
Subject: new 4 Pis near completion finally
Posted by [GarlandB](#) on Tue, 21 Jul 2009 17:10:44 GMT
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Well, I've finally got the new 4 Pis up and running. The old Theater 4 boxes are packed away for an uncertain future. The new 4s sound very good with very punchy bass and more intense midrange than the Theaters had with the same drivers (Omega 15 pros and DE-250s). One concern I have is that the Acrylic batting I'm using nearly touches the rear edges of the port. Might this have some effect on the functioning of the port? Should I push the batting away slightly to allow more freedom of air movement?

BTW, I'm driving the 4's with 12 Watt class D kit amps sold by 41HZ.com. These amps are awesome and at \$36 not including a power supply are well worth experimenting with. Highly recommended for clarity, openness, and killer bass.

Garland

Subject: Re: new 4 Pis near completion finally
Posted by [Wayne Parham](#) on Tue, 21 Jul 2009 17:29:55 GMT
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No problem at all with the insulation near the port. It's normal for the sheet on the back to be about an inch or inch and a half away from the internal opening of the port.

Subject: Re: new 4 Pis near completion finally
Posted by [GarlandB](#) on Tue, 21 Jul 2009 19:02:46 GMT
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Thanks for the advise, Wayne, but what if the insulation is like 1/4 inch away?

Also, you've got to try one of those 41Hz amps! Alot like the emotional character of Bottlehead gear but with more grunt, clarity and depth in the bass. My amp is the AMP 6 Basic. Super easy to build and only 5x7x3 inches in the case I made.

Subject: Re: new 4 Pis near completion finally
Posted by [Wayne Parham](#) on Tue, 21 Jul 2009 19:23:48 GMT
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It's still OK as long as the insulation is not too dense. It shouldn't be too dense anyway, because that would not work as a damping material. What we want is stuffing that increases acoustic resistance as a function of frequency. It reduces midrange but bass passes right through.

You could always make one with R13 and another with whatever stuffing you're using and compare the two speakers to see if you find any differences.

Subject: Re: new 4 Pis near completion finally
Posted by [Matts](#) on Thu, 23 Jul 2009 03:31:59 GMT
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Congrats on getting them done! I've used R11 in mine, and it comes very close to the back of the port- in fact the outer fluffs of it actually touch it. No problem with them, tho...the bass comes through just fine. So you like them better than the Theater cabs? Those amps sound trick...I might get one for my tv.

Subject: Re: new 4 Pis near completion finally
Posted by [Jump](#) on Thu, 23 Jul 2009 15:35:22 GMT
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Hi everybody,
Last year Wayne sent to me the old Theater 4 plans and now, after some problems, finally I'm ready to start!
Bought the birchwood, I've only to buy the drivers and build the crossover, but just today I've read this topic, and... I'm very interested to the "fight" between the old Theater 4 and the new 4 Pi!
So I would like to know if the new 4 Pi is better than the old Theater 4, and in which areas, sonically speaking.
Many thanks

Best regards
Giampiero - Italy

PS: ... sorry for my bad english...

Subject: Re: new 4 Pis near completion finally
Posted by [Wayne Parham](#) on Thu, 23 Jul 2009 16:14:02 GMT
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"why did I phase it out?" The answer is I just had too many versions and models to focus on and

That's why I chose to keep it but drop the Theater four.

What was the Stage model has the Omega 15 and what was the Professional model has the JBL

2226. These were always more expensive and higher quality options than the Theater Series.

One thing that has changed is that I've done some work to update the crossover. It hasn't

differences, optimizations for each current model that make it a better speaker. There is now also an option to use the DE250 compression driver as an upgrade over the the PSD2002.

Subject: Re: new 4 Pis near completion finally
Posted by [GarlandB](#) on Thu, 23 Jul 2009 17:36:22 GMT

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I built the Theater 4s quite awhile back and always loved them. They were very refined sounding but capable of rocking out when called upon. My favorite music to play on the Theaters however was small scale acoustic music like folk, jazz, and solo guitar. The Theaters were so good at getting the timbers and textures of acoustic music really well. Everyone who heard them marveled at the sound with low power tubed electronics. More recently I've had to face the reality that I needed more room in my small house so when Wayne redesigned the Pi 4s which uses the not too expensive Eminence Omega 15s and the DE250 compression drivers in a much smaller box, I jumped on them but workload kept them unfinished for a while. Now that they're complete, the thing I've notice primarily about the difference between the Theater 4s and the Pi 4s is that The Theater 4s (IN MY SYSTEM AND ROOM!) had a somewhat recessed midrange which made the sound somewhat laid back but very refined sounding and neutral. This is generally a good thing. The sound of the new speakers set up the same way with the speakers along the long wall about a third of the way in from the corners is considerably more punchy with a more powerful bass and more forward midrange. The new speakers are more fun to listen to and the clarity of sound and detail is still quite evident so textures and timbre are still quite well expressed. I look forward to hooking my tube amps back up after getting really absorbed into listening to my new 41HZ.com class D "Amp 6 Basic" solid state amp. Also I want to re-arrange the listening room to allow the speakers to be located in the corners of the short wall. I will report back after some more experimentation.

Hope this helps with the Theater 4 or Pi 4 decision.

Garland

Subject: Re: new 4 Pis near completion finally
Posted by [Jump](#) on Thu, 23 Jul 2009 17:56:55 GMT

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Thank you very much Wayne, you are always very fast to answer!

So, the 4 Pi is better than the old Theater 4, and I see that it is also smaller than the Theater 4!

This is good for me... I must increase my WAF!

When I tried to mime to my wife the cabinet's dimensions of the Theater four, she said me:
"What? Would you put in "my" drawing-room two washing machines?"
So, I've had to accept many compromises to convince her...
But now, with this 4 Pi I could recover many points!

Wayne, would you send me the plans and the crossover design of the 4 Pi? Thanks

Best regards
Giampiero - Italy

Subject: Re: new 4 Pis near completion finally
Posted by [Jump](#) on Thu, 23 Jul 2009 18:27:53 GMT
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Thank you very much Garland for your impressions. You have helped me a lot! Many thanks.

Me too, class D amplifier! I've got two Trends Audio TA10.1 and Nuforce Ref9V2 monoblocks.

Best regards
Giampiero - Italy

PS:... sorry for my bad english...

Subject: Re: new 4 Pis near completion finally
Posted by [Wayne Parham](#) on Thu, 23 Jul 2009 21:20:14 GMT
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Jump wrote on Thu, 23 July 2009 12:56 Wayne, would you send me the plans and the crossover design of the 4 Pi?
You've got mail!

Subject: Re: new 4 Pis near completion finally
Posted by [Jump](#) on Thu, 23 Jul 2009 21:41:40 GMT
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Many thanks Wayne

Best regards
Giampiero - Italy

Subject: Re: new 4 Pis near completion finally

Posted by [Psychoacoustic](#) on Fri, 24 Jul 2009 10:52:59 GMT

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Garland- congrats on finished your project..... Enjoy and show us some PHOTOS!

Subject: Re: new 4 Pis near completion finally

Posted by [Jump](#) on Sat, 25 Jul 2009 08:11:32 GMT

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Hi Garland,

Have you put the crossover inside the box? Eventually yes, where you put it? Thanks

Best regards

Giampiero - Italy

Subject: Re: new 4 Pis near completion finally

Posted by [Wayne Parham](#) on Sat, 25 Jul 2009 14:56:28 GMT

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We make a separate box to hold the crossover for cornerhorns but for all other models, we mount it on the inside bottom of the cabinet, attached with screws. Make a gasket with cardboard or PVC, like shown in this post:Gaskets

Subject: Re: new 4 Pis near completion finally

Posted by [Jump](#) on Sat, 25 Jul 2009 16:05:02 GMT

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Thank you very much Wayne, you are always ready to help...

Best regards

Giampiero - Italy
