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Subject: Hi Bill and others. I think I've got it fixed now :-) Plz check!

Posted by [Adrian Mack](#) on Wed, 09 Jul 2003 03:08:20 GMT

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Hi guys, Well, I've taken everyones advice and "fixed" my design. Below is the new baffle arrangement: Total cabinet height is now 42", which does seem quite a nicer figure :-). I've decided to run the midrange horn from 400Hz to 1.6KHz now. Its actually a slightly redesigned horn so its smaller now as well. This makes the horn smaller at the mouth, but the main reason for this is so that the cabinets could be 10cm less in depth. Hornresp shows the midrange horn dropping at 1KHz, but I think I'll bite the bullet and hope it does 1.6KHz properly seeing as Hornresp shows "premature rolloff". Now, the compression driver will be run from 1.6KHz and not 1KHz, so it should be less distortion here too. I've also re-read the posts that Wayne suggested on the baffle spacing/time alignment thing, I think I've got it pretty much as best as it can be now in terms of this. I've taken Bills advice and decided I should recone the 2225 baskets to a 2235, then run them in a bass reflex cabinet from 30Hz to 400Hz. I'll only have about 70L for each bass section though, but the 2235H in a 70L box with an Fb of 30Hz does give a nice flat response, the inroom -3db point will be 40Hz. I guess I could make the bass section a bit larger and have an increased cabinet height, but the difference would only shift the -3db point down about 2Hz, so I wont bother with doing that. Unless of course its better to have the woofer a bit higher than 5.65" from the ground, then I'll happily increase it. But it seems that it doesn't matter how far from the ground this woofer running 30Hz-400Hz is, so I think I can just keep it at its current smaller height instead. Just as a sidenote, the baskets for the JBL 2205 and 2225 are exactly the same I think, and the recone kit says it works in both 2205 and 2225 baskets. But because the baskets are the same, and the same recone kit is for both versions, then I dont really know what I am reconing too :P lol. It could be somewhere inbetween a 2205 and 2225! Strange. Anyway, I'm reconing to a 2235H, but its just something I thought I'd mention. If I did completely trash this design (which I dont think I will), I think that the 2225's can run up to 1.2KHz, because thats what JBL reccomends, and also in another post by Wayne here he says that the 2225's run fine up here, its only the 2205's that have limited midrange output. Thats something else I thought I'd mention. I really like the idea by Thomas (aka ToFo) about making different sections of the cab bolted together so essentially I can change between two and three way whenever I want. But for now, I think that what I've got above should work pretty well... I hope so anyway :P ToFo, I'm running the P.Audio PA-D45 compression drivers. Apparantly they go down to 1KHz OK. Sooo... is there anything else I should change on my design? Wayne, do you think you could send me plans for the Studio Series 2pi tower? I have a friend who is very interested in these :-) Thanks! Adrian

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