Subject: SBIR
Posted by Barryso on Fri, 12 Apr 2024 19:13:32 GMT
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Curious about speaker boundary interference. In most illustrations they show the distance from the front baffle of the speaker to the wall. A few calculations later you have the frequency where the null happens.

But my 4 pi's aren't flat against the wall. They are angled so the tweeters cross a few feet in front of the sweet spot. So the front corners of the speakers are 14" and 24" from the wall. What happens with SBIR in this situation?

Subject: Re: SBIR
Posted by Wayne Parham on Sat, 13 Apr 2024 14:11:17 GMT
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That creates a notch around 80Hz to 120Hz from SBIR, which is very common. Most people place speakers about this far from the wall behind them, so the SBIR notch in this frequency range is very common. Scan the internet for in-room response charts and you'll see what I mean.

It's one of the main things that flanking subs are intended to mitigate.

Subject: Re: SBIR
Posted by Barryso on Thu, 25 Apr 2024 19:52:28 GMT
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Thanks Wayne.

Turns out what I'm trying to figure out doesn't have anything to do with SBIR.

I recently re-read your FAQ on wavefront launch and moved the speakers closer to the wall. Discovered they had less bass when their backs were up against the wall then when toed in to cross in front of the sweet spot. Kind of the exact opposite of what was expected.

Thought it might have something to do with SBIR but it turns out it was just the coffee tables. When the speakers are flat against the wall they are pointed on either side of the coffee tables. But toed in they point right at the tables (which are solid wood) and somehow they are re-enforcing bass. Move the tables away and the bass goes down. Cool effect.

In any event, the extra bass is nice. So now we have, officially, audiophile coffee tables.

:)

Subject: Re: SBIR
Posted by Wayne Parham on Thu, 25 Apr 2024 19:53:59 GMT
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Oh, wow, isn't that something?!!