
Subject: Re:Port Detail for Pro 7 Pi's, Wayne, Mike Bates

Posted by [jlharden](#) on Sun, 09 Dec 2001 12:00:35 GMT

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Hi Wayne, Thanks for forwarding the plans my way. Feels good to finally be making some sawdust. I plan on doing some type of constrained layer type thing with several layers of mdf sandwiching the "core". Hoping for a very resonant free enclosure. Have opted for 1' 1/4" dowels for bracing from front to back, 4 total, 2 just above the woofer and two below. Enclosure is going to end up quite heavy but not concerned as I plan on placing them and leaving for a long time. I've been working on them a few minutes here and there. Will take a while at this rate but they are sure going to be constructed nicely. I have no hurries to just slap them together, everything has to be just right. You knew that though! Lastly today, do you have any experience with the conical horns such as the Sierra Brooks? The Baby Grand looks interesting. Does a horn such as this offer a similar frequency response to a typical exponential horn? Could they be augmented by a RC network. What effect does the conical shape have on the dispersion characteristics in room? And efficiency? I'll open this question up to Mike Bates as well as he has direct experience with these specific horns. My intention is still to use a JBL 2426 on whichever horn I chose. Thanks!
Jerrod

Subject: Wood horns

Posted by [Wayne Parham](#) on Sun, 09 Dec 2001 14:01:36 GMT

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I've asked Bruce Edgar for response graphs of his "salad bowl" tractrix horns. I think Mike Bates can probably get measurements from Sierra Brooks. Hopefully Bruce and/or Mike will chime in with some response charts.

Subject: Re:Port Detail for Pro 7 Pi's, Wayne, Mike Bates

Posted by [M](#) on Sun, 09 Dec 2001 22:56:05 GMT

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Hello Jerrod, I cannot comment on the Sierra Brooks horns because, unfortunately, I have never heard them. However, I am very familiar with Dr. Edgar's horn, having extensively listened to them, and even build my own replica. Bruce was kind enough to measure my horn and the measured response matched a response of his horns, consequently, my conclusion is that his measurements are not "doctored." Bruce is very open with his measurements, why do not you contact him with your questions?M

Subject: Re:Port Detail for Pro 7 Pi's, Wayne, Mike Bates
Posted by [Mike Bates](#) on Wed, 19 Dec 2001 14:36:07 GMT
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Sorry, I missed this post!*****You knew that though! Lastly today, do you have any experience with the conical horns such as the Sierra Brooks? Hello, the Baby horn is a pure tractrix with a 500 cycle flare rate.****The Baby Grand looks interesting. Does a horn such as this offer a similar frequency response to a typical exponential horn? Yes, they do, however the tractrix will be a shorter horn and will not perform as well on the lower end. You can expect loading down to around 700 cycles, and 800 cycles is a great place to crossover with the Baby. ***Could they be augmented by a RC network. Yes, Wayne's crossover designs in his document will work VERY well. You can expect the high end to roll off just as in a radial.****What effect does the conical shape have on the dispersion characteristics in room? And efficiency? The round horns have a 60 degree radiation. This seems to be about perfect for most rooms/listeners. What all listeners/observers have noted is the wooden round horns have less audible "horn" coloration and image better. I myself am playing with the Baby's right now in a three way with the TAD 4001 (as the high horn and the 180 cycle horns as low mid) and actually prefer the imaging of the 12" over the 26" horns. They disappear completely in the room, where the larger horns can do this with most material. These do it with everything. With the JBL drivers with a proper filter you should be able to obtain a nice near flat response from 800 to 15k+. In other words no tweeter needed. Mike Bates
