

---

Subject: Narrow front baffle on 4Pi's  
Posted by [dcole07](#) on Sat, 09 Nov 2002 05:16:08 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hi Wayne and others, After hearing a pair of Thermionic 3Pi's a while ago I am very interested in building a pair of these or the Theater 4's for myself. My only problem is that the wall space I have for stereo equipment is limited length wise in the room. I was wondering about using a narrower front baffle and compensating by making the speaker taller. Can you recomend guidelines for what would be the best compromise? For me the narrower the better, but of course the main objective in making them is to build a great sounding speaker and I don't want to lose that by using a poorly designed box. Otherwise I may just go with the 2Pi towers which I haven't heard personally... how would they compare with the Thermionic 3Pi's? (I would be using the speakers primarily with an OTL tube amp but I also like to play with PP and SE designs so compatibility is an issue). Thanks for all the wonderfully simple and flexible designs Wayne, they are a blessing for the budding DIYer. Doug

---

Subject: Re: Narrow front baffle on 4Pi's  
Posted by [Wayne Parham](#) on Sat, 09 Nov 2002 17:30:38 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

A couple other people have done that too. The main thing to be concerned with is internal standing waves. Helmholtz resonation is what's used to tune the box, and that's determined solely by box volume and port size. But standing waves line up inside the cabinet at certain frequencies depending on cabinet dimensions. Internal damping material helps, but it is best to avoid cabinets and driver/port geometries that put the port on a pressure node within the passband. It will change cabinet tuning, possibly creating peaks and notches at x/4 pipe modes.

---

Subject: Re: Me and Mitch made narrow baffle 4pi's too!!!  
Posted by [Jerry Parker](#) on Thu, 14 Nov 2002 23:08:21 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Not a good picture, it was done in the construction process, but you can see they are quite narrow. Unfortunately the cabinets are still bare MDF, perhaps over christmas break we will be able to finish them.

Subject: What's that on your finger?????

Posted by [LuxmanLover](#) on Fri, 15 Nov 2002 20:23:49 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

A little speaker building mayhem?Kelly

---

---

Subject: Re: What's that on your finger?????

Posted by [Jerry Parker](#) on Fri, 15 Nov 2002 21:15:23 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

LOL, actually that is my friend, Mitch, we built the speakers for him. I think he got it at work, he worked at sutherlands this summer, he probably cut his finger with a boxknife or something.

---