Subject: So, what do I do with these now? Posted by GarMan on Mon, 21 Mar 2005 16:47:10 GMT

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I just picked up a pair of JBL 8" 2118H on eBay for a very good price and thought it would be a good addition to my system. Currently, it's basically a 2235 and 2445/2380 2-way crossed at 800Hz. The 2-way combo sounds great, but I think I'm pushing both drivers too close to their frequency limits. What would be the appropriate frequencies to integrate this 8" between the woofer and compression horn? On Goldsound.net, the 2118H is common in their kits, but is typically run from 300 to 5,000Hz. I'm considering the "traditional" 200-2000 range unless there are other suggestions. Also, in crossing a midrange with a woofer, does mechanical slope sum up with electronic slope? For example, if I get a -12dB/oct slope from the box, will an additional 2nd order crossover at the same frequency give me a 4th order slope? How do I account for phase shift from the mechanical slope? Gar.thanks, Gar.

Subject: Electro-mechanical filter slope Posted by Wayne Parham on Mon, 21 Mar 2005 21:51:30 GMT

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The electro-mechanical slope of the driver adds to that of the crossover if they're close in frequency. Phase and amplitude response are the same whether a filter is formed electrically, mechanically, acoustically or combined. The only thing that might complicate things for you is that at the upper end of a driver's response, it usually stops acting as a piston and the cone begins to flex. In breakup, amplitude and phase response isn't usually a simple slope, but rather bounces around with several peaks and valleys instead.

Subject: Re: Electro-mechanical filter slope

Posted by GarMan on Tue, 22 Mar 2005 14:20:13 GMT

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Thanks Wayne. Now I just have to find an economical way to build a crossover in the 150Hz to 200Hz range. 90uF caps and 10mH coils! Ouch!

Subject: Re: Electro-mechanical filter slope

Posted by Mike.e on Wed, 30 Mar 2005 03:41:26 GMT

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No economical way, bite the bullet and go active with a \$3 op amp! Ive got a 400hz coil I think, its the size of a food tin!	