
Subject: More on bass impact

Posted by [SteveBrown](#) on Tue, 15 May 2007 01:46:00 GMT

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Having identified that my lack of bass impact may be related to a room suck out around 80 to 100 hz (I verified it isn't the speakers), I have a new idea but want some advice from the speaker pros. I have these EV SP-12s which I think sound wonderful on open baffle. When I model them in WinISD in a closed box of 2 ft, I get a 2.6db peak around 100hz, then it falls off to $f_3=63\text{hz}$, and $f_{10}=45\text{hz}$. So, while the bass isn't all that extended (unless I put them in a 50 cu ft box), but I'm wondering if that rise at around 100hz might be just the ticket to help compensate for the room? Or am I just asking for problems I've not seen yet?

Subject: Re: More on bass impact

Posted by [footstony](#) on Tue, 15 May 2007 05:58:14 GMT

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Hi Steve, Nice topics. I like your idea of a separate "slamming" driver. Getting it to play well with the other drivers will be the challenge. Bass impact is a good term. I missed the previous thread discussing slam. I also wish for the type of physical musical involvement you describe. My son plays drums. In the next room with the door closed you are safe. When you enter his small bedroom while he is playing you can feel a physical impact on your body. My own rule of thumb which I am investigating is: For slam you need a baffle the size of a door. I think that "slam" may have something to do with the transient response and the "coherence" of the waveform. For drivers on smaller baffles the "impact" wave is not focussed and is omnidirectional and smeared by all reflections. Open baffle is more directional but I still think size (of the baffle) matters. Just my own thoughts. Keep up the good work and let us know how you go. Regards Philip

Subject: Re: More on bass impact

Posted by [Bob Brines](#) on Tue, 15 May 2007 15:14:46 GMT

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Steve, Putting peaks in a speaker's response is a valid approach under the right circumstances. A really good example is putting a 3dB hump on the bottom end of an HT satellite to do the baffle step compensation. However, in your case putting a hump in you speaker to take care of a room mode doesn't sound like a good idea. Once you get Q_{tc} above 1 as you will in this case, transient response is going to suffer due to ringing. You would be much better off to find th source of the suckout and try to fix it. Bob

Subject: Re: More on bass impact
Posted by [SteveBrown](#) on Tue, 15 May 2007 21:43:49 GMT
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Bob, thanks -- I figured I was likely being too clever for my own good. I think the solution is move the family and TV down to the basement, and I'll take over the family room.. Hmm...
