Subject: Re: Active Crossover - 4Pi Tower?
Posted by Russellc on Sat, 24 Jun 2006 23:28:20 GMT
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You would have to ask Wayne for sure, but you may be able to just use the compensation circuit on the tweeter, and then crossover electronically at the desired point. You can do the whole bit electronically, but you had better know a whole lot about electronic crossover design! Basically, there is a rise in most compression driversin the mid highs followed by a drop after about 15khz. The compensation circuit, (which is a seperate circuit from the rest of the crossover), pushes down this rise down and the energy is then used to extend the high end, flattening the response overall. It is used a lot with altec A5 systems, which use the larger format drivers which tend to have a more prominent mid high rise, followed by even more dramatic drop off on the high end. If you search around, there is a nice article from an old issue of sound practices that illustrates this nicely, by a guy named Jean Hiraga, for the A5. Most all compression drivers suffer from this to some extent, and a proper compensation circuit undoes the mid High peak, and boosts the high end droop ay the same time. You can do this electronically, just not with any basic off the shelf crossover, as the compensation would have to be designed and added in. Compensation is added to electronic crossovers for certain subwoofers, a bass boost is added which compensates for the bass drop off, resulting (hopefully) in flat response to a lower point than the driver/crossover alone will allow. Wayne, will the compensation circuit alone (passive, like in the standard crossover you sell) perform its function mated to an electronic crossover of the same slope as your passive units?Russellc