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Subject: 4pi: Cabinetmaker's build

Posted by [dustboy](#) on Tue, 17 Mar 2026 02:35:45 GMT

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4pi parts are on order JBL 2226/DE250 (and backorder, in the case of the DE250-8's) and in the mean time I'm starting to work out the details.

I own a custom cabinet shop with 5x10 CNC router and edgebander, so building boxes is kind of my thing. But doing the engineering of building a speaker is way beyond my mental capacity so I'm glad to have found this design. I've built several kits before including Zaph Audio 5.2 and Adire Audio MTM.

I don't want to mess with success so I'll be sticking with the script for the most part.

-Would it be a bad idea to fillet the mouth of the port with a 3D printed flare? Or 3DP the entire port with flares at both ends? Presumably sharp outside corners produce turbulence and most ports I've seen have this feature. Would I want to change the length of the port if I do this?

-I have 2+ sheets of A1 MDF with a walnut veneer that are very nice and even better, free. I think most folks are using 18mm or thicker baltic birch these days, so I'll plan for more internal bracing. What is the intended enclosure volume? For whatever volume I displace internally I'll need to add to the total enclosure volume, yes? Which outer dimension is preferable to modify?

-I'm considering an inset baffle to allow a removable cloth grille panel to set flush.

-I will probably integrate a base, maybe some nice hardwood legs and try to make the speaker a bit less boxy looking.

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Subject: Re: 4pi: Cabinetmaker's build

Posted by [Wayne Parham](#) on Tue, 17 Mar 2026 20:29:00 GMT

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Sounds like it's going to be a cool build!

You can probably radius the edge of the ports without any ill-effects. There's a formula for calculating the Helmholtz frequency of ports with radiused ends that could be used to see. But then again, that port is huge - in a cabinet tuned and designed for full-range use rather than as a subwoofer. So you won't hear any chuffing no matter how hard you push 'em.