Subject: Furniture influence on sound Posted by lush on Thu, 29 Mar 2018 01:50:48 GMT View Forum Message <> Reply to Message

I have a sectional couch in my home theater room. A friend of mine came over earlier today and said that those kinds of couches distort sound patterns. Is that true?

Subject: Re: Furniture influence on sound Posted by Wayne Parham on Thu, 29 Mar 2018 14:38:05 GMT View Forum Message <> Reply to Message

No, in fact, it will help damp the room.

What causes problems are large solid surfaces, which act as reflectors. They're especially bad if they're between the listeners and the sound source.

Subject: Re: Furniture influence on sound Posted by Quest01 on Thu, 29 Mar 2018 18:13:21 GMT View Forum Message <> Reply to Message

Wayne Parham wrote on Thu, 29 March 2018 09:38 What causes problems are large solid surfaces, which act as reflectors. They're especially bad if they're between the listeners and the sound source.

That's interesting. Does that mean that coffee tables are generally a bad idea? If the speaker is above the large solid surface, would a table still be considered in between the speaker and the listener?

Subject: Re: Furniture influence on sound Posted by Wayne Parham on Thu, 29 Mar 2018 20:24:30 GMT View Forum Message <> Reply to Message

That's right. One of our most common and useful pieces of furniture is problematic: The coffee table.

There are a few things you can do to mitigate the anomalies it creates:

1. Place it to the side of the listening area instead of right directly between the speakers and the

listeners. A couple of end tables beside the listeners is better acoustically than a coffee table in front of the listeners.

2. When a coffee table in front of the listeners is desired, use one that is as small as possible. Limit the flat (reflective) surface area.

3. Place books and other things on it to diffuse and "soften" the reflection.

Directional speakers can also be used to reduce the problem, but the truth is that most speakers (even directional ones) lack control in the vertical.

Subject: Re: Furniture influence on sound Posted by lush on Mon, 02 Apr 2018 19:08:17 GMT View Forum Message <> Reply to Message

It's crazy how common coffee tables are despite how problematic they can be. Thank you for the tips. I could definitely make do with a couple of end tables instead of my coffee table, and I have enough books around my house to help soften things up a bit. How big is too big for an end table? Or does that not really matter so long as they aren't directly between the speakers and the listener?

Subject: Re: Furniture influence on sound Posted by Wayne Parham on Mon, 02 Apr 2018 20:01:05 GMT View Forum Message <> Reply to Message

End tables beside the listeners don't reflect nearly as much to the listeners as a coffee table placed in front of them.

It's pretty easy to visualize the effect if you think of the incident of reflection and picture how much glare you'd have if the table were a mirror and the speakers were spotlights.

Picture that for a minute. Imagine that each main speaker was a bright light and that the coffee table had a mirror laying flat, face-up on the table's surface.

What you would see when facing the speakers (lights) was the coffee table (mirror) would be almost as bright as the mains (lights).

Just like the mirror creates a glaring reflection that's nearly as bright as the mains, the sound reflection from the coffee table is also very strong.

So you effectively have another sound source coming from the coffee table, and it is slightly delayed because the path from the speakers to the table to your ears is slightly longer than the direct path. The delay is actually the problem - The interaction causes comb filtering which adversely affects sound quality.

Subject: Re: Furniture influence on sound Posted by Khanman on Tue, 03 Apr 2018 02:20:19 GMT View Forum Message <> Reply to Message

You know, I've asked myself many times why I even have a coffee table. It's pretty much just a glorified footrest, at least in my place. It's not all that big, but considering that it has nothing on it, it probably hasn't been doing me any favor sound-wise. I guess it's time to get rid of it. Would a bookshelf below a speaker cause issues?

Subject: Re: Furniture influence on sound Posted by J.Jacobs on Tue, 03 Apr 2018 05:03:20 GMT View Forum Message <> Reply to Message

Khanman wrote on Mon, 02 April 2018 21:20You know, I've asked myself many times why I even have a coffee table. It's pretty much just a glorified footrest, at least in my place. It's not all that big, but considering that it has nothing on it, it probably hasn't been doing me any favor sound-wise. I guess it's time to get rid of it. Would a bookshelf below a speaker cause issues?

That's pretty much what my coffee table serves as too. I'm assuming that you're talking about having a mounted speaker above a bookshelf. Is that what you meant? If it is, how far does your bookshelf stick out? I'm not sure if it would matter, but you never know!

Subject: Re: Furniture influence on sound Posted by Junior on Fri, 06 Jul 2018 02:48:43 GMT View Forum Message <> Reply to Message

What about a room where the sofa is behind a wall and the TV is mounted on the opposite wall? I have a friend whose apartment is set up this way. The sound is not comfortable to listen to, is that because of the walls?

Subject: Re: Furniture influence on sound Posted by JazzHog on Thu, 09 Aug 2018 22:50:42 GMT View Forum Message <> Reply to Message

Go for large, comfortable squishy sofas. Not only are they comfortable to lounge on, but they will not have a detrimental effect on the sound either.

Subject: Re: Furniture influence on sound Posted by Floyd on Fri, 10 Aug 2018 18:45:10 GMT View Forum Message <> Reply to Message

JazzHog wrote on Thu, 09 August 2018 17:50Go for large, comfortable squishy sofas. Not only are they comfortable to lounge on, but they will not have a detrimental effect on the sound either.

That's exactly what I have. Only trouble is they are always full of the family cats, clawed to bits, and look like they are about to fall apart.

I'm going to have to start looking around for some new ones.

Large tables are definitely to be avoided for good sound, go for little occasional tables instead.

I don't think the cats interfere with the sound quality - except when the younger one tries to chew through the cables.

Subject: Re: Furniture influence on sound Posted by JazzHog on Fri, 10 Aug 2018 20:49:43 GMT View Forum Message <> Reply to Message

Floyd wrote on Fri, 10 August 2018 13:45

I don't think the cats interfere with the sound quality - except when the younger one tries to chew through the cables.

Have you thought about covering your cables? You can buy some tubular plastic that can be fitted round cables, and this stops pets from chewing them. It is also good for keeping cables together if they are going in the same direction, rather than having them separate.

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