
Subject: 4pi vs 3pi plans

Posted by [jayhawk785](#) on Mon, 07 May 2012 23:53:59 GMT

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Hey Wayne,

I've been having a serious internal debate about which to build, 4pi 3pi econowave standard/deluxe, etc. I think I've narrowed it down to doing a 4pi or 3pi build. Would it be possible to get the plans to both--figure I'll decide based on overall dimensions and costs when I add it up.

I'm basically looking for a solution for behind the screen LCR, so size (depth) is a bit important. What is also important is barrier factors (distance/placement from walls etc).

Steve

Subject: Re: 4pi vs 3pi plans

Posted by [Maxjr](#) on Tue, 08 May 2012 00:05:35 GMT

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Cabinet sizes, efficiency, and prices can be found here: <http://www.pispeakers.com/Prices.html>

Subject: Re: 4pi vs 3pi plans

Posted by [jayhawk785](#) on Tue, 08 May 2012 01:20:30 GMT

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Ya, I had found the sizes--but I'd plan on sourcing parts from various locations--short of maybe the crossover if it can be had pre-built.

Probably just the plans for 4 pi--and crossover schematic if not included for now. If i find those too big, I'll go for the 3's.

Subject: Re: 4pi vs 3pi plans

Posted by [Wayne Parham](#) on Tue, 08 May 2012 04:08:38 GMT

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Please decide first. I kind of don't like sending out too many plans. I've had some folks copy my designs and make commercial offerings out of them, so I started limiting my freebies. Please understand.

As for how to decide, the thing to do is to choose which midwoofer family you prefer. The sizes of the boxes are nearly the same, so your decision criteria really boils down to which midwoofer "flavor" you prefer.

Midwoofer families

Subject: Re: 4pi vs 3pi plans
Posted by [jayhawk785](#) on Tue, 08 May 2012 20:16:55 GMT
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Thanks for the response, Wayne--I'm certainly not looking to go into business, I have enough trouble keeping track of my own projects as-is, but appreciate your desire to keep them locked down.

that said, is it possible to tweak the cabinet depth at all? If i were looking to keep them 11-10" deep, is it possible to modify the cabinet height to accommodate the box volume without significantly impacting the response/sound?

I'd like to go with the 4pi--I'm just concerned about the overall depth.

s

Subject: Re: 4pi vs 3pi plans
Posted by [Wayne Parham](#) on Tue, 08 May 2012 20:50:10 GMT
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Sorry, I wouldn't suggest modifying the plans. The internal standing waves line up in specific locations and it is impotnat that a pressure node not be on the driver or port. Smaller cabinets can be tweaked without much worry because the standing waves are higher in frequency and insulation is pretty effective at damping them. But these larger cabinets shift the modes down in frequency, making the insulation less effective at damping the modes. So source position in relation to the cabinet walls becomes more important.

Subject: Re: 4pi vs 3pi plans
Posted by [jayhawk785](#) on Tue, 08 May 2012 20:52:59 GMT
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Is there a thread here that you'd recommend for read for the differences in the 2pi/3pi/4pi response?

My room isnt huge (23'x16') but it does open into other areas. My real goal here is accurate, punchy theater-esque response that these pro drivers can deliver. I can deal with 14-15" depth, as long as they can cuddle the wall--but would i need to worry about excursion/air movement from these blowing the screen around?

Subject: Re: 4pi vs 3pi plans
Posted by [Bill Epstein](#) on Tue, 08 May 2012 20:55:38 GMT

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Interesting thread. I was hoping for a description of the different characteristics of the JBL and AE mid-woofers.

How flattering that someone has decided to rip-off your designs; care to name names?

Subject: Re: 4pi vs 3pi plans
Posted by [Wayne Parham](#) on Tue, 08 May 2012 20:58:21 GMT
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Look at the spec sheets here:

the description of each model. Click on that and it will show you the response chart.

Subject: Re: 4pi vs 3pi plans
Posted by [jayhawk785](#) on Tue, 08 May 2012 21:01:20 GMT
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Hey Wayne, based on that--I'll go the 3pi route. I'll also not be reproducing them and selling

So whatever literature I need for crossover/build I'd appreciate it.

Do you sell the 3pi crossover prebuilt separate from the kits?

Steve

Subject: Re: 4pi vs 3pi plans
Posted by [jayhawk785](#) on Tue, 08 May 2012 22:31:25 GMT
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I do see the crossovers, so I answered my own question there --appreciate the 3-pi plans whenever you have a chance. you may see an order for a few of those crossovers from me, before too long. those things are a pain.

Subject: Re: 4pi vs 3pi plans
Posted by [Maxjr](#) on Tue, 08 May 2012 22:57:29 GMT
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Steve,

I highly recommend buying Wayne's prebuilt crossovers. They are well built with high quality components. Also, the markup Wayne puts on them is very little in my opinion. He could be selling them for double, but keeps them at an extremely low price. You also don't have to worry about messing anything up in regards to component selection and wiring. It is also a small way of giving back to Wayne for such an awesome free design.

Now if we could get a surround speaker with compression drivers, I'd be all over that to complement my 4Pi's =)

Cheers,
Joel

Subject: Re: 4pi vs 3pi plans
Posted by [jayhawk785](#) on Wed, 09 May 2012 00:32:07 GMT
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I totally agree- i've had enough problems with other crossovers, I'll likely buy the pre-built covers. Just waiting on the 3pi plans so I can figure out what i need to buy

Subject: Re: 4pi vs 3pi plans
Posted by [Wayne Parham](#) on Wed, 09 May 2012 01:22:01 GMT
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