
Subject: Re: Pre Compensation Load on X-OVERS and L-Pads

Posted by dB on Tue, 10 Jan 2006 23:04:16 GMT

[View Forum Message](#) <> [Reply to Message](#)

Dear Mr. (Wayne) Parham,Hi. It his a pleasure to be able to ask you a question and having you 'in person' to answer to them. First I am learning how to work with Spice software and what a difference from 20 years ago with/when my only book (that) was >PHILIPS Building Hi-Fi Speaker Systems. Thanks to all of you guys from Berkeley. I am making such great improvements that I feel pity that I am only an unemployed architect and not a technologist engineer to find a job in this area. It seems that now everybody has a position open for engineers. At least I have time for what I like and what I can do...Second I wanted to take in consideration that how more times I read your paper 'Speaker motors and passive crossover filters' there is something that doesn't add up. Since my first question that I couldn't find an answer.1. On page 33 you show: $R1 \ 3 \ 1 \ 5.5R12 \ 1 \ 0 \ 3.7$ If the speaker is $1 - 0$ your $R1$ should be $3 - 0$ (not $3 - 1$) and $R12 \ 3 - 1$ and not $1 - 0$. (Or Spice is right and the drawing is wrong?)2. Again on page 35 you show: $L2 \ 5 \ 6 \ 0.6mHC2 \ 5 \ 3 \ 16u$ $R1 \ 3 \ 1 \ 5.5R12 \ 1 \ 0 \ 3.7C1 \ 3 \ 1 \ 5u$ If the speaker is $1 - 0$, $R1 \Rightarrow 3 - 0$, $R12 \Rightarrow$ should be $3 - 1$ (from C2-1.st order?) and not $1 - 0$. (Or the drawing is not right...)What is confusing me is that the Pre-compensation can be connected to 1 (Motor-Speaker) or to 3 (C2 from 1.st order x-over).Again on page 37 and page 52:! series/parallel compensation $R1 \ 3 \ 1 \ 25R12 \ 1 \ 0 \ 16C1 \ 3 \ 1 \ 0.47u$ If you noticed $R1$ IS OK, $C1$ IS OK AND $R2$ IS WRONG AGAIN. Should it be $R2 \ 1 - 0$? Or $R2 \ 3 - 0$? With $L1$ from 2nd order x-over. All connections from Spice seem to be right and the x-overs drawings wrong.If $L1$ is $1 - 0$ (page 51) then, when you introduce a !series parallel compensation on the circuit (from page 52) 1 becomes, then, 3 from C2 ($C2 \Rightarrow 5 - 3$), $C1 \Rightarrow 3 - 1$ AND $R1 \Rightarrow 3 - 1$ (Speaker $1 - 0$). $R2$ is then $1 - 0$ (parallel with the speaker $1 - 0$). But the drawing is not showing that. What it's showing is $R2$ (from)3 -(to)0 (in series with C2 (of 2nd order x-over) . Thanks again Mr. Wayne and thank you for your time.Best RegardsFrom da Bastos
