
Subject: 4Pi plans

Posted by [FE3T](#) on Tue, 19 Apr 2011 19:10:05 GMT

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Can i have the plans please?

Ps i wrote a longer message, but the spell check killed it (created some server error)

Subject: Re: 4Pi plans

Posted by [Wayne Parham](#) on Tue, 19 Apr 2011 19:14:51 GMT

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Subject: Re: 4Pi plans

Posted by [FE3T](#) on Wed, 20 Apr 2011 13:12:43 GMT

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Thanks alot for the plans Wayne.

I hope you will not be to offended i i ask if some changes will alter the final result to much from the original designs sound.

I added an attachment of what i have on my mind.

The bottom box will have the same measurements as the original 4Pi and the same tuning, the space gained by not having the tweeter in the same box will be used up by additional bracing. Low adjustable feet will be added to make it possible to adjust the whole cab into the desired angle.

The tweeter module will get low adjustable feet, making it possible to angle it differently than the woofer box, if i feel i get some gains from it.

Will the placements on the drivers create any problems?

Will the added baffle area create any noticable changes in the sound??

On a later ocation i migth build a subwoofer module with the same foot print, and place the tweeter on top of it with the 4Pi woofer module turned upside down on top of the tweeter module again, something ala the K2 S9500, but that will again make the baffle even larger, would that be

a problem?

File Attachments

- 1) [4Piv2.jpg](#), downloaded 2578 times
 - 2) [4PivS9500.jpg](#), downloaded 2620 times
-

Subject: Re: 4Pi plans

Posted by [Wayne Parham](#) on Wed, 20 Apr 2011 14:26:49 GMT

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As long as you keep the tweeter/woofer spacing the same and the cabinet tuning is the same, it will probably work pretty well. The thing is - and I get asked this a lot, about "minor mods" of one form or another - when you change the speaker there are sometimes unintended consequences. The biggest one to watch for in a speaker this size, doing mods that move the midwoofer and/or port, are standing wave anomalies. In a box this size, standing waves line up in the lower midrange. This is an area that is notoriously hard to deal with.

At high frequencies, the insulation absorbs a lot of energy, so the upper midrange is not a problem. Small boxes are easy because their standing waves line up higher in frequency where the insulation is effective. But at lower frequencies, lining the walls becomes ineffective. That's why the plans call for a sheet spanning the cross-section. That helps. But you also want the midwoofer and port in places that reduce the negative impact of standing waves.

Subject: Re: 4Pi plans

Posted by [rotomod](#) on Mon, 09 May 2011 22:06:38 GMT

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Hi,

can I have the 4Pi plans.

CAn we use JBL Horn with JBL driver in place of B&C.

Thank's

Subject: Re: 4Pi plans

Posted by [Wayne Parham](#) on Mon, 09 May 2011 22:44:18 GMT

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Honestly, unless you have measurement equipment and are comfortable with crossover design, I wouldn't substitute the horn if I were you.
