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Subject: Smoothing Effect on FR of multiple speakers  
Posted by [Still Marlboro](#) on Tue, 01 Sep 2009 14:47:01 GMT  
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Bill Fitzmaurice commented some years ago on a smoothing effect of the FR of having multiple speakers in a line array. It was his contention that since each speaker's FR is not exactly the same that statistically we could expect, and that measurement-wise he saw, the speakers to regress their responses closer to an average between all of them.

I do believe this to be true. But I also believe that it won't work unless each speaker is isolated from its "peers". In a line of tweeters, this is not an issue, since tweeters are by their nature insulated from each other. But many line arrays have as tendency to put all the midranges in one box all to reinforce each others deficiency resonances with sound from the back impacting them. And with cabinets that are pretty shallow this gets worse.

So I believe this characteristic only works when each midrange is physically and acoustically isolated from its peers.

Marlboro(returning to Marlboro from Eric J since I cannot get the system to recognize my password on the origianl Marlboro)

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