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Subject: Re: A few questions

Posted by [Bill Wassilak](#) on Tue, 09 Mar 2004 19:23:51 GMT

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>>All the best large concerts have flown arrays that give long throw right?Nope, the concert arrays form a line that supposedly (and I use that term loosely) change the shape of the sound from a spherical wave front to a cylindrical wave front, and none of the devices in a line array should interfere with each other, it makes the vertical dispersion very narrow and does not effect the horizontal dispersion. And the frequency that it does this at depends on the length of the line.

>>How does this translate to benefit at home in hifi speakers? Keeps the sound from bouncing off the ceiling and floor better imaging I'd guess you would call it.>>What are the best connection diagrams for home use?Not sure Jim Griffen will be able to help you out there. I'm into bi-amping/tri-amping etc. >>I know there are different array types, but don't have a clue which is which. What are the pros and cons of each one?(Some pros and cons to ponder, theres more)Point Source:Pros- used when you can't fly a line array easily, narrow places, smaller places etc. easier to keep the sound off the wallsCons-Falls off 6db for doubling of distance. Can cause comb filtering if not arrayed properly.Line array:Pros- Used in larger areas, even frequency response if flown right, falls off only 3db for doubling of distance.Cons- Need a certain amount of cabinets to form the line, harder to set up so you don't get interference from 1 cabinet to the next. Harder to use in smaller places.>>I see Eminence has made a new speaker designed to be used in arrays. Has anybody here built speakers with them?I havn't, but they look mainly for the midbass-midrange of an array.If you can't tell I mainly know about the pro-audio line arrays not the ones used for hi-fi. Theres a link at the bottom of the page that explains the basic operating principles of a line array.HTHBill W.

Basic line array principle