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Subject: HT questions and 7pi.

Posted by [Kim Schultz](#) on Sat, 20 Aug 2005 14:08:13 GMT

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Hi Wayne. I have a dedicated HT room in the basement with the following dimensions: (WxDxH) 4.38m x 5.48m x 2.35m. And I want to use 7pi's as front, and make a center speaker with the same tweeter horn, and pi midhorn and a bassbox with the same woofer. 1) Would it be best to set up the front speakers on the short or the long wall? 2) Would the 7pi's overpower my room if I used them as rear speakers too? 3) Are the 7pi's too forward sounding for rear speakers, would I be better off with a direct radiator speaker for this? Placing the front speakers on the short wall will make the listening position in the middle of the room, and the rear speakers placed behind the listening position. While placing them on the long wall, the couch would have to be up against the back wall and the rear's too. Don't know how much this matters though. Regards Kim

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Subject: Re: HT questions and 7pi.

Posted by [Wayne Parham](#) on Sun, 21 Aug 2005 02:16:11 GMT

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room, but it may be worthwhile to analyze the room modes. You'll have enough speakers that you can setup for best sound averaging. The good thing about having speakers in corners is that you know the sound emanates from the corner apex and is limited to the 90° wall angle, consistently for each speaker. But with four speakers in a relatively small room, it might be good to shift the bass bins forward or inward a bit from the rear wall, to average the sound field and possibly fill in a null that might have otherwise formed. So take a minute to look at the references below, and you may want to spend some time and do an analysis of your room. That way you'll know if you want

forward or something. Loudspeakers and Rooms - Working Together Whitepaper: Loudspeakers and Rooms for Multichannel Audio Reproduction, Part 1 Whitepaper: Loudspeakers and Rooms for Multichannel Audio Reproduction, Part 2 Whitepaper: Loudspeakers and Rooms for Multichannel Audio Reproduction, Part 3 Whitepaper: The Acoustical Design of Home Theaters Whitepaper: Audio - Science in the Service of Art Whitepaper: How Many Channels Do We Need To Believe That We Are "There"?

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Subject: Re: HT questions and 7pi.

Posted by [Kim Schultz](#) on Sun, 21 Aug 2005 04:37:45 GMT

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Thx Wayne. I suspected the short wall was the way to go for placing the front on. And I like to have the rear's behind me instead of to the sides. With analysis, do you mean calculating the room

modes?I have a Dlsa measuring system can I use that for anything room related?regardsKim

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Subject: Re: HT questions and 7pi.

Posted by [Wayne Parham](#) on Sun, 21 Aug 2005 17:43:00 GMT

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What you might want to do is to model the room mathematically, to get an idea of what you're working with. Then maybe once you get close and have everything built and installed, you can make measurements at several positions to fine tune the installation. Check out Loudspeakers and Rooms, Part 3. It goes into the treatment of room modes in some detail. The Room Mode Calculator mentioned on page 11 is available here. The article called Loudspeakers and Rooms - Working Together is another good article. It has pretty much the same information, but it's presented a little bit differently.

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