Subject: Re: skywave's 3Pi subwoofer build Posted by skywave-rider on Sun, 23 Dec 2012 17:31:52 GMT View Forum Message <> Reply to Message

Just a quick note reporting that the sub got built with just enough time for the glue to dry and was immediately thrown into service: (Pardon the hyperbole) The Earpocalypse

Some things might be of interest to newbie box builders like mysef:

I followed Wayne's T-Nut Installation Instructions and those suckers went in like a dream. I used 2 dabs of Gorilla Glue on each T-Nut for mounting the LAB 12 driver. However, the 4 T-nuts used to mount the PE speaker grill used Phillips head screws, so I could not get enough torque to pull them in all the way. I got them half way and gave then 2 shots with a hammer. All seems well.

I live in Manhattan and have no workshop, so I and the students built the box in the hallway and a tech closet at school. That meant I had to find a lumber yard which had Baltic birch ply and could do straight cuts. Nearly impossible here. I finally found a little storefront wood guy who had a RATTY table saw; but he had a 5X5 sheet of wood, so I took the chance. His cuts were fairly consistent except for one panel which was a little small in one dimension. I only noticed it during the dry fit. Of course we went with it anyway. I have to say that is nice strong wood. It looks nice too. I laid out the panels so the edges could be seen from the top, which I like. If all the panels were the same size it could have been an acceptable "furniture" or home use build. I realized after seeing it together that the box is a rather nice side table.

We went glue and screw. I bought 4 big clamps because I wanted to use the no screw method, but now I know you need a nice work table, 1 million clamps and skill to do that. So, screw it.

We never had time to apply the truck liner paint I bought, so we ran it raw. I will paint it next week during my grading period.

I added wood blocks to the bottom and attached casters. I did not know if they would be rattlers, but in use, they were quiet and great for a mobile sub.

As a guy with little experience with a router, I am proud to say I made the port cutout the correct size to accept a snug press-fit of the tube, flush with the front of the baffle. I ran a bead of Gorilla Glue around it on the inside.

We loaded the woofer in after an overnight dry and immediately put it into service. It kicked ass. I ran it with another, smaller sub, both crossed low, in hopes of smoothing some modes. Because of time constraints, I was not able to do the set up with measurements. But tuned by ear. Placement of the 3Pi near mid point of a side wail, the other sub was offset mid point along the front wall.

One other thing: We used some 1 1/4" stock ripped into a right triangle for corner bracing in the cab. I literally found this wood on the street already cut like that. My bad is that I did not calculate how much volume that took up in the cab and adjust. I am pretty sure it would be negligible, though.

I'll post pics later.

I want to thank Wayne for providing this great design and all the help, tips, expertise and mega good will.

Thank you Wayne from my self and the student builders.

