
Subject: pi4 / pi12

Posted by [kongarne](#) on Wed, 06 Nov 2013 20:36:47 GMT

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

Hi

I was wondering if i was possible to make the volume bigger on the pi4 cabinets (Around 160L) Making it go a little deeper, or will it ruin the sound over 150hz?

I have been looking at the 12pi subwoofer, and I really like it, very impressive! I have been making some lascala cabinets but this looks very advanced, is it possible to get the plans for the subwoofer?

I guess the best solution is to keep pi4 original and make a subwoofer?

Best regards
Arne Olav

Subject: Re: pi4 / pi12

Posted by [Wayne Parham](#) on Wed, 06 Nov 2013 20:59:26 GMT

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

If you're going to use subs (as recommended) then there is no point in increasing the volume of the mains.

The problem with changing the dimensions is you have to check internal standing wave nodes, to make sure you don't introduce an anomaly in the lower midrange. Large cabinets have standing waves in the lower midrange, and those frequencies are not adequately attenuated by lining the walls with absorbent material. Large subwoofers don't have this problem because no midrange frequencies are presented to them. But full-range speakers with large cabinets take special care.

You can model the cabinet mathematically to find where the pressure nodes fall, and take care to ensure the midwoofer and port are not placed on one. And acoustic measurements should always be taken of the finished product to ensure the response is ripple-free. But if you are not prepared to do these things, I would suggest sticking with the plans, because they are already

twenty years.

Subject: Re: pi4 / pi12

Posted by [kongarne](#) on Thu, 07 Nov 2013 08:21:49 GMT

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

Thank you for quick reply!

This is over my knowledge , so sorry for questions that are

If I just make the speaker round and keep the volume and other parameters, is it less chance for ruin the construction sound vice ? (I guess we will not know before it is made and measured)

Made a simple sketch

File Attachments

- 1) [p4r.jpg](#), downloaded 2048 times
 - 2) [p2r2.jpg](#), downloaded 2124 times
-

Subject: Re: pi4 / pi12

Posted by [Wayne Parham](#) on Thu, 07 Nov 2013 09:04:24 GMT

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

That's a neat looking cabinet, but you will still need to analyze standing wave modes, and then verify with measurements afterward.
