
Subject: Re: More HornResponse

Posted by [lunkie](#) on Sun, 08 Apr 2012 04:05:48 GMT

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Hi all, did get around to making a "volume plugs" but just using the pottery plaster. It dries pretty hard but drills, cuts and sands very easy and made a just about perfect mold of the speaker. So I cut a hole in it to match the throat and glue it to the horn. How well did it work? It definitely helped the high end, but the response had 2 big dips. One centered at 770 hz, about 200hz wide at the top, and the other centered at 1895 hz about 300 hz wide at the top. The depths were about -15 db and -30 db respectively. Not good. I tried putting different things in the throat, varying the rear chamber, plugging the vent in the speaker, nothing would vary the dips more than 3 db. If I added gasket thickness to the speaker on the faceplate (increase the front chamber volume) the dips would slowly push up in frequency and lower in depth, but at the expense of high freq response. So out comes the mold. Now what? I let it rest for a couple weeks and to drink some beer and keep re-reading Wayne's previous posts. I have Wayne's mid horns sitting there, so just for fun I punch in the B & C speaker specs into Wayne's horn and come up with this.

If we look at the 100db level I have 100 hz to 2000 hz response. I'm using a BBE DS26 DSP as a crossover network which has 5 bands of parametric Eq for each of the 3 way band passes I'm using. Maybe I can Eq this out, so I mount the B & C to the horn and test. The response is close but the peak is at 300 to 600 hz and at 2000 hz is about 12-13 db down. So by lowering the higher peaks by 6 db and raising the higher end by 6 db I ended up with a fairly flat response. It sounds pretty good rolling into the DE 250 driver / H290 horn on the top end. I'm pretty happy with it for now and those that have heard it really like the sound. Singers and instruments sound like they are in the room is the most common comment I get. But I think I can make it better, still digesting Wayne's previous posts, but for now I'm just listening.

File Attachments

1) [B & C 8.jpg](#), downloaded 2623 times
