
Subject: Re: Downfiring flanking subs ??

Posted by [Wayne Parham](#) on Tue, 02 Mar 2021 00:19:04 GMT

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The two issues are (1) acoustic loading and (2) path-length distance. If down-firing, we also have the potential of suspension settling, but that doesn't apply to you 'cause you aren't talking about down-firing. So since you already have considered the acoustic load, that leaves just the matter of path-length distance.

What I was trying to say about the placement right on the boundary is that puts it exactly (or near exactly) one-half the difference of the direct path length and the reflected path length.

The reason I mentioned it is I kind of like to avoid multiples like $1/4$ and $1/2$ when placing sound sources due to wavelength-related issues. But I would much prefer the flanking subs to be mounted near the wall than to be too near the mains they're flanking. So it gets a thumbs-up from me.

The main thing we're trying to do here is to ensure that the direct path length from the flanking sub and its reflected path length are sufficiently different than the direct sound of the midwoofer its reflected path length. We don't want the distances to be so great that we have localization problems, because we're running the flanking subs up into the lower midrange. But we don't want them so close that we fail to fill in the hole from SBIR.
