Subject: Re: Line Array Assistance

Posted by AudioFred on Sat, 06 Aug 2011 12:20:52 GMT

View Forum Message <> Reply to Message

My preference by far is for a two-way array of woofers with a line of ribbon or planar tweeters. Few speakers can match the scale and dynamic capability of a line array using high quality woofers and tweeters. Unfortunately, a line array using high quality woofers and ribbbons or planars will set you back about \$3K or more if you DIY. Also, the crossover design can be unforgiving with a line array, and simple formulae don't seem to work so well, so you need a competent crossover designed for that speaker.

The array of woofers with a single high sensitivity dome tweeter is a compromise whose only purpose is to create a high sensitivity speaker on an extreme budget. It offers some of the characteristics of a line array, but combining a woofer array with a single tweeter doesn't provide the coherence of a two-way single woofer speaker or a woofer-tweeter array.

The full range driver line array, with equalization to counteract the comb filtering produced by an array of 3" drivers, doesn't provide the treble resolution you get from a single high quality tweeter or an array of high quality tweeters.

So here's the bottom line: If I had a budget of about \$1,500 for parts I would build a woofer-tweeter array using a line of relatively inexpensive woofers with a line of Dayton planar tweeters. Selah Audio offers this as the AurArray kit: http://www.selahaudio.com/id252.html

With a \$2.5K to \$3K budget I would choose the GR Research LS-6 or LS-9 kits. I've heard both and they are awesome. They aren't advertised on the GR web page, but I undestand they are available as kits.

If I won the lottery and had a \$20-30K budget for multi channel amplification, DEQX processing, and ultra high quality drivers, I would have Rick Craig throw a Julietta array together for me and would pay his first class airfare to come over and set it up in the media room of my new mansion. Or maybe I would just send my Gulfstream jet over to Raleigh to fetch him. http://www.selahaudio.com/id195.html

If I needed a high sensitivity speaker for use with a flea power amp, and my budget were about \$1,000 (for parts plus equalizer) I would consider the Murphy Corner Array or some variation on that design. If my budget were \$400 I would consider the Art Array.

But if I were planning to use the typical 100w/ch solid state amp or a 30 watt/ch or greater tube amp, at each of the above two price points (\$1,000 and \$400) I would choose a two-way point source speaker using higher quality drivers and crossover parts.

Hope this helps.