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Subject: My One Pi's are done (almost)

Posted by [RMW](#) on Mon, 07 Feb 2005 00:25:21 GMT

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Continuation of this thread:<http://www.audioundtable.com/PiSpeakers/messages/16194.html>My woodworker friend and I finally finished off the baffles on Saturday morning. The cutouts for the LF and HF drivers and the cutouts for the terminal cups are all rebated, so the drivers and cups sit flush. I soldered the wires to the terminal cups a couple of days ago, so assembly went pretty quickly. I came up with a (seemingly) clever way to attach the coils to the baffles. I rolled a piece of Blu-Tak style putty (the stuff that's used to stick up posters, etc.), into the shape of one of those funny cigarettes that people used to smoke at concerts, then molded it to a circular shape and pressed it onto the bottom of the plastic bobbin air core inductor. Then I took two ordinary twist ties and set them on the back side of the panel in an X shape, then fastened them to the baffle with a heavy duty staple. Next, I lifted the four ends of the ties to a vertical position, and slid the coil down onto the baffle, putty side down. Last step was restoring the twist ties to the original X shape, and stapling the four ends to the baffle. Hopefully, the coils won't ever move or rattle. All panels except the baffles are finished with black chalkboard finish. The baffles are unfinished at this point, and I'll probably leave them that way, and add grills to help with any SAF issues. Due to a size issue with the mailing tube I bought, and my reluctance to vary from Wayne's tried and tested design, I'm still on the lookout for mailing tube that's 2 1/2" OD and roughly 2 3/8" ID. In the meantime, I'm running with simple ports, and the speakers are impressive even though they're not "done"! My system includes a Rage 12" DVC sub:<http://subwoofers.cc/remain.aspx> in a sealed two cu. ft. box, with 120 watts (courtesy of my QSC Model 5.1 amp) available to each voice coil, and a Yamaha RX-V640 HT receiver. I built six identical One Pi's, and I spent yesterday evening listening and growing more and more convinced that I made a good investment choice. I have a pair of Koss PRO3AA Titanium headphones that I use for reference, and the only adjective I want to use to describe these speakers is IMPRESSIVE. I keep going back to the Cowboy Junkies "Trinity Sessions" CD, especially "Misguided Angel" and "Blue Moon Revisited". For me, ultimately it's about the music, not the equipment, and when I close my eyes, it's like Margo is in the room with me "Dark Side of the Moon" was pretty cool too, as was the Clapton "Crossroads" concert DVD. I think this is the start of a beautiful relationship! I had some rectangular pieces of MDF left over, and I modified a speaker stand idea that I saw somewhere on the Internet. I picked up a ten foot length of 4" PVC pipe, cut it into four identical lengths, and covered the tubes with oak grain contact paper. I selected four of the larger scrap pieces for bases, and four smaller pieces for platforms, and had my woodworker friend rout circles in them, to a depth of 3/8" in the 5/8" material. I primed the MDF and let it cure for a couple of days, then coated the pieces with some leftover chalkboard paint. As soon as the paint dries, I will glue the tubes to the bases, using Elmer's Probond polyurethane glue. Here's the fun part. When the glue has cured completely, I'm going to fill each tube with play sand, packed as tight as possible. The last step will be to glue the platforms to the tops of the tubes. I figure I should be able to start using them at this point, and use my new speakers to "clamp" the platforms until the glue has cured. Wayne, I can send you some pictures of my new speakers and stands if you like. I don't have a Web site of my own...

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Subject: Re: My One Pi's are done (almost)

Posted by [Wayne Parham](#) on Mon, 07 Feb 2005 00:43:23 GMT

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Those sound so great! I'm glad to hear they're coming together. I'd love to see them, so yes, please do send me an E-Mail. Even better yet, use one of the free image hosts to store them and link them here in a post so everyone can see. Or when you send the image files to me, I'll put them in the [www.PiSpeakers.com/DIY](http://www.PiSpeakers.com/DIY) folder so you can link them from there.

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Subject: Re: My One Pi's are done (almost)

Posted by [RMW](#) on Mon, 07 Feb 2005 01:44:21 GMT

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Thanks Wayne! More pix to come, but for now: [http://pispickers.com/DIY/RMW\\_One\\_Pi.jpg](http://pispickers.com/DIY/RMW_One_Pi.jpg) still have to finish my speaker stands, so this is a temporary home for the three front speakers. Thank you so much for sharing your work. I'm telling anyone who will listen about your awesome designs.

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Subject: My One Pi's - no stands yet :)

Posted by [RMW](#) on Mon, 07 Feb 2005 01:47:15 GMT

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More to come....

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Subject: Re: My One Pi's are done (almost)

Posted by [GarMan](#) on Mon, 07 Feb 2005 13:49:36 GMT

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2 1/2" ports are hard to find. I custom made mine by cutting 2 1/2" holes with a holesaw through several sheets of plywood, stacking them together and glueing it behind the baffle. Alternatively, you can expand the port to 3" diameter and lengthen accordingly. 3" plastic ports are very common and I can recommend a place in K-W for you. BTW, is there a reason why the terminal cups are on the front baffle? Gar.

One PI

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Subject: Re: My One Pi's are done (almost)  
Posted by [RMW](#) on Mon, 07 Feb 2005 14:26:31 GMT  
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Thanks Gar, Great idea on the port. Stacked and glued sounds like the way to go! Cups on the front? Unusual, I know. I had to work around my neighbor's schedule, and while I was waiting to do the cutouts and rebates on the baffles, I assembled the remaining sides, caulked the inside seams, added fiberglass, and coated all exterior surfaces with primer and then black top coats. Having the cups on the baffles enabled me to transport just the baffles when hole cutting day arrived. It's a minor compromise for me - function takes priority over form some times, and that's OK with me!

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Subject: Re: Isn't 3" Sched 40 PVC 2 1/2" I.D.? nt  
Posted by [BillEpstein](#) on Mon, 07 Feb 2005 20:54:08 GMT  
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Subject: Re: Isn't 3" Sched 40 PVC 2 1/2" I.D.? nt  
Posted by [GarMan](#) on Tue, 08 Feb 2005 02:14:56 GMT  
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Is that a plumbing pipe? Never thought to look at that section of HD. Good idea though. I was only going by what's available from speaker shops.

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Subject: Re: Isn't 3" Sched 40 PVC 2 1/2" I.D.? nt  
Posted by [RMW](#) on Tue, 08 Feb 2005 03:06:11 GMT  
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My first choice is to get 2 1/2" OD tubing, since that's the diameter of my cutouts. I have found a couple of local outfits that have extrusion equipment, so should happen soon.

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