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Subject: Cornerhorn answer

Posted by [Wayne Parham](#) on Mon, 31 Jan 2005 05:01:28 GMT

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What you're describing is actually the ideal situation for cornerhorns. If the room is large enough, the fundamental room modes are shifted down below the audible range. And the best listening area is within 30° from both speakers. You don't have to be right on axis, but it's best if you're at nearly the same angle to both speakers. One thing to look at is the distance between speakers and the distance to walls. Consider that there will be cancellation at the frequency where the distance between woofers is 1/2 wave. There will also be self-cancellation at the frequency where the distance between the woofer and a wall is 1/4 wave. So this gives a range of distances to avoid, and if you're in this range of distances, then different placements might be chosen instead. The idea is to place your speakers strategically so that nulls don't form in your target listening area. In some cases, you may want to stagger them so nulls that form as a result of a single woofer are filled by another woofer. For more information about room layout, I might suggest these papers: Sound System Design Reference Manual, George Augspurger Loudspeakers and Rooms for Multichannel Audio Reproduction, Part 1, Floyd Toole Loudspeakers and Rooms for Multichannel Audio Reproduction, Part 2, Floyd Toole Loudspeakers and Rooms for Multichannel Audio Reproduction, Part 3, Floyd Toole

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