Subject: Four PI Thermionic & 1K6a012dB
Posted by John B. on Sun, 02 Dec 2001 20:51:23 GMT
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I have the four pi thermionic plans, and I've already started assembling the boxes - parts are and will be on order. I fully intend to build the four pi's, but would like my knowledge as complete as possible.To this end, I do, however, have a question.Using the spice tools and circuit models you provide; and other number crunching and plotting tools: No matter how I analyze and model the system I seem to predict a 3 or so octave wide notch in the response centered at about 2000Hz. Am I correct? The notch is apparently crossover generated, and I can't find any component of the system which compensates, or for which it compensates.I imagine this is probably a more complex issue than I am assuming - what with phase cancellations and so forth. But it bothers me :) and inquiring minds want to know.Thanks.

Subject: Compensation for compression horns
Posted by Wayne Parham on Mon, 03 Dec 2001 01:23:10 GMT
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The crossover is asymmetrical, so the electrical crossover points don't line up. There is also top-octave compensation in the tweeter circuit, which attenuates the lower region much more than HF. This is all done on purpose to make the overall response curve as flat as possible. The crossover was carefully designed to provide good response, both on axis and off, with uniformly collapsing directivity that is matched at crossover and constant above that.

Subject: Wayne, I have a question...
Posted by Adam on Mon, 03 Dec 2001 01:58:14 GMT
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What crossover point do you think is best for the PSD2002? I choose a 1.5 kHz xover point on my design.Thanks!!Adam

Subject: Eminence PSD2002 crossover frequency
Posted by Wayne Parham on Mon, 03 Dec 2001 06:32:54 GMT
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That's perfect. I like to crossover between 1.2kHz and 1.6kHz.

Subject: Re: Eminence PSD2002 crossover frequency
Posted by Adam on Mon, 03 Dec 2001 17:27:58 GMT
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Alright thanks Wayne.Adam