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Subject: Re: You've got mail!

Posted by [Wayne Parham](#) on Sun, 30 Sep 2007 22:32:12 GMT

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The midhorn is designed to cover 200Hz to 2.0kHz. In practice, it works lower than this because the driver is large and having no rear chamber, the lower rolloff is gradual. With boundary loading, there's pretty good output at 100Hz. For that reason, I allow a lot of overlap between the woofer and midrange. Wavelengths are long, so summing is good. They act as a single sound source. The midhorn's range allows the use of the standard 1.6kHz tweeter crossover. With the acoustic rolloff of the midhorn, you get perfectly matched curves when the midhorn and tweeter mouths are flush. Some drivers need a small coil, some don't. Each driver is independently optimized for perfect summing taking position and electrical characteristics into consideration. It really sums nicely with seamless transition between midhorn and tweeter. The crossover was

not sum properly, especially if length or dispersion characteristics are much different. For example, the Altec 811 will probably need to be positioned differently to get summing right. You'll probably need to move it forward a few inches.

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