
Subject: Re: Voice Coil Inductance

Posted by [Adrian Mack](#) on Sat, 30 Aug 2003 03:27:23 GMT

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Hey Wayne, Adire Audio, in their technical notes section has an article on voice coil inductance. Its located at http://www.adireaudio.com/tech_papers/woofer_speed.html If you have the time to read it, can you please go through it and tell me your thoughts. Its really just making a simple point, but a point nonetheless. If we go by what that article has to say on inductance - that it holds the signal for a bit then "lets it go" (which is basically what inductors do) - do you think that the motor acting as an inductor will hold low frequencies for longer than high frequencies? Or would it act sort of like a constant delay like a flat GD curve? I believe there are some that place all this emphasis on voice coil inductance, but they dont even know what it is. Thats why I'd like to get a better picture of this aspect. BTW: On DVC woofers - wiring the VC's together in series doubles L_e , and parallel halves it. I guess thats because in series the wire length is seen as doubled (which explains why BL is doubled with series wiring). In parallel, for some reason it doesn't affect BL at all... Siegfried Linkwitz says on his website that wire length is not made any longer or shorter in parallel so BL is not affected in parallel wiring. But parallel wiring does halve the L_e value. Why is this? Linkwitz also said voice coil inductance has little influence on low frequencies.... is this true? If so, then... we could say that for subwoofers, L_e is not important. And on midrange/high frequency units inductance is always going to be low anyway, because they are tuned higher, so its not important to know what L_e is on these units either. Or is this too simplistic? Thanks! Adrian
