Subject: basshorn

Posted by toxicport.e on Fri, 01 Aug 2003 00:02:52 GMT

View Forum Message <> Reply to Message

hi wayne!3segment conical basshorncant get rid of the 70hz peak,but i would use 70hz Fc low pass filter linkwitz riley,would it be -3db at that point??its either this concept,or a derivative of it, or labsub with 1woofer modified.:^)

Conical basshorn

Subject: Re: basshorn

Posted by Wayne Parham on Fri, 01 Aug 2003 04:44:00 GMT

View Forum Message <> Reply to Message

I really like the response curve of your horn in eighth-space. That 70Hz peak isn't bad at all. It's only a 4dB peak, and so your horn would still be +/-3dB from 30Hz to 150Hz. And if it's a straight horn or has reflectors that propogate high frequency energy, you'll probably find it goes a lot higher, if that's important to you. Most woofers have rising response, and this tends to act in a complementary fashion to the falling response of the horn, unless there is a low-pass filter in the system. A low-pass filter can take the form of an electronic crossover or it can be an acoustic filter made by horn folds that reflect midrange energies within the horn instead of directing them towards the mouth. If you plan to crossover at 100Hz, this is of little importance. But if you want the option of higher-frequency output, then wave path and reflector geometries become significant.

Subject: Re: basshorn

Posted by toxicport.e on Fri, 01 Aug 2003 04:58:28 GMT

View Forum Message <> Reply to Message

room modes will show up muckn up my nice response anyway:-Pit wil be a large room, approx 28ft x 19ft or so.:-Di am progressing in the modeling,im up to getting the labsub onto paper to compare it to mine, with the folding.i reduced the 1st fold in from the mouth to cram it into necessary size:^)at the 'horn loudspeaker forum' W H geiger has helped alot.http://f16.parsimony.net/forum27133/Regards Mike