Subject: Arrays speaker placement "in wall"
Posted by Brad on Tue, 25 Apr 2006 12:27:43 GMT
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With all the talk about line arrays and speaker placement what would be all the pros and cons of doing an array “in wall”? Brad

Subject: Re: Arrays speaker placement "in wall"
Posted by Jim Griffin on Tue, 25 Apr 2006 23:16:32 GMT
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Brad,One positive factor would be that in-wall you have essentially an infinite baffle so the speaker always radiates into 2 pi space so no baffle step compensation (up to a 6 dB impact on sensitivity) is necessary. You would have the ability to conceal (if SAF is a factor and I assume that it is) and present a clean, uncluttered environment within your room--no speaker boxes in the mix. Not everyone has a room large enough to house a set of line arrays and in-wall you can alleviate that worry. The negative side includes that absence of flexibility to move the speaker enclosures around for best sound within the room. Plus you effectively will make your room layout set as any future movement of furniture around the room may not yield acceptable sound. Jim

Subject: Re: Arrays speaker placement "in wall"
Posted by Chris Brunhaver on Thu, 27 Apr 2006 16:41:12 GMT
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I have had some very good experiences with in-wall line arrays. As for the pros, if done right (a big if), you can make a very "stealth" install with great performance, even rivaling the best freestanding speakers. I think that the biggest con is that the average stud cavity doesn't make a very good speaker box and so, for high performance, wall preparation/construction is definitely a factor. There is also the issue of finding good, shallow-mount driver units (especially woofers) but there are some interesting approaches out there. Feel free to bump me an email if you want to speak in more detail.-Chris

Subject: Re: Arrays speaker placement "in wall"
Posted by jimbop on Sun, 30 Apr 2006 01:40:53 GMT
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Sounds like an interesting approach to surround sound for a thater system.

Subject: Re: Arrays speaker placement "in wall"
Posted by Brad on Tue, 02 May 2006 12:41:00 GMT
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I have a room that is 32’ long , 22’ wide and 18’ ceiling. One long wall is about 50% open to the rest of the house. The 22’ wall with the array would be the theater wall with the usual seating. The far end there is a pool table-bar area. I would like to set up a speaker system so if I put music on the people sitting in the sitting area are not over powered and the pool area can here the music. I placed my Infinity 2.5’s on the theater end and to get the volume in the pool area the seating area is so over powered. This is what is getting me to think of the arrays with the 3db drop off. The speaker side wall is an exterior wall with 2x6. I was thinking of cutting out one of the studs with the correct bracing to get the volume need. Maybe now that I am thinking more about this I could bore holes into the next cavity? The single 16” cavity, I think, would be to small after (cabinet) reinforcement, need to do some calcs. I have always loved the ribbon sound so I would look into a 5’ array of the BG neo3PDRs with PE RS 6” woofers. I would love to try the BG 10s with the BG 3s but I do not think BG is going to let them go to the public. Two subs for the lower end.I wonder if the whole length of the room would be in the near field? I saw a calc somewhere; I’ll have to look for it. A post a while back was talking about the x-over and the near field far field. When going from the near to far what would be the sound differences perceived and measured?Brad

Subject: Re: Arrays speaker placement "in wall"
Posted by Jim Griffin on Tue, 02 May 2006 17:46:45 GMT
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Brad,Chris sent me a link to the latest in-wall line arrays from B-G. You should look up this URL:http://www.bgcorp.com/productLine.php?id=16The Radia R-600 uses Neo 10 and 3 drivers. These models are sold through dealers and as a finished product likely are not cheap but you can do the leg work to ascertain the numbers. Speakercraft sells several models of in-wall line arrays including the Starlet series at:http://www.speakercraft.com/our_products/starlet/index.htmThe near/far field stuff is in my white paper linked below. You should strive to place as much of your room into the near field as reasonable. Jim
Near Field Line Array White Paper