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Subject: Center Channel Port

Posted by [pizzachef](#) on Wed, 05 Jan 2011 22:58:18 GMT

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As I was going through this forum, I saw a post where you recommended, in a 4pi installation as LCR's in a home theater, that the port in the center channel might be eliminated. Could you explain the logic of this to me a bit, other than the fact that the picture you included (it looked like a studio monitoring application) looked fabulous.

By the way, at your recommendation I went to multiple small subwoofers in my home theater and it has been a fabulous change. I am still futzing around with positioning but even the first try was better than my old single-sw installation.

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Subject: Re: Center Channel Port

Posted by [Wayne Parham](#) on Thu, 06 Jan 2011 01:36:25 GMT

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The reason for omitting the port in the center channel was largely aesthetic, although if there were any penalty for doing so I would have not suggested it. I wouldn't suggest running all the speakers without a port because you lose too much low end. But just one made that way is OK.

It's good to have multiple low frequency sources, and the two mains built stock provide two sources as do the subs. Between all of those, modal smoothing is pretty good. It wouldn't hurt to have a little more low end from the center channel, but it isn't really needed.

There's also the matter of the position of the forward lobe and the nulls. The slight left/right offset of the tweeter makes the nulls shift slightly oblique. It's really not enough to matter, the nulls are still above and below the speaker, but naturally, they are shifted ever-so-slightly off the vertical. Moving the tweeter to the center puts the nulls stright above and below the speaker. Again, this is of absolutely no audible consequence, but I think the symmetry of having the left/right mirrored and the center symmetrical about the vertical makes the setup look better. There is bound to be a perceptual improvement, even if it doesn't make an audible difference.

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