
Subject: The corners

Posted by [mamoss](#) on Fri, 07 Jul 2017 19:06:11 GMT

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What do corners have to do with bass traps? Is it because bass mainly concentrates in these areas? I read that these traps adsorb much lower frequencies (as a result of their thickness).

Subject: Re: The corners

Posted by [Wayne Parham](#) on Sat, 08 Jul 2017 17:36:54 GMT

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Corners are associated with all room modes - axial, tangential and oblique. So they are effective places to damp bass sound. But the best way to damp room modes is with panel absorbers.

Look them up:

Panel Absorbers

Subject: Re: The corners

Posted by [johnnycamp5](#) on Wed, 12 Jul 2017 19:55:00 GMT

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Speaking of the corners, I found this comment on an audio website, and it really confuses me.-

Quote-

"1) From my car projects, I've learned that using existing boundaries can allow one to make horns much much smaller than what would be "ideal." The typical solution is to use the corner of a home. I have tried corner horns, and I do not like the 'headphone' effect. Basically corner horns have no reflections, and that makes them sound a bit uninvolved, like a giant set of headphones".

Anyone care to comment on this?

Personally, I love headphones for the fact they have no reflections.

And I find them "more" involving because of this.

In this case, "Beauty is in the eye of the beholder".

Lol.

Subject: Re: The corners

Posted by [Wayne Parham](#) on Thu, 13 Jul 2017 14:26:02 GMT

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He hit the nail on the head, saying a properly built constant directivity cornerhorn has no reflections.

But I must admit, there are not many loudspeaker models that do the trick. All sound sources must be acoustically close to the corner or they must be directional. Just placing a typical loudspeaker in the corner won't do because it isn't close enough acoustically through the passband. If done wrong, it's most noticeable in the midrange.

Subject: Re: The corners

Posted by [johnnycamp5](#) on Thu, 13 Jul 2017 19:18:45 GMT

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I see.

So by his description, it sounds like he may have had properly designed corner horns.

The part I find interesting is the comment that because there are no reflections-

"It makes them sound a bit uninvolved, like a giant set of headphones".

I have read many times, how some studio engineers prefer listening to typical stereo mains at home, even though they have the luxury of working with flush mounted speakers all day.

I guess what I'm saying is, I'm not sure I understand why someone would prefer hearing these reflections, like living with a compromise that does not have to be tolerated.

Perhaps it is just to change things up once in a while,
an excuse to build something new.

As a diy'er, I am guilty of this myself lol.

Subject: Re: The corners

Posted by [Wayne Parham](#) on Thu, 13 Jul 2017 21:29:16 GMT

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I took that inference from the OP comments too.

I digressed a bit about how a speaker must be acoustically close to the corner to gain the benefit of constant directivity. That is a significant fact, very important for the proper implementation of a constant directivity cornerhorn.

But like you said, if a person uses constant directivity cornerhorns that are designed and setup properly, they won't have any early reflections. The wavefront launch is perfectly pure. No other loudspeaker configuration can do that indoors, so it sounds different than other loudspeakers. It is sort of like headphones.

Speaker placement and wavefront launch
