
Subject: My New Theatre Three's

Posted by [GarMan](#) on Thu, 12 Aug 2004 20:28:03 GMT

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I wasn't going to make this post until I had the speakers completed, but it doesn't look like that's going to happen for another couple of weeks. It's one thing to build a set of good functioning cabinets, but building a set that looks good is something else. I choose the Theatre 3's because I already had a pair of PSD2002 / horns from experimenting with my 2PI Towers, and IMO the 3's presented the best combination of size, price, and performance. This is my third speaker project in the past 12 months and I took it as an opportunity to try a few new things. I definitely did not want just a standard box, but had no idea what I got myself into. A few modifications were made, mainly shape, size, and port. I prefer the tower shape over the standard box, and the overall volume was reduced by a quarter cubic foot. The size and shape was also dictated by the amount of space I was willing to dedicate in the room, and how the panels could be cut from the full 8x4 sheet. Port was increased to 4" diameter (because I had the plastic flare in hand) and length adjusted accordingly. The two basic functioning cabinets were completed in an afternoon. The cabinets were glued, braced, lined, baffle cut, and sealed. As usual, I had all the panels precut at HD. Panels were 3/4" all around and 1" front baffle. Went with the 1" front to compensate for reduction in thickness from flush mounting. About that funny triangular brace, I cut it to that shape so that when it sits between the woofer and port, I can reach in from the woofer cutout to make any adjustments to the port from the inside. Cabinets were built in one afternoon, but I've spend four weekends finishing them. The MDF carcasses were covered with 5mm thick VC oak ply instead of veneer, simply because it was much cheaper. It also added almost another 1/4" to the MDF all around. Veneering the beveled edges was a pain as there was no easy way to keep pressure on it until it dried. Woofer cutout was done with a homemade jig, made from a scrape piece of MDF, as per Epstein's suggestion. Rabbeting cutter with bearing was use to cut the recess for flush mounting the woofer. Flush mounting the horn was more of an exercise in woodworking than acoustics. More difficult than I thought, but happy with the results. I vow never to build another 8 sided speaker with moulding, especially when half the sides are less than 1" wide. First of all, I don't have a mitre saw to give me the exact 22.5 degree cut I need, so there was a lot of trial and error happening. Secondly, the corner pieces were so small that they can't be resized if you don't get it right the first time. If the piece does not fit perfectly, start again from scratch. What's left is more sanding, another coat of stain, and many coats of tung oil. I figure if I can move these into the laundry room, I can get five coats of oil on it over the course of a week. So, how do they sound? Like a more mature and sophisticated version of the 2PI Towers. They both have the same extension in bass, but the 3's are much better controlled. And they do go deep. I also find that I'm able to listen to these at a much higher volume comfortably than the 2's. These speakers are also a better match for rock and roll. I found that not all pop/rock recordings worked well with the 2 Towers. I'll keep you folk updated when final pix are available. Gar.

Theatre Three PI Photos

Subject: Re: My New Theatre Three's

Posted by [Tightwad](#) on Thu, 12 Aug 2004 23:27:01 GMT

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Very nice work. You're making me jealous.

Subject: Incredible!

Posted by [elektrartig](#) on Fri, 13 Aug 2004 00:19:05 GMT

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Just a beautiful job. You should be proud!

Subject: Re: My New Theatre Three's

Posted by [Wayne Parham](#) on Fri, 13 Aug 2004 02:33:41 GMT

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Great work, Gar.I still love those bevelled edges.

Subject: Re: My New Theatre Three's

Posted by [ports](#) on Fri, 13 Aug 2004 14:06:21 GMT

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.Wow....those look great....you've been quite busy this year (3 pairs of speakers!)...what are the measurements of these Theatre 3's & what size port opening/length are you going with ? I'm asking because I'm thinking about doing a quasi-3 myself, but a tower version does indeed look like an interesting option...and you say they sound better on rock than the 2's...thanks...ports.

Subject: Size

Posted by [GarMan](#) on Sat, 14 Aug 2004 21:27:42 GMT

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Internal dimensions I used are 38.5(h)x14.5(w)x11.5(d). Port size for now is 4"(d)x5"(l) and sound very good. But I'll fine tune when I get the cabinet in their final destination. I think this cabinet size would work very well with the normal Delta12, if you already have a subwoofer and don't

need the bass extension.Gar.

Subject: Very elegant, Gar
Posted by [JLapaire](#) on Tue, 17 Aug 2004 15:49:51 GMT
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I like the beveled edges too, and the molding adds a nice classic touch. One afternoon is a fast build for a project with that many steps!Are you using the Gamma to go with the H295/PSD2002 hf?Very good WAF I expect - I believe Deb would trade the Karlsons for them in a heartbeat.John

Subject: Hi John, How are you liking the Karlsons?
Posted by [Garland garland](#) on Tue, 17 Aug 2004 18:22:19 GMT
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I've been curious about their sound. They look really cool in a classic early HIFI kind of way.Is there any way you could haul them to the next NE Bottlehead meet?Garland

Subject: Re: Hi John, How are you liking the Karlsons?
Posted by [JLapaire](#) on Tue, 17 Aug 2004 19:03:22 GMT
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Hi Gary, I love 'em. For bang-for-the-watt you should hear them with the new little battery-powered t-amp.I'll bring them out again if the guys aren't tired of them. They've been on the road a few times since the last meet to pick up more dings and scratches, etc, and by now they practically jump into the truck when I back up to the deck. At least I wish they would.Might you bring the mighty Theater 4s or the new 3s? What bass driver did you use in the 3s? In the last post I meant Kappa, not Gamma.John

Subject: Re: Very elegant, Gar
Posted by [GarMan](#) on Tue, 17 Aug 2004 22:47:32 GMT
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Thanks for the compliment John. No, I didn't do all that in one afternoon. Just the bare MDF box with braces, foam and baffle cutout. It makes it a lot easier when all the panels are pre-cut to size

for you at HD. The veneering, bevel, flush-mount recess, moulding, staining, sanding, and more sanding has taken over 4 additional weekends. For the woofer, I'm using the Delta12LF as per Wayne's Theatre Three design. Excellent low end as would be expected, but was also surprised by the midrange. But I still miss the midrange from the 8PI though. Gar.

Subject: Re: My New Theatre Three's
Posted by [James W. Johnson](#) on Wed, 18 Aug 2004 14:12:12 GMT
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Very nice Gar , you are quite a talented woodworker!

Subject: Re: Hi John, How are you liking the Karlsons?
Posted by [Garland garland](#) on Wed, 18 Aug 2004 17:43:21 GMT
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never built the 3's and unless I get help the 4's don't move out of the listening room. Would also have to rip out the seats in the minivan which unlike the TV ads is not a particularly fun thing to do either. I wish I could have a big "to do" up here in Natick but my listening room is just too dang small for more than 3 at a time. Back to your Karlsons: do you find the bass to integrate well with the horn? Better than the Theater 4's reflex woofer? I love the look of them but fear the kids storing toys and what-not in the kool kubby.G.

Subject: Oh, I'm very dense
Posted by [JLapaire](#) on Wed, 18 Aug 2004 18:29:34 GMT
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It's the Garland-Garland vs Gar Man thing - I lost track of who I was talking to. Apologies to both youse. So, about integration. Way back when, after I had gotten over the initial euphoria of having so much acoustic power and presence on tap with the Theater 4s, I noticed a little coloration around the upper registers of the male voice. No big deal, but it was there - I think you and I talked about it. It got worse when I put the Th 4 guts in the Karlsons, and the sound changed in other ways too. It almost disappeared when I put in the Delta Pro and is gone for good with 500hz crossover to the JBL HF stuff. Integration is better now than with the 1k6 crossover in the Karlson and maybe better than the Th 4. The Ks weren't able to present a very good soundstage with the higher crossover in the living room, but were fine outside at a little distance, whereas the Th 4 did a credible job inside. It's been a while since I've heard the Th 4s, maybe we can badger Hakn Hendrix to lug his down to Steve's? Failing that, Natick's not such a long ride from Hadley and we do like that area.... It was pictures of your Theater 4s that got me into this HE stuff after all. John
