Subject: 4 pi & 7 pi
Posted by spears_tears on Mon, 06 Jan 2003 18:10:32 GMT
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Hello.I am looking for high efficiency speakers for a vintage tube amp and later on a SET amp. Can anyone tell me what the difference is between the Theatre series, Bass Reflex speaker and the Corner Horn speaker. Both use the same horn and driver, so how do the differing designs change the sound.Could someone direct me to any reviews of these speakers too.Thank you, Spears.

Subject: Re: 4 pi & 7 pi
Posted by Wayne Parham on Mon, 06 Jan 2003 18:37:02 GMT
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The main difference in the cornerhorn is in the way the woofer drives the room. In the bass-reflex model, it is simply a direct radiator. But in the cornerhorn, it is positioned near the apex of the room corner, which places the woofer in eighth-space and forms a large conical horn expansion

Subject: Re: 4 pi & 7 pi
Posted by wasteh202 on Mon, 06 Jan 2003 18:50:45 GMT
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Wayne, while we are on the subject here with the Theater 4 & 7(corner-horn). What is the reason for the cornerhorn having 3db more than the bass-reflex? Does it have to do with the corner-loading? Is the XO the same? I give up... what is it?

Subject: One question Wayne
Posted by Edwin on Mon, 06 Jan 2003 19:44:26 GMT
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Hi,You said that if you take the cornerhorns away from the corner the effect will be a direct radiating speaker. Basing on this the Theater 7 will be a Theater 4? I don't have corners right now but will it be better to build a Theater 7 now and use it like a Theater 4 until such time that I can build a dedicated listening room with good corners? This question is only based on economics :-). Thanks

Subject: Re: 4 pi & 7 pi
Posted by Wayne Parham on Tue, 07 Jan 2003 02:48:27 GMT
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When compared to a bass-reflex speaker, the 3dB gain difference is due to an assumption that the bass-reflex speaker will radiate into quarter-space. Since the cornerhorn is used in eighth-space, there is 3dB gain in comparison. If we were comparing to free-space, we would have 9dB gain. See Chapter 3 of George Augsperger's "JBL Professional Sound System Design Manual" for more information.

Subject: That's a tough one, Edwin
Posted by Wayne Parham on Tue, 07 Jan 2003 03:04:55 GMT
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Subject: Re: good stuff to learn--thanks
Posted by wasteh202 on Tue, 07 Jan 2003 04:23:18 GMT
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Wayne, you are very paitent and always willlling to help us listeners who do not have the knowledge and experience that you do. Thanks for taking the time to explain some things to me and help me to learn some new principals, and I never have to wait long to hear from you.BTW--I'm sure I'll have more questions for you in the future. I got the 2Pi towers complete except for the finish and trim. I'll post pics soon. I gotta say....THEY ROCK!!!!!

Subject: Now it's even harder to decide :-)
Posted by Edwin on Tue, 07 Jan 2003 06:11:00 GMT
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Thanks Wayne, I think a few sleepless night will do it! I just hope the right thing to do hits me pretty soon. Edwin

Subject: Re: 4 pi & 7 pi
Posted by JLapaire on Tue, 07 Jan 2003 09:33:17 GMT
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How about this? Build a 7 without the standoff section on the back and with the HF separate on top of the box. That way you can face the boxes into corners if you have them. The difference is in the lowest bass and is worth some effort if you (like me) want the deep stuff.Actually, building the 7 without the standoff section might make corner placement easier if you have baseboard heat, since the standoff won't let the box go all the way into the corner.I tried something like this, can email pics if you like.John

Subject: Yes, but...
Posted by mollecon on Tue, 07 Jan 2003 19:22:37 GMT
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After all, the reflex & the cornerhorn do share the same drivers. It could be argued that building a new box & changing to another X-over wasn't THAT big a deal... :-) But that's provided you DIY, of course.

Subject: Re: Thanks, just a few more Questions
Posted by spears_tears on Wed, 08 Jan 2003 14:46:42 GMT
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I have 2 possible positions for the corner horns, i live in an old cottage and they will be upstares;-In the corner the left hand speaker will be placed, the wall on the left hand side is 1.5 meters high, and from there the ceeling slopes up towards the center of the room. The right speaker would be placed in a perfect corner. Will this produce an unbalenced sound? should i counteract this by building a slope above the right hand speaker, to form an arch?-Both speakers are in similar corners but the wall behind both is only 1.5 meters high and it slopes up and in towards the middle of the room. But the room is an 'L' or 'foot' shape and the right hand speaker is in the toe of the foot, so i would listen off ballenced.Sorry for posing such a confusing question. I would be very greatefull to recieve any thoughts on my corners! Regards and thanks for all the help.

Subject: Re: 4 pi & 7 pi
Posted by wasteh202 on Wed, 08 Jan 2003 14:58:22 GMT
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I might be interested in such an arrangement. I am begining to consider building the Theater 7 instead of the Theater 4 myself. I would be interested in taking a look at those pics myself.Could you please e-mail to "listener26@hotmail.com" if it will not go through there because of the size then mail to "geckog21@charter.net" Thanks

Subject: You've got mail!
Posted by Wayne Parham on Wed, 08 Jan 2003 15:25:03 GMT
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Subject: Room symmetry
Posted by Wayne Parham on Wed, 08 Jan 2003 15:31:14 GMT
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I've run into these kinds of things with cornerhorns before. Sometimes, rooms that are highly unsymmetrical like this are problems, sometimes they're not. In general, the corner expansion should not be uneven or you're right to guess that the sound may not be balanced.

Subject: Re: 4 pi & 7 pi
Posted by JLM on Wed, 08 Jan 2003 19:39:18 GMT
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I've wondered about the same thing.Wayne, couldn't you have separate tweeter and woofer cabinets, with both the 4Pi and 7Pi crossovers installed? The tweeter cabinets would have separate binding posts with cables connecting to the bas boxes. Then you could install both crossovers in each of the bass cabinets with separate binding posts for bass reflex 4Pi use and corner horn 7 Pi use on the opposite sides of the cabinets.Wayne, is the "home plate" shaped top and bottom cabinet pieces and the vertical pieces in the corners needed for acoustic purposes? Couldn't I just promise to position them correctly (maybe using a template)? (Then the 7Pi cabinets would be simple rectangles.)

Subject: Re: 4 pi & 7 pi
Posted by Wayne Parham on Wed, 08 Jan 2003 22:01:38 GMT
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Sure, you can mount the tweeter externally. That's how most people do it, actually. As for the shape of the bass bin, the rear panels are a positioning device.

Subject: You've got more mail!
Posted by JLapaire on Thu, 09 Jan 2003 09:26:52 GMT
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I sent them to your Hotmail account.If that doesn't work I'll try the other account.John