Subject: 3 way
Posted by dB on Sun, 11 Mar 2007 09:41:49 GMT
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Hi Wayne,I friend of mine (DIY Forum) is using a 3-way design with a 10"Wo-Vifa P25, a 5"Mid-Seas MCA15 (Fs=51Hz/Fsc=160Hz) and a standard Tw-Seas 27TFF.He has the idea of bringing the xover to the 300Hz region, and I don't know if that is better, or up to the the 600/900/1K region (if voices are in the 90-1000Hz band). Upper filter in the 2K500/3KHz region. Thanks.

Subject: Crossover frequencies
Posted by Wayne Parham on Sun, 11 Mar 2007 19:16:12 GMT
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I try to keep crossover out of the 200Hz to 2kHz range as much as possible. Since many of my two-way designs use DI matching of a direct radiator to a horn, and since this requires crossover between 1kHz and 2kHz, I compromise and crossover at 1.6kHz. I've gone as low as 1.2kHz but don't like going down further, which is why I avoid 1kHz crossovers. Similarly, with three-ways, it's very tempting to compromise the woofer-to-midrange crossover point from 200Hz up to 500Hz or 600Hz on the woofer-to-midrange point, since that makes choices for midrange drivers so much more plentiful. You can go with a smaller driver if the crossover point is moved up. Horns get way smaller if you move up in frequency. But I just don't like the sound of speakers crossed over between 500Hz and 1kHz. Seems there's no getting around it, so I prefer to keep as much of the 200Hz to 2kHz range as possible covered by a single driver.

Subject: Re: Crossover frequencies - Thanks!
Posted by dB on Mon, 12 Mar 2007 00:40:11 GMT
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Yes Wayne, that is great that we can get the felling for the behaviour of the beast. Regards.