Subject: Stage 4Pi improvement
Posted by LAL on Sat, 04 Mar 2006 16:39:45 GMT
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I have never been satisfied with some aspects of the Stage 4Pi performance. The dynamic range and "big" sound the speakers produce was their saving grace. The bass on mine was too boomy and woofer's frequency response gave vocals,both male and female an unnatural sound. There was never the sensation that the singer was in the room with you like good quality speakers can produce. On the other hand percussion and brass did have a dynamic quality that regular speakers couldn't produce. These qualities, both good and bad, were evident in various rooms and consequently were not room dependant(although the room and speaker placement still affected the sound). As a result I used the speakers primarily for background music and instrumentals. I have another system available to me which I used for "serious" listening. My cabinets were constructed according to the basic plan for Stage 4's out of 3/4 baltic birch. They are well braced and lined bottom, back and one side with fiberglass. The unlined side was covered with Northcreek "Glop", a mixture of a softglue and drywall mud, used to dampen cabinet wall vibrations. I am a fairly experienced speaker cabinet maker and usually go the nth degree to produce a stiff well damped cabinet. Normally I use a constrained layer walls but certain design constraints required that I limit the Stage 4's to 3/4" thickness. I have never been satisfied with my Stage 4 cabinets. They radiated too much sound from the 15" woofer. I have also suspected that the use of the fiberglass to partially line the walls was insufficient to damped the back wave of the 15" woofer. So I finally decided to do something about it.A couple of days ago I got some "Sonic Barrier" damping material from Parts Express. This is 1 1/4" thick multi layer dampening foam with a 1 lb vinyl barrier. It has an adhesive backing. I removed the existing fiberglass and then covered the bottom, top, back and sides(except the area on one side where the crossover board is attached)with the Sonic Barrier. Since it is charcoaled color it can be place on the wall behind the vent without being noticable. I then took about 1/3 of the fiberglass originally in the cabinet and used it to cover crossover and I place some directly behind the woofer, with alittle more on the bottom. After reinstalling the drivers I sat down for a listen.The results were stunning. The response had smoothed out. The sound was much clearer. Voices now had a natural sound and on good cd's the performers sounded realistic and had that "in the room" quality that was so lacking before. Everything about this speaker is much better now. Had I not known what was done I honestly would not have recognized the sound as coming from the same speaker. I have listened for extended periods of time with no hint of listening fatique. Five sheets of the Sonic Barrier and about 4 hours of my time have absolutely transformed these speakers. I hoped for some improvement but never could have predicted the changes in clarity, smoothness and lack of distortion I am now hearing.Maybe others are completely satisfied with their Stage 4's or my cabinets for some reason sounded differently than others, but if you are interested to see if you can improve your speakers get 5 sheets of the 1 1/4 Sonic Barrier and spend a few hours lining your cabinets, throw in a little fiberglass directly behind the woofer and see what happens. If it doesn't work for you all you will be out is about $125.00 and some time. If it turns out anything like it did for me you will be greatly rewarded. (Incidently so you will know my frame of reference for how a speaker should sound, my primary system used VMPS RM40's with AVA hybred electronics). I know audiophiles are sometimes prone to exaggerate attributing great differences in performance to difference between amps or cables. This is most assuredly not the case with the transformation of my Stage 4's. This has been a major league improvement and couldn't be more pleased about. I hope this post may help someone else make a similar improvement to their

speakers and as a result to their listening enjoyment.