



VIVID audio®

Speaker Positioning for Optimal Performance

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When implemented at the highest level the moving coil design is the most precise method of controlling the movement of the loudspeaker diaphragm. When combined with materials that are light, rigid, and precisely shaped so that they do not to change shape when driven hard - and when the diaphragm movement is purely pistonic (that is, only moving back-and-forth without deviating from that motion like a piston) the moving coil design is unequalled in its ability to faithfully reproduce the original musical signal.

Vivid Audio speakers are the pinnacle of moving coil speaker development, employing advanced parts, materials, motor systems, enclosure designs, and manufacturing techniques.

Because they are so revealing – care should be taken when choosing associated equipment and especially when placing them in the room. To clarify; Vivid speakers are neither difficult to drive or finicky to place. However, when given the attention they deserve they will reward the listeners with an unparalleled listening experience.

Speaker Break-In

Break-in on high performance speakers and associated equipment is important. You will find that the Vivid speakers sound good in many ways right out of the box. However, they will get much smoother and fuller as they are played. It will take between 250 and 300 hours for the Vivid speakers to fully sound as they were designed to sound. Also, your Vivid speakers will be easier to set up *after* they've been broken in.

Often people don't want to listen to the speakers while they are breaking-in. Here is a technique to reduce their sound while they break-in. Once they are unboxed place them so that they are facing each other – as close as possible without touching. Then one speaker should be hooked up to the amplifier with its polarity reversed (out of phase) with the other. When played this way, the sound of one will mostly cancel the sound of the other. Some people go so far as to place thick, soft blankets over the speakers covering the gap between them to further reduce the sound. They don't break in faster this way – but they make less sound while doing so. Play them constantly at a normal volume until they have at least 200 hours on them (approximately 8 days of continual playing - 24/8, so to speak).

While breaking them in this way will make it faster and easier to set them up and position them – it's human nature to want to listen to them as soon as you unbox them – even though you know they will not sound as good as they can.

If you proceed directly to set up and positioning, please play them for at least several hours first. Keep in mind that they will be changing as you are listening to them and positioning them. Understand that you will likely want to do a bit of fine tuning of their final position when they eventually have 300 hours on them, so to make it easier to move them, don't spike them until they are fully broken in. You might even consider keeping the wood platforms installed until you're ready for their final position in your room.

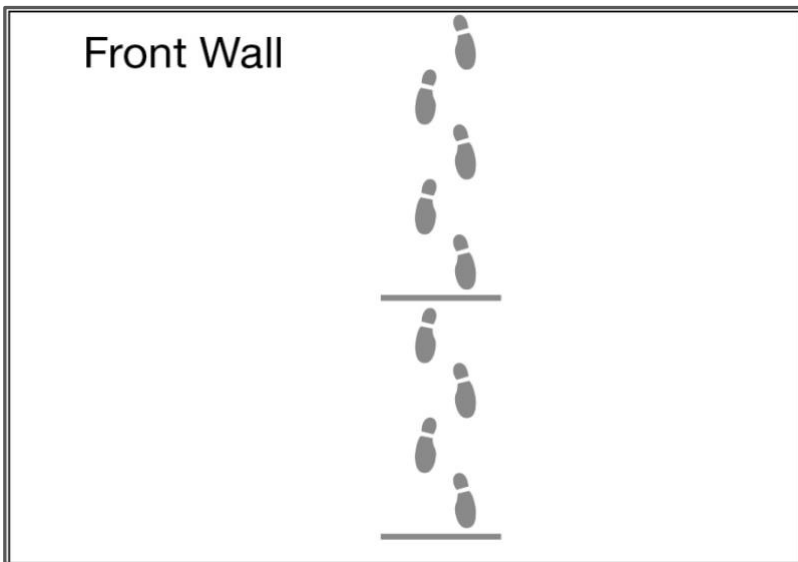
Placing the Speakers for Best Performance

Just as getting the best performance from a race car requires it be fine-tuned and adjusted for each racetrack, getting the best performance from a high-performance speaker requires its placement be fine-tuned and adjusted for each room. As a starting point the widest the speakers should be apart and will form an equilateral triangle with the prime listening position. Positioning them too far apart will create a sonic "hole in between" rather than a complete and seamless sound stage.

To find their best position in any given room, we recommend using the "speaking" technique to find the positions that are most neutral; In other words, the placement where the room has the least effect on the sound. For those unfamiliar with this technique, it involves speaking loud enough to project one's voice into the room and listening for the effects of the room on the voice. It is easiest when it involves two people, the person speaking and the listener.

Starting in the general area where the speakers are to be placed the person speaking begins with their back against the front wall (the wall you will be looking toward when you listen to the speakers), repeating several words consistently as they walk away from the wall. Repeating the words "Hello, Sammy" for example is easy and works well. Make sure you speak at the same pitch and volume as you walk.

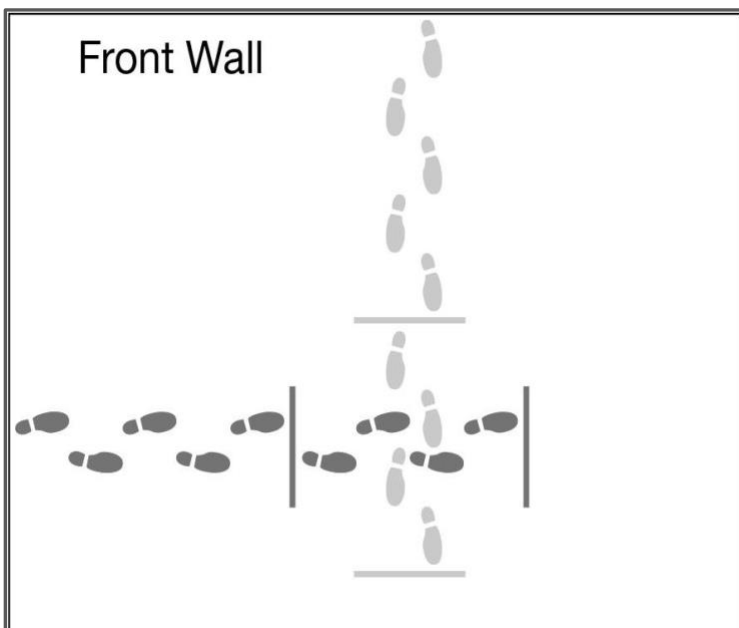
Using masking tape mark the position on the floor where the sound of the voice "opens up" (sounds less boxy or closed in).



Walking further forward, mark the position on the floor where the voice takes on a bit of echo or a distant slightly hollow sound (the sound reflecting from the back wall).

Repeat this same technique starting with the person against the side wall and speaking while walking out across the room, and as before marking with tape on the floor the two spots where the voice changes.

At this point there is a masking tape box on the floor. This is the neutral portion of the room where the room has the least effect on the sound. This is where you will place the speaker. Repeat the same technique to create a masking tape box for the other speaker.

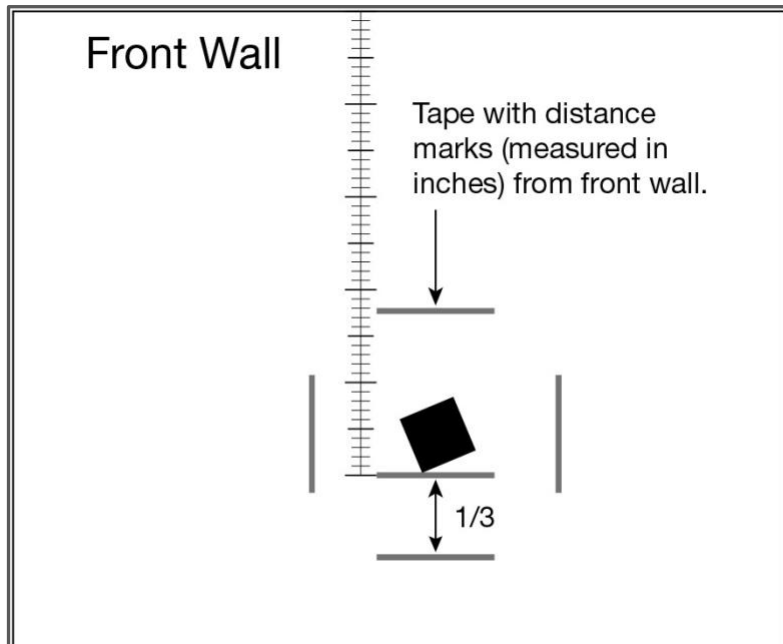


Most often the two boxes are similar in size and shape, but not always. It depends how symmetrical the room is among other factors. Next - place the speakers inside the boxes facing the central listening position.

Make a mark using the tape approximately 1/3 of the way back into the box (away from the listening position). Adjust the speaker so that its front baffle is at that tape mark.

The speakers should be aimed at the central / prime listening position.

Using a tape measure, measure out from the front wall into the box and place another piece of tape next to the speaker (perpendicular to the front wall). Write one-inch marks on the tape so you can know exactly where the speaker is positioned relative to the front wall. Do the same for the other speaker.



As you know – the midrange is the most critical part of the musical spectrum because that's where most of the music is, that's the frequency range our ears are most sensitive to and most important the sound of the human voice is the sound we are most familiar with. We are all experts when it comes to the sound of the human voice so as you begin listening to music, focusing primarily on the vocals - move the speakers forward and back in small increments to fine tune the sound. You will find that small position changes can make a significant difference. Typically, you will adjust the position of the speakers, so they are the same distance from the front wall, but again, that depends on your room and other factors.

Next you will adjust how the speakers are aimed at the listening position ... varying the angle from pointing right at the listener to slightly wider. This will adjust the focus or center image from a more precise, strong central image to a slightly wider, more uniform sound stage across the front of the room. Proper sound stage is a matter of personal preference.

This technique isn't the only way to find where the speakers will sound best in a room, but it is a relatively fast and easy technique. And most importantly – it's repeatable. We're confident that you will find that the time spent getting the speaker positioning right was well worth it!



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