
Subject: Re: 3Pi speakers - various questions
Posted by [audiothings](#) on Thu, 20 Sep 2012 07:51:29 GMT
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Quote:Second, don't run the mains sealed, but rather keep them ported. In fact, don't deviate from the plans at all. I don't say this to be arrogant, but just to prevent you from re-inventing the wheel. The alignment chosen is very smooth, provides good extension and limits excursion. And the layout of the midwoofer and port in the box prevents any standing wave nodes from creating anomalies too. So you really can't beat that system. A sealed box will just reduce extension and increase excursion, and neither are improvements.

Thank you Wayne. I have incorporated the above suggestions into my current design idea.

Quote:First, keep the subs in separate boxes from the mains, so you can use them as distributed multisubs. This will help smooth room modes.

As I mentioned, I have read your work, and that of Dr. Geddes. In this case, there are a couple of reasons why I am disinclined to take this route.

First - I am building the room according to a very specific design approach - the 'Non Environment' method, described by Philip Newell, in his book, 'Recording Studio Design'. This calls for all surfaces with the exception of the floor and the front wall to be fully absorbent. All surfaces are being treated with full absorption, down to below 50 Hz... I believe this is called a hemi-anechoic room. I do not expect the modal problems that are common to domestic listening environments, to be much of an issue here. This approach also calls for the speakers to be flush mounted in the angled, heavy wall, and I do not wish to deviate from these design fundamentals.

Secondly, and more importantly, there are severe space considerations. The room will frequently be occupied by multiple people and their workstations. Also, I have not represented much of the equipment and amenities, in my pic... We need all the space we can get...

With this in mind, could you take a look at the following redesign, based on your inputs? The internal volume of these 3pi's are identical to your specification, the only deviation being the usage of 1" MDF instead of the 5/8" board you have specified. I would specifically like you to look at whether the height of the respective drivers in relation to the ear level is appropriate.

Also, is 440 watts per channel @ 8 ohms sufficient to drive them to 110 dB?

Thanks again,

File Attachments

1) [howabouthis.jpg](#), downloaded 4314 times
