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Subject: Re: Impedance correction at a compression driver's Fs - How to calculate - Wayne P?

Posted by [Wayne Parham](#) on Tue, 21 Mar 2006 14:56:28 GMT

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Check out my Speaker Crossover document, because it describes techniques for dealing with the impedance peaks of a compression horn and the interaction that results with crossover components.

In a nutshell, the methods described use conjugate filters and/or additional damping. A horn acts like a series of resonances, so the conjugate is also a series of resonances. In some cases, only one impedance peak is really a problem, so it can be smoothed with a single electrical resonator. But you'll also find that increased damping will smooth the peaks, and this may be more attractive. Model the circuit in Spice and then measure your final results.

You might be interested in attending my "Crossover Electronics 101" seminar at the Great Plains Audiofest in May. We will examine several circuits, by comparing their schematics and modeled response charts as well as actually listening to speakers that use the circuits shown. So we will be able to identify how each sounds.