Subject: Re: 4 Pi and 7 Pi bass response- More similar or different?
Posted by Psychoacoustic on Thu, 14 Jan 2010 00:14:39 GMT
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Wayne, thank you for the informative response re. rear facing woofer theory.
Bass cabinets will be a walk in the park compared to the midhorns!
2 X 3 Pi subs in operation.
I know that Wayne has recently addressed this topic in "False wall bass traps", but thought a brief discussion of wall surfaces specific to 7 Pi cornerhorns might be informative. Apologies if the questions are limited to my situation, hope the discussion may be generalised.
Unfortunately, still no equipment for taking room measurements... anyhoo...
In the rear corners and to the left and right of the speakers in the pictured listening room are low and mid frequency panel bass traps constructed from Ethan Winer's designs
http://www.ethanwiner.com/acoustics.html#fiberglass%20traps
These are intended to absorb the hump around 100 Hz - 150 Hz, which I presume is the Schroder frequency often referred to. Would it be advantageous to incorporate the same, sealed bass traps in 50% (or more) of the wall surfaces immediately next to (in front of) the speakers (where curtains are currently located)? I think this application would address the notion of '...we want the room walls to (have the same things you'd want in a horn and) provide some damping'. I presume we do not want high frequency damping in this location if the walls are intended to act as extensions of the horns and provide directivity.
There are high frequecy, rigid fibreglass absorbtion panels in the centre of three walls of the room.
Two more optimisation questions. There is a log roof joist right above the speakers and there are windows behind them. Would these things cause interference? Can't do much about the joist, except relocate speakers to the back of the room (where they were originally intended to go!!) but then I lose my mountain view! Feel a bit claustrophobic, too. Any 7 Pi specific comments on ceiling treatments directly above the speakers?
For the windows behind the speakers, it would be possible to build removable wall 'panels', as high as the glass and 1 metre (plus) wide to partially cover the windows for the purposes of increased bass absorbtion and to better act as '... directivity control device(s)'. Thoughts on the necessity/effectivity of this idea in relation to the rear-facing woofer?