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Subject: Re: Experiment, Insights pls?

Posted by [Barry](#) on Tue, 26 Feb 2008 06:02:41 GMT

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Hi Wayne, (and everyone) Thanks for the input Wayne. I don't have much test equipment yet. The original idea was to have interior pathway that would lower Fs to allow for a little lower F3 for the same given size box. Did 2 more experiments. The original experiment had a 6'6" pathway. Box tuning went down from 40 hz [identical box with no pathway] to 35 hz for a 5.1 cu ft box. The sound was "OK". Next was a little larger box and 8'5" pathway. Port tuning sounded best at 28 hz but did not like the sound. Next was another box of 5.1 cu ft and shorter pathway of 4.5 feet. Port is tuned to 37hz. So it does offer a slight improvement in low frequency response over box with no interior pathway. I really like this one. IMO it sounds better than an identical box with no pathway and it goes just a little lower. The bass is clean and well defined. So apparently with a certain size box a reflex speaker can reach a little lower by using a small interior pathway to lower its Fs just a little. I think that the pathway is mostly inaudible as the small size of the port would be a barrier to hear any volume increase from it. I really cannot hear much of any other affect from the pathway other than a slightly lower Fs and a tiny reduction in volume. This I think is because the impedance has shifted to closer to 9 ohms or so because of the pathway. Think that the bass is a little more controlled and clean. I plan on doing some more of these experiments with smaller and larger woofers this spring. Any thoughts or comments welcome. Barry

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