
Subject: Loudspeaker re-design help needed!

Posted by [Mikey](#) on Wed, 10 Nov 2004 20:00:11 GMT

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Hi Guys! I'm looking for some opinions on how I could improve my current loudspeaker system. Each loudspeaker is made up of the following components:- JBL 2446J 2" compression driver with a JBL 2380A horn- Cetec Gauss 4583A 15" woofer. The JBL driver is crossed over at roughly 500Hz, with a 12dB slope. The crossover consists of a 10uF Solen cap and a 10mH air core coil, followed by an L-pad, followed by impedance compensation, followed by a shelving network. I'm quite happy with the JBL's performance, very dynamic and 'live' sounding. I haven't experimented with any horns other than the 2380A's yet. The Gauss woofer is mounted in a 5 cubic foot ported box, tuned to 38Hz. The box is lined with a combination of R-13 insulation up near the woofer, and acoustic foam elsewhere. It's crossed over to the 2446 at roughly 500Hz, with a textbook 12dB crossover. I also added impedance compensation to the woofer network. It's here that I think the system falls short of its true potential...the bass doesn't seem to keep up with the JBL's. The Gauss woofer is a fantastic driver, so I suspect a problem with my implementation. Two ideas I've considered are: 1. Doubling up on the woofers (like the TAD-Pioneer Model 2401 Studio Monitor) 2. Horn loading the woofer somehow. Any other ideas to consider? Can any of you point me to some plans for horns for the Gauss woofers? Thanks in advance, Mike
TAD Model 2401
