Subject: New revised subhorn plans
Posted by Adrian Mack on Sun, 04 Apr 2004 13:13:08 GMT
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After getting advice from AA and a few other designs like the WSX Martin cab to look at, I revised my folding scheme. Here is my new one for the 18" driver that I'm using: This new design is the same external dimensions as the previous design (see thread a little down index page of forum for those who have not have seen). Well, this new one is 10cm taller actually, thats the only difference. Yet I've packed in a big 3360cm^2 mouth area and 2.85m length! External dimensions are 110cm high, 48cm wide and 90cm deep + MDF thickness, so its good and compact like I wanted. Essentially I've made the first few segments tilted, and there is no longer wasted space in the design which is how I got in more area and length. It is similar to a WSX design. Improvement over previous plan - blue curve is 2.85m/3360 mouth and grey curve is older 2.5m/2000 mouth. So the improvement is higher efficiency for the most part. The shape of the response curve has not changed, but at least its more eff, I guess its kinda more flat too but both would have been fine in flatness.If I reduce mouth size to say 2500 or even 2000cm^2 but keep the 2.85m length, I'd loose a lil bit of low end eff but also gain a lower Fc. However I dont want to do that... in this particular case it didn't do that much which is why, so I'd rather have the bigger mouth (bigger mouth also makes it perform better in non-corner loaded placement, like just against a wall and floor). Also the horn is not so ugly now - the bigger mouth makes it look cooler from the front. Less wood is also used on the new version, so thats good for weight and costs and the number of angles I have to cut!Adrian

Subject: Re: New revised subhorn plans
Posted by Wayne Parham on Sun, 04 Apr 2004 16:38:49 GMT
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Now that's a nice horn too. I would think the larger bigger mouth area might be an advantage, but I would still expect corner loading a requirement for single horn use. It sure does look cool with the angled panel in front.

Subject: Re: New revised subhorn plans
Posted by Adrian Mack on Sun, 04 Apr 2004 22:04:03 GMT
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Nah not really, I just spent awhile doing it so I wanted to post it :P The bigger horn doesn't have that much performance increase.... I would expect either to work about the same. Maybe I'd still go with the smaller one because its smaller and has the same response.