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Subject: Re: 4pi: Cabinetmaker's build

Posted by [Wayne Parham](#) on Sun, 26 Jul 2026 23:17:49 GMT

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Excellent observations, and an excellent question. I'm glad you asked it.

The "mirror image" I've always used is purely for aesthetics. There's no significant difference whichever side each speaker is placed.

That said, I've always placed the ports outside, except for the four Pi model. I place the tweeters outside on that model.

The reason is trivial, but I'll tell you why. It's because of the vertical nulls we discussed earlier. They are perfectly above and below the speaker if the midwoofer and tweeter are both centered. But with the tweeter slightly offset, the nulls are too. Or perhaps I should say the maxima above and below are slightly offset. They track a line drawn between the driver centers.

So the upper null is a little bit towards the tweeter side and the lower null is a little bit away from the tweeter side. Just a smidge. Insignificant. Still, that's why I always set 'em up with the tweeters outboard.

Back to your speaker placement. That's a great observation too. I've noticed that as well, and it's exactly what the flanking sub configuration mitigates. Try that setup sometime - I'll bet you'll hear the improvement right away, especially since you could hear the SBIR from the wall behind the speakers. Flanking subs are specifically designed to counteract SBIR from nearby boundaries, e.g. the wall behind the speakers.