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Subject: Re: Svelte 3pi

Posted by [Wayne Parham](#) on Thu, 02 Oct 2014 23:55:28 GMT

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Answers under questions:

"Does the 3pi crossover include BSC or not?"

No. Please see the FAQ page for comments about baffle-step compensation on loudspeakers of this size. In short, the baffle-step occurs near the Schroeder frequency, and there are better ways of increasing bass in that range than EQ. Use flanking subs instead.

"Clarification on your comment on pressure nodes... So the common practice of putting a slot/vent at the bottom of a box is really bad because it excites all modes?"

Not necessarily. But it is important to do the analysis and testing to make sure the pressure nodes aren't located on a sound source, and that they don't create response ripple as a result.

"Is the depth of the H290C the same as Eminence, 5.9"?"

Yes, it's very close to that.

"Any thoughts on whether the PH612 PT clone is too short at 4.4"?"

It's not just the length, but also the acoustic load, and the ratio of resistance to reactance, which sets the phase.

"Is the crossover frequency for the 4pi lower to match the slightly bigger diaphragm? Doesn't this push the CD harder because it has to play louder and lower?"

The frequency and slope are both different. Please see the post in the FAQ called "Crossover Optimization for DI-matched loudspeakers", because it shows the process of setting the crossover region.

"Do you have any thoughts on feasibility of resistance boxes for (partial) cardioid response?"

No, sorry. I'm sure it can be done very well. I've gone a different way, using constant directivity cornerhorns and DI-matched two-ways with flanking subs.

"And please, a copy of the 3pi crossover and plans(?) as a starting point. Still leaning to DE250 and Definimax 4012HO."

You've got mail!