
Subject: Single driver cornerhorn
Posted by [Ralph](#) on Fri, 10 Sep 2004 17:34:16 GMT
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Do you know of any single driver cornerhorns? Seems like most single driver horns are huge. Maybe a corner design will solve my space/size problem. What do you think about a dual horn made for corners so the bass backhorn section can be made smaller?

Subject: Re: Single driver cornerhorn
Posted by [roncla](#) on Fri, 10 Sep 2004 18:04:52 GMT
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A 50 hz horn is a 50 hz horn. Corner loading will allow a smaller mouth(which will mean a shorter horn) but depending on the throat size and type flare will still have to be a given length. Only reason i havent spent a lot of energy in corner horns is the lack of room geometry. IMO a corner horn should be just that, designed for a corner horn and not just a rear firing horn.ron

Subject: Re: Single driver cornerhorn
Posted by [Ralph](#) on Fri, 10 Sep 2004 19:41:03 GMT
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What about recessing a front horn and suitable driver in a backhorn cabinet something like this?
<http://users.bigpond.com/tunnelgap/tannoy/grf.html>

Subject: Re: Single driver cornerhorn
Posted by [roncla](#) on Fri, 10 Sep 2004 23:37:51 GMT
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Works for me.The FLH should be tuned for the roll off of the BLH.(slight overlap) so you are looking at a normal range of approx.250-350 hz.XO.ron

Subject: Re: Single driver cornerhorn
Posted by [kyle](#) on Sat, 11 Sep 2004 15:50:02 GMT

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I looked at those tannoy cabinets a few years ago. I had detailed plans and I would say you need a major woodworking shop and much better skill with precision cutting than I ever had. I made back loaded horns for a pair of Lowthers instead and while it was no picnic it was certainly easier to cut the more than twenty internal parts and have them fit than it would be to cut the thirty to forty inside the GRF cabs. The pieces are all at different angles and setting them up and aligning them would be a total pain in the ass. That said, I've heard a pair of the original tannoy GRF cabinets like this and they do sound impressive.

Subject: Re: Single driver cornerhorn
Posted by [Ralph](#) on Sat, 11 Sep 2004 17:16:20 GMT
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Thanks, I'll keep that in mind. I was using the GRF as a proof of concept and thinking about something along the same lines. Best, Ralph

Subject: Re: Single driver cornerhorn
Posted by [Ralph](#) on Sat, 11 Sep 2004 17:20:33 GMT
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Thank you for exploring this with me. I think I'll pursue this more. Do you design your horn on paper or is it more of an empirical approach? How do you know where the BLH rolls off? Ralph

Subject: Re: Single driver cornerhorn
Posted by [roncla](#) on Sat, 11 Sep 2004 21:45:20 GMT
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My designs are a long drawn out process. I start with the basic math and formulate a design goal. I then factor in a size goal then start folding on a CAD program till i can get as near as i can. Then i start a wave form/pressure(hydrodynamic) program which more or less refines the flow. Then i go thru structural methods to assure there will be minimal resonances then sit down with CAD and several dozen papers filled with numbers and work on it till i get something that is as close to my original design goal as i can get. Last horn took 6 months to design and build a test horn and test.ron (i may be slow ,but i eventually get there)

Subject: Re: Single driver cornerhorn
Posted by [roncla](#) on Sat, 11 Sep 2004 21:49:16 GMT
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Dont know why that posted twice. FYI the filter/compression chamber volume is the main factor in the roll off frequency.ron

Subject: A small corner horn
Posted by [NUMA](#) on Mon, 13 Sep 2004 12:11:33 GMT
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You might check out <http://www.thehornshoppe.com/>. They are a pleasant and small single driver corner horn. Pretty versatile, and fun to have around. High W-A-F. Kris

Subject: Re: A small corner horn
Posted by [Don](#) on Mon, 13 Sep 2004 19:43:20 GMT
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Interesting and low cost. \$700 a pair for finished speakers? Are they good? Sound? Fit and finish? Have you compared with others from Cain, King, etc?Thanx,Don

Subject: Re: Single driver cornerhorn
Posted by [Ralph](#) on Mon, 13 Sep 2004 19:50:12 GMT
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Thanks for your ideas Ron. You have been most helpful.Ralph

Subject: Re: A small corner horn
Posted by [NUMA](#) on Tue, 14 Sep 2004 12:46:20 GMT
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Yeah, I think they sound great. I use mine as my primary speakers. I really haven't been interested in chaning anything for a long time as far as speakers. I am continually fiddling with

amps/preamps/whatever. I have heard Cains at audio shows so they were not in their prime setup, the rooms were way small, so I really shouldn't say anything about Cains. Finish is simple, and actually very stylish. The finish is quite durable mine have been moved between 3 houses without a scratch. If you wanted them unfinished I am sure you could get that arranged. I use a pair of 2A3 monoblocks, a silly little powerwave amp, and a big old heathkit as my power. The speakers are scary revealing and I have been really happy with them. If you live in the midwest you are welcome to swing by and give a listen. Kris

Subject: Re: A small corner horn
Posted by [akhilesh](#) on Tue, 14 Sep 2004 15:06:48 GMT
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I've never heard them. However, Ed Schilling, the manufacturer, did send me a curve he measured which shows they are flat down to 60 HZ or so. A stereophile review (FWIW) also seemed to like them, in fact they are "stereophile recommended" (again FWIW). My guess is they sound pretty good over 80 HZ but you may need to augment the bass with a good active sub. Blamping may be a good option as well. -akhilesh

Subject: Re: A small corner horn
Posted by [NUMA](#) on Tue, 14 Sep 2004 17:06:07 GMT
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Yeah, I actually have used a variety of bass augmentation methods. I have used a sealed 10" sub amped, and it did well. Ed actually makes a bass augments that you might want to look at. (I have one). I would advise STRONGLY to FIRST get them in your room and listen and try to see how much augmentation you want/need. All corner horns are room sensitive. That's life. My room is quite big with a 15' ceiling. Kris
