Subject: Re: Transient Perfect Crossover's
Posted by Adrian Mack on Thu, 16 Oct 2003 08:12:54 GMT
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Hey Wayne,When I asked what order do the circuits have to go in, I actually meant like - is there any specific order? EG: Crossover first, then attenuation circuit after that, then zobel after that. Or is there any certain requirements - like, does the zobel need to go before the crossover, or lpad before zobel, etc. I was pondering on weather or not there are changes in any other parameters when two drivers are hooked togethor. Since Re changes (halved or doubled if parallel/series), then BL does too, so Qes does as well, etc. Or is this all "cancelled out" because there are two drivers there? How would I design a series notch filter for the driver in the cabinet where it modifies its impedance at resonance? The typical formula for it damps the free-air resonance impedance peak, so it just uses four T/S parameters. It sounds like its probably quite a lot of work to do this... perhaps it would be better to just not cross near resonance. But even if we dont have the crossover point at resonance - below that, where the crossover attenuates frequencies will also be around the resonance region where impedance is high. Does this still pose a problem to us? Or is it just a matter of having the crossover point itself in a region where impedance is low? In a 2-way design, it doesn't matter about the impedance at resonance as you've said because the xover point is typcially way high, in the kilohertz range and the box tuned low. In a 3-way design with woofer, midrange and tweeter, it could matter for the midrange driver. Then at this point my brain kicked out of "dumb" mode, and one of your comments reminded me that midranges in the 3-way cabinet are typically closed back ones with no box :P So I could just use the normal formula to get rid of the impedance peak at resonance, right? Do people ever use 3-way designs where the midrange ISN'T closed back? (therefore it could be affected by the box?). Thanks!Adrian