
Subject: Re: Room acoustics newbie

Posted by [Adveser](#) on Mon, 02 Aug 2010 13:17:27 GMT

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Where to begin?

*Is the coffee table in front of the sofa? If so, higher frequency sound is bouncing off of it, so get a nice thick cloth to go on top of it.

*Are the speakers toed into the viewer? If not, toe them in where the speakers intersect anywhere from a foot behind you or in front of you. It's a matter of opinion exactly where the intersect takes place at sounding best. While you are there make sure the tweeter is at ear level. I consider that critically important above almost anything.

*You mentioned curtains, if they are the good sound and light proof curtains made for theater rooms, then you are in good shape. Making sure sound can't get to windows is important because glass reflects and refracts sound more than anything. glass and windows are a huge problem that should be dealt with accordingly.

*You don't want bass bouncing off the walls. Anything below the (can't remember the name - Schroder frequency? you know, around 240-280hz) is going to resonate, cause phase cancellation and produce standing waves that lead to "one note bass." The bass should really be filling the room. People keep claiming bass is "omni-directional" which I think is bull****. That said, what do you mean by flat? Like it is coming from one part of the room (the source) only? Typically people do not give speakers the foot or two (!) they need completely off the walls, so that may be an issue. This is probably not a big deal unless the speakers are getting lower than 100hz or so.

*I don't think the hollow walls make any difference at all other than possibly becoming as resonant chamber for sound to get trapped in, which should be inaudible really.

*Yes, carpet on the walls works. Every band known to man at some point trolled around town looking for old carpet and mattresses to soundproof and create dry rooms for recording demos. It works.

The key is to create a good balance of things that absorb sound and things that sound can bounce off of. That is what creates great acoustics. Measure the room and make sure there that when the dimensions are divided by each other that you get an irrational number, like a ratio of 1 to 2.65 or whatever.

Look around online. There are some great guides I've read regarding more specific things like speaker placement that might be useful.

For room treatments all I do is cover up the windows and nail a heavy blanket to the back wall myself, assuming there is carpet in there and the dimensions allow no resonate bass frequencies. That is a problem that can be dealt with a lot of ways, but we'll save that for another time.
