Subject: Re: TAD TD-4001 Passive Crossover Suggestions Wanted!
Posted by Wayne Parham on Fri, 30 Dec 2011 15:25:24 GMT
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My best advice would be to follow the suggestions in the thread below:
Notes for the DIYerIn particular, pay attention to the notes, video and schematic in this thread:Crossover optimization for DI-matched two-way speakersAbout ten years ago, I made two

and another used the 4001 compression driver. The 2001 variant was crossed where directivities matched, but the 4001 was crossed a little lower sort of "forcing" the pattern collapse in the crossover region. Note that both crossovers were designed specifically for the horn used and the loudspeaker layout they were being used in. This is a key aspect.

The schematics mentioned in this thread are what I would consider starting points, in that they are very close to what you will want for many drivers when the loudspeaker is designed similar to the configuration I use. That is to say horns mounted on 90° waveguides or radial horns having approximately 40° to 60° vertical beamwidth at HF. You can see an example of this type of crossover, along with a lot of information on how to optimize it in the link above. This approach is described in some detail in the following whitepaper:
High-Fidelity Uniform-Directivity Loudspeakers