Subject: Floor bounce
Posted by Geoserv on Mon, 14 May 2007 17:12:44 GMT
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What do you do to prevent the notch from floor bounce? If a single driver is used, do you place it low to the ground to prevent floor bounce or place it high on the baffle near ear level and just live with a notch in response from floor bounce?

Subject: Re: Floor bounce
Posted by Bob Brines on Tue, 15 May 2007 15:25:28 GMT
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As you suggest, there isn't much that you can do about floor bounce with a single driver speaker. You could put the driver at the floor, but then the sound stage will be on the floor and that is really annoying. The drivers on my speakers work out to be ~32" off of the floor. The sound stage is a little low, but livable. I find that the best sound stage is with the driver ~45" off of the floor. One thing you might try is to put a coffee table or large hassock between you and the speakers. That will block a large part of the floor bounce and the bounce off of the table will be at a higher frequency. Maybe a good thing, maybe not.Bob

Subject: Re: Floor bounce
Posted by akhilesh on Wed, 16 May 2007 18:06:37 GMT
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HI,You could put the BR port or TL port close to floor level, and the driver high up (listening height). This is the design most folks use. -akhilesh

Subject: Re: Floor bounce
Posted by Wayne Parham on Sat, 19 May 2007 03:56:12 GMT
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When a driver is placed at ear height, the frequency where the floor bounce notch occurs is well above the port frequency. So port position isn't as relevent as driver position. Ceiling bounce is actually about right for the range of frequencies coming from the port though.

Subject: Re: Floor bounce
Posted by akhilesh on Sat, 19 May 2007 23:10:37 GMT
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That's true, Wayne. I can't think of a solution for a single driver and 1 port solution, unless you put the driver 5 feet up and point it downwards (20 feet would be approx 60 hz) and maybe use a transmision line or something. Perhaps a fostex 167E driver in a voigt pipe like we heard at Jim Denton's house? It seemed really flat over 100 hz on my rat shack meter if I remember. What do you think?-akhilesh

Subject: Re: Floor bounce
Posted by Bob Brines on Sun, 20 May 2007 01:47:39 GMT
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Just for grins, here is the FR response of my FT-1600 MLTL. This was an ungated measurement taken out of doors over concrete.Bob

Subject: Re: Floor bounce
Posted by Wayne Parham on Sun, 20 May 2007 14:51:13 GMT
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the driver in my speakers is a little higher than yours, so my notch is shifted down a bit, around 150Hz.

Subject: Re: Floor bounce
Posted by Wayne Parham on Sun, 20 May 2007 15:19:01 GMT
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I usually suggest trying to keep bass drivers either closer to a boundary than 2 feet or further away than 8 feet. This shifts the self-reflection notch out of band. With two-way speakers or single drivers, this usually isn't practical.