
Subject: Driver spacing... Pro stuff
Posted by [DSM](#) on Fri, 06 Aug 2004 03:27:41 GMT
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For those wanting to roll their own Pro line array. Its often seen where two LF drivers are mounted side by side horizontal. Beware this can cause severe lobing. This week I did several test runs in the middle of nowhere (a big field) to prevent any interference. I noted as much as 20db nulls in the horizontal plane with drivers spaced 12" CTC at as low as 500 hz. Most are using only one driver to the hf xover. The other is low passed at a point depending on spacing. It is an obvious problem easily checked. Keep 'em tightly spaced. Listen for nulls...start over. The empirical method. Its all a learning experience.

Subject: This isn't anything new.
Posted by [Bill Fitzmaurice](#) on Fri, 06 Aug 2004 15:20:51 GMT
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In fact this phenomena was identified some 60 years ago, and was the basis for the 'original' line arrays, the column speaker. Side by side speaker mounting was made popular primarily due to the cabinets designed by Leo Fender and Jim Marshall. Leo did not play guitar, Jim was a drummer, and neither was an audio engineer. If the original Twin Reverb had been designed by Harry Olsen instead of Leo Fender it would have had the two twelves vertically stacked.

Subject: Really ???
Posted by [DSM](#) on Fri, 06 Aug 2004 19:15:48 GMT
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I thought about making 'em like a twin reverb. But, then I thought, how about making 'em W horns. Hey, now those look cool don't they Bill. Just pullin' your chain. I wasn't sure in my original post if folks knew one driver was low passed or not. I see alot of people trying to solve the problem by a crossfire orientation. It don't work. CTC spacing is CTC spacing. Ain't that right Jim G.

Subject: Re: Really ???
Posted by [Bill Fitzmaurice](#) on Fri, 06 Aug 2004 19:52:44 GMT
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No, crossfiring doesn't alter the fact that differing pathlengths lead to phase anomalies. Crossfiring is useful in broadening horizontal dispersion but once you get to a half-wavelength spacing phase

cancellation will occur.