
Subject: 12PI plan or CAD ?

Posted by [cox-nox](#) on Fri, 16 Oct 2009 20:52:37 GMT

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first hello everybody,

i just read this post on PSW:

<http://srforums.prosoundweb.com/index.php/mv/msg/15490/141095/0/>

i didn't know that 12PI was a diy project, i look over the forum but don't find the plan...

Subject: Re: 12PI plan or CAD ?

Posted by [Wayne Parham](#) on Sat, 17 Oct 2009 01:18:10 GMT

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Yes, a very ambitious project, one that resulted in a patent for the cooling plug. I sought to improve upon the LABhorn, after some prompting from Tom Danley and Todd Michaels. I believe we accomplished this quite well, with increased durability, greater output, lower distortion and smoother response all from a horn only five inches wider than the LABhorn. If you want the plans, I'll send them to you. We also make flat pack kits and other parts available for sale.

Subject: Re: 12PI plan or CAD ?

Posted by [cox-nox](#) on Sat, 17 Oct 2009 12:04:00 GMT

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thanks for the answer

first i would like to see the plan(in mm pleaz) and study it a little beat...

Subject: Re: 12PI plan or CAD ?

Posted by [Wayne Parham](#) on Sat, 17 Oct 2009 13:22:14 GMT

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Subject: Re: 12PI plan or CAD ?

Posted by [bitzo](#) on Fri, 30 Oct 2009 16:22:19 GMT

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Hi Wayne,

I see your great work on this cab, the spl plot is amazing.

I've some question about the cooling. The plate metal panel it's a great idea and plug too..but...are there some DIY option?

If I use a wood panel is heat too much for the driver?

Could you send me the plans? I want to make some simulation in akabak to get some plot about different way of stacking.

cheers, bitzo

Subject: Re: 12PI plan or CAD ?

Posted by [Wayne Parham](#) on Fri, 30 Oct 2009 16:53:55 GMT

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You can omit the cooling plug but thermal limits are then less than half what they are with the plug. When used at 30Hz and higher, the limiting factor is thermal, not mechanical, even if cooling plugs are used and most definitely without the plugs. There was some talk years ago that the LABhorn limit was mechanical, and this simply isn't the truth. Those guys were misinformed and fooling themselves. When you see them blown in the field, it's always voice coil burnout, literally melting the adhesive allowing the coil to unravel off the former. So the cooling plugs are cheap insurance against failure.

Subject: Re: 12PI plan or CAD ?

Posted by [bitzo](#) on Fri, 30 Oct 2009 17:39:51 GMT

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wow! fear and fire from this cab...

so what is the best way of stacking 4 of this cab? What about Vplating?

cheers, bitzo

Subject: Re: 12PI plan or CAD ?

Posted by [Wayne Parham](#) on Fri, 30 Oct 2009 18:12:25 GMT

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Stacking is usually determined by the environment. One of the best arrangements is all four standing side by side in the center, another is two on two, on their sides. Put the mouths together and lay them on their sides. Then set another pair on top of that, again, mouths together. The cooling system will work even if there is no gap between cabinets but it obviously wouldn't hurt to

have an inch or two gap between them.

Subject: Re: 12PI plan or CAD ?
Posted by [NickP](#) on Sun, 06 Dec 2009 03:29:54 GMT
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Hi Wayne,

I'm thinking about building a new sub design and interested in the 12pi. Can you send me the plans? I'm in the UK so a flat pack is not really a viable option.

Thanks a lot,

Nick Procktor

Subject: Re: 12PI plan or CAD ?
Posted by [Wayne Parham](#) on Sun, 06 Dec 2009 15:29:56 GMT
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Subject: Re: 12PI plan or CAD ?
Posted by [Wayne-o](#) on Tue, 08 Dec 2009 03:15:59 GMT
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Just saw your intercooler design, Nice, looks like a major improvement for a speakers cooling. should be on all subwoofers.

Subject: Re: 12PI plan or CAD ?
Posted by [thebuckaman](#) on Thu, 11 Feb 2010 16:16:24 GMT
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Interested in the 12pi plans as well.

Thank you!

Subject: Re: 12PI plan or CAD ?
Posted by [Wayne Parham](#) on Fri, 12 Feb 2010 03:56:15 GMT
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Subject: Re: 12PI plan or CAD ?
Posted by [Mr.Kimp](#) on Wed, 17 Feb 2010 15:54:55 GMT
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Hi Wayne,
I was looking for long time through lot of horndesigns, but 12pi seems to be the best (for my needs). Can you send me the plan please? As I'm located in Europe flatpack won't be managable....

Thanks

Subject: Re: 12PI plan or CAD ?
Posted by [Wayne Parham](#) on Wed, 17 Feb 2010 16:20:47 GMT
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Subject: Re: 12PI plan or CAD ?
Posted by [winger](#) on Thu, 11 Mar 2010 17:44:20 GMT
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I am interested in building some of these as well. Could I get a copy of the plans as well.

Also, in an old thread there was talk about you planning to trying scaling up for 15" speakers. Did you ever try that?

I have some evm 15b and jbl e-140 sitting unused and I would like to use for something like this.

Subject: Re: 12PI plan or CAD ?
Posted by [Wayne Parham](#) on Thu, 11 Mar 2010 19:46:00 GMT

I never made a larger model with 15" woofers. I also considered making a smaller model with either 10" woofers or a single 12". Didn't build that either. I put a lot of time and energy into the model, because I didn't see any point in it.

Subject: 12PI plan or CAD ?
Posted by [djfire](#) on Mon, 17 May 2010 12:11:25 GMT
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Hi!

I'm from hungary. I'm very intrested in this sub. Can you send me the plans?
I have heard a sub, that has 2 12" speaker, infront each other, and seems like your 12pi sub.

I'm waiting your masage.

Thanks from Hungary, Gyula

Subject: Re: 12PI plan or CAD ?
Posted by [Wayne Parham](#) on Mon, 17 May 2010 14:09:21 GMT
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