Subject: My results with 4 Pi Pro using 16 ohm drivers
Posted by spkrman57 on Wed, 12 Nov 2003 00:53:42 GMT
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Jerrod, My system uses 2mh air coil in series to my JBL 2226J, and 1.6Khz Pi crossover for either 8 ohm or 16 ohm, the difference in sensitivity between the two is really not much in my experience at low wattage and smallish living room. For 806A (16ohm) Altec drivers, I like the R1=30 ohms and R2=15 with .47 ufd cap on Martinelli horn and Altec 811B horn. For the 802/902 with Edgar horns, I want to use different R1(40ohms) and R2(12.5 "2 25 ohm in parallel") and change the cap to .33 ufd to reflect the difference in efficiency between the 802/902 and the 806 is 2 db and the 902's I am playing now are 8 ohm, I want to try 16 ohm 902's next, as I like the more relaxed sound. I am running a Norh SE-9 amp and the different horns/drivers I have tried out, the 806A is least capable in the HF response catagory whereas the 902's shine with the best HF response, but at times, I think the old alnico 806's are more mellow. The jury is still out on preferences, but I will keep trying different combinations to see is the most transparent in the long run. But that is my setup and my speaker voicing may be different than yours, I just wanted to put some values for you to start with. Good luck in this venture, I have found you have a lot of leeway with this crossover due to R1 and R2 doing some loading, takes that problem away from the horn driver. That same situation allows me to change horns/drivers without disconnecting the amp or powering down, as long as you don't short the HF drivers wires, the crossover sees R2 as a minimum load resistance, "JUST DON'T SHORT THE WIRES TOGETHER" and this is the easiest way to quick change horns in realtime. I have swapped many different combinations out and thought some of them sounded good only to change my mind the next day when listening to the system again. Have fun and try a attenuation to try and change if you don't like the sound, sometimes trial and error brings better results than just textbook alone. Even Wayne will tell you that with audio drivers there is not a exact formula that will work with each and every system. That is why a DIY'r can do better than a engineer who has a "bean counter" running his dept. And the other thing is that I have more fun just trying different ideas in speaker projects than the rule book say can't be done. Just the rebel in me I guess. Just check out the forums, that is the reason we have them. Enough of my $0.02 worth!!! Ron