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Subject: Not so "Easy-as-Pie" One-Pi's

Posted by [GarMan](#) on Mon, 24 Jul 2006 20:27:30 GMT

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Over the weekend, I took some time to rebuild my One-Pi cabinets. The originals were built almost 3 years ago. They ended up pretty good considering they were my second woodworking project, but there were lots that could have been done better. In addition to cosmetics, I wanted to expand the cabinet from 0.8 cub ft to a full 1 cub ft and retune the port properly. I built the ports in the first cabinet too short and never took the time to lengthen it (I didn't use tube for port, but built with wood pieces). My original intent was to complete the cabinets, ready for finishing in one day. If I was able to bring myself to do what I've already have done, I probably could have completed it in one day. But I have this stupid need to always try something new. Trying something new, coupled with tool failure and thunder storms stretched the project over two days. This is my first cabinet using mitred corner joints. There were several heartwood markings on the sheet of BB ply I was using, so it took a while to work it in the design. Care was also taken to ensure grain continuity around the mitre corners. The heartwood markings runs from front, top and back continuously on both cabinets. Internal panels were lined with foam "live-side, dead-side". On the non-foam side, I decided to cover with acrylic caulking, the thinking being that it would help dampen vibration. Only cost \$1.39 for the tube and took 10 minutes to do, so no big risk. After two days, I ended with a pair of cabinets sanded down to 120 grit. Next step is to take it down to 220 grit and then oil. I've been listening to these cabinets for a day now and they sound better than the old, due to better construction, larger volume, tuned port and new tweeter. Port size is currently 3" dia x 5" len. Bass goes deep, but at a attenuated level. I'm thinking a length of 4" to 4.25" is where I'll end up. On the tweeter, I started with 10uF recommended by Wayne, but found the tweeter was really drawing attention to it self. I brought it down to 8.2uF and thought it gave better integration. Still a little too much presence. I expect I'll end up somewhere between 6.5uF to 7uF. I think FredT was to one who stated that he would not be upset if this was the only speaker he could listen to for the rest of his life. I completely agree. Highly recommend this for anyone looking for their first, second, third, forth, etc DIY project. The only problem is that it never ends. Right now, I'm thinking, "How can I turn this into an MTM design?" Gar.

One-PI build photos