Subject: HT InWall array
Posted by SE-Raider on Mon, 17 Jul 2006 20:51:09 GMT
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I am tying to decide between point source and Line array or line array hybrid for my HT room. What line array design would be reasonable for such an application. Given that I will be doing a 6.1 system to THX specs, the cumulative cost of that many linw arrays could get prohibitive pretty fast. I'd like to do in wall for a number of practical and aethetic reasons. I will also be integrating sound treatment into the design as well.Any recommendations for possible line arrays for such an application are appreciated. As a refence I am considering a variation of Selah's Hiddenites as one alternative if I go point source. I am concerned only with dispertion in the seated position for this room.Any recommendations appreciated.

Subject: Re: HT InWall array
Posted by Chris Brunhaver on Tue, 18 Jul 2006 15:09:52 GMT
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Since you're trying to do a theater with THX specs, line arrays are not required (or desired) all the way around. If you have an acoustically transparent screen, you could do line array three across the front. The sides and rear do not need near the same dynamic capability and so a more modest dipole design could be used.-Chris

Subject: Re: HT InWall array
Posted by justinc on Wed, 19 Jul 2006 16:14:26 GMT
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Could you explain why it would be undesireable to do line arrays all the way around, say all 7 locations. I had been thinking it might be fun to try something similar, with line array of subwoofers up front also. thanks

Subject: Re: HT InWall array
Posted by Chris Brunhaver on Thu, 20 Jul 2006 15:03:15 GMT
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Well, one of the benefits of the line array design is that its controlled directivity allows for more direct field (versus reverberant field) response at the listening position. While this is good for imaging and localization of sounds, it is not what you want for a side and rear channels in a

theater (according to THX and others). For that, a dipole speaker with the null aimed at the listening position (so as to get essentially no direct response from the speaker) is recommended. That way, you have very diffuse and enveloping surround channels, which is especially good when you have to sit at a closer than optimal distance to the surrounds. However, there can be an issue with LF power response (if you are running speakers dipole throughout their whole range) so sometimes a mix of dipole sides and rear center (if used) can be augmented by monopole rears in the back corners. This particular suggestion came out of Earl Geddes "Premium Home Theater" book. Also, the increased power handling of a line array simply isn't needed for the side and rear channels and you can go with something more modest, output wise.

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Subject: Re: HT InWall array
Posted by Anonymous on Thu, 20 Jul 2006 16:02:25 GMT
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>>I had been thinking it might be fun One reason we DIY..... keyword: funMake some test boxes and have some fun trying it out.

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Subject: any examples
Posted by SE-Raider on Tue, 25 Jul 2006 22:42:52 GMT
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Has anyone done a line array T setup or Line array/dipole combination? What were the results.

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Subject: Re: any examples
Posted by Chris Brunhaver on Fri, 28 Jul 2006 19:03:46 GMT
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I work at a manufacturer of residential in-wall line array speakers and so as such have had a lot of experience with them. What sort of information are you looking for?I will say that not all line arrays are created equal and so somebody's experience with a DIY line array with poor coupling or other design problems may be somewhat different.-Chris

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Subject: Re: any examples
Posted by SE-Raider on Fri, 28 Jul 2006 21:28:28 GMT

I was looking for examples of line arrays implemented as an HT solution. I would like a combination HT and listening room. I could consider in-wall line arrays or a combination of line arrays and ribbon/hybrids for the surrounds, or a combination of stand-alone line arrays in combination with other speakers. I was basically looking for implemetnations of line arrays in HT rooms, DIY or commercial.Thanks for the response.