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Subject: Re: New HT - Need Advice on Speakers - 4pis or 7pis for main, 2pis, and what to use for bass

Posted by [Wayne Parham](#) on Sun, 04 Sep 2011 03:18:53 GMT

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Answers by numbers:

matched-directivity two-way loudspeaker. The difference is that a constant directivity cornerhorn provides constant directivity from the Schroeder frequency up, all the way through the audio band.

A matched-directivity two-way speaker is the next best thing, having a pattern that collapses gradually up to the crossover point, where it becomes constant. More information is available in the following article:

High-Fidelity Uniform-Directivity LoudspeakersIf you have the right corners, I'd suggest the seven

corners that are unobstructed for at least five or six feet, and it's usually best for them to be placed along a short wall. You need to be able to sit back behind where their forward axes cross, which is 1/2 the distance that the wall is long. In other words, if you are placing the speakers at each end of a 20 foot wall, you have to be able to sit more than 10 feet back from that wall. That's an ideal placement.

If you don't have the right corners, the matched-directivity two-way speaker is the next best thing. Run them with flanking subs for the best results. A matched-directivity two-way with flanking subs is 95% as good as a constant directivity cornerhorn, and has the benefit of greater placement flexibility. But to get this kind of performance, you'll need to set them up as shown in the document referenced above, similarly to the cornerhorns, with 45° tow-in, forward axes crossed in front of the listeners and flanking subs a couple feet away from each main speaker in each axis.

I like having the mains on stands, and flanking subs on the floor beside them and behind them. Like this:

2. All models with the (upgrade) DE250 compression driver reach 18kHz. They're smooth and extended, and offer the dynamics and low distortion that only a compression driver can provide. Other tweeters can hit 20kHz, and sometimes even more. But none can do it with the dynamics of a compression driver. I'd trade the dynamics for that last 2kHz any day.

good, clean, powerful bass and their relatively small size allow you to use several of them in a multisub configuration. Use at least two as flanking subs, and possibly two more at the other side of the room, if space permits. More information on that in the following link:

Room modes, multisubs and flanking subs4. A "regular" receiver is all that's needed to drive any

best speakers and driving them with a mediocre amp or source.

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