Subject: Anyone who could model new 18db/oct High Pass @950Hz?
Posted by -3db on Thu, 18 Sep 2003 16:40:59 GMT
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Dear Anyone Kind who could model this for me,custom designed Xover: Fc = approx 950Hz 18db/oct different sort of filter: LCLSo input parallel shunt inductor of 1.3mH into polyprop 42uf series cap into parallel shunt inductor of 1.3mH.The input inductor has a 25 ohm resistor in series plus DCR of .6 ohm: ouput inductor also has a DCR of .6 ohm driving an Lpad driving an 8 ohm Selenium D210ti compression driver.The result I am getting seems like way too low Fc, and high distortion. I have no test equipment or even test CD now.I think the high inductor leg resistor is too high, but I don't know. I havedone the best I can to make this thing work.I designed a similar style filter with excellent results at 5khz, however I had only a 4 ohm resistor in the input leg.Any Modeling would be great.Thanks Sincerely,-3db

Subject: Spice
Posted by Wayne Parham on Thu, 18 Sep 2003 17:49:55 GMT
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Check the circuit in Spice, and don't forget to accurately model the source and load impedance, including reactance. This is very important in speaker circuits, because the load is usually nearly as reactive as the parts in the crossover.There are some sample crossover circuits in the archive above, so you can see how to use the program. You'll be able to simply edit the files to make your circuit model.Wayne

Subject: Re: LCL is NOT a hp configuration
Posted by Sam P. on Fri, 19 Sep 2003 10:49:37 GMT
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and I would suggest 1)stop listening to who suggested it or 2)pickup up a basic speaker design text or 3)go to www.selectproducts.com/calculators.htmand input your driver Z's and desired xover freq. Good luck. Sam

Subject: Re: 210ti unsuitable for 2 ways?
Posted by Sam P. on Fri, 19 Sep 2003 11:21:12 GMT

what part of "minimum recommended crossover frequency 2000Hz./12dB octave" is unclear? I would imagine results at 950 Hz. WOULD suck. This driver has a huge z peak at 2 kHz., and a 4 dB rise from 2 kHz. to 4 or 5kHz. shown on the PE site's spec sheet. Looked decent at first glance for use in a 3 way system, although I did not look closely at the upper end response. Not sure what advantage they would have over the venerable psd-2002 in this price range:) Sam8 ohm, 3rd order HP, the online calculator showed 14uF series input cap, 1.0 mH shunt inductor, and 42uF series output cap to the lpad/driver for a desired Fc of 950Hz, btw.

Subject: Need a pair of PSD2002's
Posted by LuxmanLover on Fri, 19 Sep 2003 20:57:40 GMT

I have a set if you are interestedKelly