Paper