
Subject: Re: Question for FredT re: One-Pi Towers

Posted by [FredT](#) on Fri, 14 Jul 2006 00:11:11 GMT

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I just re-measured the port, and it's a bit shy of 4" ID by 4-1/2" long. According to WinISD this gives you a 53 to 54hz tuning freq in a 1.5 cu ft enclosure. I had started with a 2 cu ft, then reduced it to a 1.8 and then to a 1.5 to get the best possible bass extension without the hump that accompanies a too-large enclosure. I have since experimented with wood blocks inserted in the enclosure to yield a smaller volume and decided 1.3 cu ft might be just a bit better, so I'm building another pair from scratch with that volume. This pair will have a 3" X 2-1/2" long port (using a 3" port instead of a 4" is for cosmetic purposes - with the 4" you can see the stuffing inside the speaker, and the 3" is plenty large for this application). I'll be using baltic birch veneer plywood for this one because my supplier had some nice looking 3/4" eleven ply for \$31/sheet. I asked Wayne about the enclosure volume and port size when I ordered the new One Pi kits, and he agreed the 1.3 cu ft enclosure with a 3" X 2.5D" port would be a good combination. Did I mention the enclosure volume is determined by where you put a false bottom within the enclosure. The actual outside dimensions are 9.5" wide (the narrowest width that will accommodate the Alpha 8 driver, 11.5" deep (the greatest width that will enable me to get four panels from a 48" wide sheet of mdf or plywood), and 36" tall (the height that places the tweeter just above ear level). These dimensions enable me to make two enclosures, including top, bottom, and three braces per enclosure, from one 4X8 sheet. Regarding the power handling, I've found they will play very loud without overexcursion, even with classical organ music. The bass isn't quite as tight as I would like, but I wouldn't describe it as loose.
