Subject: Re: 7Pi Build 2014
Posted by Wayne Parham on Mon, 20 Oct 2014 14:28:47 GMT
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The woofer-to-mid crossover is a pretty simple first-order low-pass on the woofer. I use a 5.6mH coil, so crossover is around 250Hz. The midhorn has no electrical high-pass, so the two overlap in the upper-midbass / lower-midrange which helps smooth the top octave of the modal region. However, the mid-to-tweeter crossover isn't as simple. The transfer function is pretty complex. Best to look over the "Crossover" and "Simulations and Measurements" sections of the Pi Speakers FAQ.

In particular, study the information in the link called "Crossover optimization for DI-matched two-way speakers." Even though that document is about a two-way design, it's the exact same process I use to dial-in the upper crossover in a three-way design. So if you can duplicate that process, you can duplicate the crossover. I essentially design a digital crossover using the Spice models in WTPro, and then implement the crossover with passive parts.