Subject: Re: fullrange single driver help please!!
Posted by Martin on Tue, 14 Jun 2005 10:09:34 GMT
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"If using a SS amp (as I do on my FE168EZ), try a (series) 4 to 10 ohms non-inductive resistor. In my case, I noticed what seemed like a 6dB boost in bass, and a "magic" drop in low treb output, while retaining vry HF sound."At the very low frequencies where the electrical impedance at the driver terminals is high due to the system resonance(s) and at the high end where the electrical impedance is rising due to the voice coil inductance, the series resistor has almost no effect on SPL. In the middle frequencies, a voltage division occurs between the series resistor and the driver impedance to shelve down the SPL output. So at the top and bottom end the SPL is not really changed, only in the midrange is there a reduction in SPL. The speakers efficiency is changed different amounts at different frequencies depending on the electrical impedance of the speaker. There is never an increase in SPL output.You are depending on the drivers impedance curve to rebalance the SPL output. If you use a Zobel across the terminals and a BSC circuit (with parallel cap) in series you have a bit more control over when the SPL is reduced and then allowed to rise. This is the next level of refinement to just adding a series resistor and you should be able to make another improvement in performance.Martin
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