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Subject: example of design forethought

Posted by [Sam P.](#) on Tue, 09 Jul 2002 15:37:55 GMT

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considering the physical placement of the HF driver BEHIND the LF appears to be the JBL2370 horn. It's depth, plus the typical magnet thickness, puts the HF source 1/2 wave behind the LF at a xover freq. around 820Hz. When used with back to back 2nd order BW filters, OVERALL summation in the typical 800Hz. xover region should be closely phase aligned as a consequence of the electrical and physical interactions being correct. At almost twice as deep, it would take a xover freq. of near 435Hz. "for the numbers to work out" when implementing an Altec 511 the same way, i.e. mounted even with the front baffle and with the hf mounted 1/2 wave behind at xover. Mounting a horn flush to the front baffle CONSTRAINS some fixed distances into the consideration of phase that could otherwise be examined and maybe "tweaked"/optimized when fore/aft movement is permitted. Obviously, it would be MUCH less problematic to use a JBL 2370 mounted flush to a front baffle than an Altec 511 when crossing near 800Hz. Can I get an Amen from Wayne? and that is why my horns are mounted on the damn trolley... Sam

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