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Subject: Re: 2 Pi completed

Posted by [Wayne Parham](#) on Mon, 31 Dec 2018 15:36:28 GMT

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Your speakers look great!

the modifications are slight. I also wouldn't suggest mods on larger speakers and I wouldn't suggest mods to increase the internal volume too much on any of our models. Don't go past about two feet in any dimension without making acoustic measurements. That last statement is what I most concerned about; That and moving the positions of the drivers and/or port in relation to each other and to the cabinet walls.

The problem with large full-range speakers is their dimensions support internal standing waves at lower midrange and bass frequencies where damping material becomes ineffective. Small cabinets can only have standing waves at frequencies high enough that internal damping material attenuates quite well. But the larger the cabinet, the lower the internal standing wave modes. This means we have to mitigate (or even take advantage of) standing waves with careful placement of sound sources (drivers and port) and reflectors (cabinet walls).

But I do have one very optimistic suggestion: If you prefer a larger cabinet over the use of stands, cardboard mock-up - and they provide even deeper bass extension than the bookshelf model.