Subject: Jumping the gun, but a few questions
Posted by HFGuy on Sat, 05 Feb 2011 07:27:10 GMT
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Later this year I want to start to upgrade my current home theater to a dream theater. My first purchase and reward to myself (finishing up my doctorate in a few weeks... hopefully) will be a projector and screen (was thinking of buying an SMX, like the one BigmouthinDC) but after that my audio is in desperate need of updating.

I stumbled across the econowave project on another forum and read through as much as i could (it's several hundred pages long). My conclusion was I love the idea of the horn and 15" for a home theater setup. One thing that put me off the econowave was the options, different woofers, different horns and compression drivers, all of which effect the network... Then when Wayne himself participated in the discussion and was VERY objective and fair (pure class). I directed myself to his site and discovered that the Pi-4 uses the same drivers as the high end econowave i was eying. So, that pretty much settled it, I think I have my plan narrowed down. I will purchase a single Pi-4 kit with all the trimmings and build the cabinet to Wayne's specs. From this I can determine if this is the route I want to continue with, my concern is that my past experiences with horns have been less than stellar. If i do in fact love the Pi-4 I was thinking I could build a floor stander version, with a larger/deep tuning. I guess my question after my long drawn out story (what Phd doesn't love to hear their own voice ?) can the Pi-4 be improved with a larger (read less WAF) cabinet or is the stock size as good as it gets (build speaker stands instead) ?

If i do continue with the Pi-4 new cabinet or stock I will build 2 more so i can have a matching LCR set for my theater. I know Wayne recommends a 1 or 2 Pi for the surrounds, but I find it difficult to believe the tonal matching between a dome speaker and a horn loaded CD.

Any thoughts or recommendations ?

P.S. I have very fickle so don't hold me to my plans

Subject: Re: Jumping the gun, but a few questions
Posted by Wayne Parham on Sat, 05 Feb 2011 15:47:30 GMT
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I don't suggest deviating from the plans unless you are prepared to do a lot of measurements and go through a full design/test cycle. Some modifications can be done with little impact but most can't. Making the cabinet significantly larger changes the way standing waves line up in the cabinet and can introduce peaks and dips in the upper midbass and lower midrange. So my suggestion would be to stick with the plans. Use stands to put the mains at the proper height and use multiple subs to smooth room modes. See the link below for more information:
High-Fidelity Uniform-Directivity Loudspeakers

Subject: Re: Jumping the gun, but a few questions

Posted by Bill Epstein on Sun, 06 Feb 2011 03:16:30 GMT
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I used Waynes original crossover and 4Pi components in several different larger (4-4.5cu ft) cabinets with lower tuning. So did the one Spkrmn57. We were both amazed when we finally heard Waynes own version, which is now my main speaker.
A little less bass but much higher quality.

The new crossover is purpose-designed for the 3.5 cu ft cabinet and is killer!

Stick with the plan.