Subject: Re: Correctly placing your speakers

Posted by Wayne Parham on Fri, 20 Oct 2017 21:22:14 GMT

View Forum Message <> Reply to Message

Yes, properly designed speakers have specific placement instructions. Room interaction is profound.

Just do a little experiment to see what I mean. After you do this, you can search the "Room Acoustics" forum here to learn more about why you will hear what you are about to hear in this experiment.

Use any sound source that's easy to carry. A portable radio or handheld device is perfect.

First, take the music device outdoors or in a large open room and hold it up in the air, away from any walls or other boundaries. Turn it on and listen to it. Pay attention to its loudness and its bass.

Now walk towards a wall. While the device is making sound, position it near the wall. Move it away from the wall, and then back up against the wall. See if you can hear a difference.

Now move it to the ground, still against the wall. Put it in the junction of the wall and the floor. Listen to it. Move it out away from the wall and floor, up in the air again. Listen to the difference.

And finally, put the device in a corner, on the floor. Move it into the corner and then out of the corner. Listen to the difference.

The difference you hear is due to boundary loading conditions. It changes the volume level quite a bit, doesn't it? And it makes the bass more pronounced too.

Now do one more thing. Take the device into a small room, especially one with hard walls. A bathroom with tile walls is great. Listen to the sound. Now go outside the room. Even better if you can go clear outside to the outdoors. Listen again.

The difference you hear is due to the interactions of reflections on the sound. It changes its tonal character quite a bit, doesn't it? The bathroom sounded really hollow or nasal, didn't it? But it was louder. The outdoors sounded very clear, but it was less loud.

These are some of the things that influence sound after it leaves your loudspeakers. Truly, the room is the biggest sound modifier in the sound system.