Subject: Fountek Ribbon Tweeter

Posted by dB on Thu, 23 Feb 2006 19:06:59 GMT

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Hi, I need to model a FOUNTEK NeoCd2.0 Ribbon Tweeter in Spice.Are the parameters I am using ok?R=6.5Ohms (for Re) L=0.1mH (for Le)(1)The problem is that they don't publish the Le parameter. (2)Also the impedance is 7 Ohms (nominal) but in the graphics curve of response & impedance it shows impedance coming down to 6.75 Ohms @2kHz and 6.5Ohms @3kHz. Which impedance is the best choice to model in Spice, with x-over at 2kHz? (3)What is this ---> DCR 0.02 ohm, from the factory .pdf catalog?(4)I am not using compensation for HF, what do you think?Website here(http://www.fountek.net/products\_neo\_20.htm);or here(http://www.madisound.com/neocd2.0.html).Thanks Wayne.Best Regards

Subject: Re: Fountek Ribbon Tweeter
Posted by Wayne Parham on Thu, 23 Feb 2006 20:06:12 GMT
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I haven't used the Fountek tweeter, so take these comments with a grain of salt. But based on what you've said, I think your proposed Spice values will describe the tweeter pretty well, particularly if you crossover well above mechanical resonance. A conservatively high crossover point is generally a pretty good idea with a ribbon tweeter. And I don't think you'll want compensation for a ribbon tweeter, because that's really EQ for horns to correct their falling power response.

Subject: Re: Fountek Ribbon Tweeter Posted by dB on Fri, 24 Feb 2006 13:38:09 GMT

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Hi,Do you know they have a pretty nice transformer in the back, the Founteks. Isn't it like the 50's speakers that had transformers!? I am reading Klipsch Patents right now, #2612558, #4138594 and #4237340 about x-overs networks and horn loading formulas and design. I helped this other guy in another Forum that needed x-overs for his Founteks and 'modeled it with one second order LF/HF x-over that worked pretty well. The guys in the Forum were amazed because they had plenty of notchs and 4.order LF x-overs that we needed because the 6" midd-bass was peaking at 5/6KHz next to x-over frequency. The result was that going down in the x-over freq. to 2kHz helped, what gave it a beautiful curve down in the problematic area of the peaks in the 5K range. So, the guys were amazed because the second order x-over was giving them a third order slope and that was what everybody was looking after. I think you 'stated' in your White Papers that it is the voice coil (inductance) 'working'. Best Regards