
Subject: Two different kinds of Line arrays

Posted by [Marlboro](#) on Wed, 25 Apr 2007 17:12:33 GMT

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From our recent discussions there appear to be two different kinds of line arrays. Both try to stay true to Jim Griffin's research, but attack it from a different angle. 1. This first one is most often done and echo's the Rick Craig model. It consists of a basic 2-way system with 6-8 inch woofer line and a 35 - 60 inch line of ribbon or planar tweeters. Sometimes a sub woofer is added to the picture. Crossovers can be either passive or electronic, and are usually somewhere between 1200 and 1600. Speakers are rather high in price: woofers usually in range of the aurum cantus at about \$70 a piece and tweeters usually planars or ribbons costing \$35 - \$70 a piece. Considering that it is a two way this is essential. Sometimes the ART approach is taken where there is just one dome tweeter in the center. This seems to work even though the tweeter portion is not in the nearfield. 2. A second approach is the one that I've taken. While I'm sure that others have also done this, I don't know of anyone who has (speak up!) My approach is a bit different in that it is a 3 ways design. There are separate two woofers, a mid range that only handles from about 150 to 300 and then crosses again at between 2500 and 3500. There is a tweeter line which may be planars or could be dome tweeters. If its domes, then they either have to be already at at .9 c-to-c or they have to have flanges (like the Dayton Neo20A) that can be cut to that c-to-c. Since it is a three way, and the bass is picked up by a quality woofer, the midranges can be something that doesn't have to cover the bass range, and this means 3 inchers can be used. Also, in my design as much of the sensitive human hearing range is without a crossover, the mid needs to be small enough to adequately handle the lower tweeter range starting at about 1800hz. My design does not use passive crossovers; it uses an electronic three way with separate amps for the bass, mid, and tweeter lines. _____ Are there other basic design differences out there? Either of the two designs argue with each other about which is better. The first one which is a two way, argues that one has to use very expensive components to get a decent sound. The second argues that using a three way allows one to lower the individual cost of the components, but that electronic Tri-amping must be used to get the best benefit out of the system. Neither the twain shall meet? Marlboro
