Subject: 16 Ohm crossover
Posted by LuxmanLover on Thu, 09 Jan 2003 23:20:50 GMT
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WayneI need your assistance....I found a set of 2470 1" compression drivers at a reasonable price (swap deal), I want to roll them off at 800Hz using the TOA Pi ciruit....I want to test them out but I don't know which way to factor the crossover for 16 Ohms....do I go up or down with values....Kelly

Subject: Re: 16 Ohm crossover
Posted by Wayne Parham on Fri, 10 Jan 2003 06:19:43 GMT
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I'd suggest that you model the circuit with Spice and tailor the circuit to give the response curve shown below. Butterworth values are pretty easy to find, but the compensation circuit values won't scale so easily. For example, the "stock" Butterworth values for an 8 ohm high-pass third-order are 8uF/0.6mH/22uF and the 16 ohm variant would be 4uF/1.2mH/12uF, so you can see that the caps are half and the coils are double when moving from an 8 ohm load to a 16 ohm load. But the compensation circuits really need to be modeled with a more accurate load representation, and you can't expect them to scale this way.So download a copy of Spice, enter the values for your driver, and configure the circuit to give the response curve shown below.

Subject: Re: 16 Ohm crossover
Posted by LuxmanLover on Fri, 10 Jan 2003 10:20:06 GMT
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Thx Wayne.....I'll give it a shot.Kelly