Subject: Tweaking 2 Pi Towers
Posted by breakfastchef on Fri, 16 Jan 2009 22:01:47 GMT
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Wayne & Group:I understand I can improve sound quality and lessen fatigue by upgrading the inductors and capacitors. Anyone done some mods that really improved their listening experience?What are the specs on the inductors for the 2 Pi's (inductance & DCR)? Also, what are the specs for the Dayton caps? Would upgrading the internal wiring add any significant improvement?

Subject: Re: Tweaking 2 Pi Towers
Posted by Barry S on Fri, 16 Jan 2009 22:38:57 GMT
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Hi,I've never upgraded the crossover components so somebody else will have to comment on that mod.The one thing that really did improve the 2 Pi Towers (to my ear) was adding duct seal and felt to the driver baskets. Played with this a bit and the best improvement came from putting lots of duct seal on the front and back of the woofer baskets. Then the front of the basket (facing the woofer cone) got covered in felt. Don't leave off the felt as it REALLY makes a positive change (without the felt the speakers sounded a bit lifeless).The tweeters also got a gob of duct seal on the back plate. That seems to help, too.Felt and duct seal costs about $6 to $8. It made a truly positive improvement (in my opinion) and can be removed if you don't like the results.I believe the sound is far more refined with the mod. It took away a bit of midrange to upper midrange hash/glare that wasn't realistic. The 2 Pi's sound damn fine now.One warning, the edges of the woofer basket are fairly sharp. Don't cut yourself on them like I did.

Subject: Re: Tweaking 2 Pi Towers
Posted by breakfastchef on Fri, 16 Jan 2009 23:27:51 GMT
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Thanks for your reply. Sounds interesting. Would you have a link to a website or a photo of what the sealed and felted drivers look like? I am picturing a driver basket completely cover in duct seal (tape or liquid) and felt so the cones are not visible. Would that be correct?

Subject: Crossover components
Posted by Wayne Parham on Fri, 16 Jan 2009 23:36:26 GMT
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In all models of my speakers, I use Solen, Jantzen, Dayon or Erse polypropylene capacitors as standard issue parts. Standard inductors are 18 guage Jantzen air core coils.

Some models are offered with upgrade options where you can call parts, choosing Auricaps for example. Some are offered with larger guage coils as an upgrade option too.

If you upgrade to larger coils, you get a little tighter bass but slightly less depth. Think of the difference in bass sound between using SET and push-pull amps. Increasing DCR reduces damping factor, and that has an effect similar to increasing woofer Qes and ultimately Qts. So the stock 18 guage coil sounds a little fuller down low, whereas a larger guage coil sounds a little tighter.

I've substituted a lot of caps, and the differences are a little more subjective. It isn't a simple matter of DCR and damping factors, like the coil swap is. I've used everything from Solen, Jantzen, Dayon and Erse (which all sound very nice to me) to oil filled motor runs to Auricaps and even Audio Notes.

Solens, Daytons and Erse poly caps all sound the same to me. They're great, maybe sound quality doesn't get any better than that. But of course when you spend fifty bucks on a cap, you're

and I think they sound more pure with Auricaps. Do they really? I don't know. But they do sound nice. They have the same character, at least to me, but maybe a little more silky sounding smoothness. Nah, probably just the added cost making me think so.

Audio Note caps disappoint me. I hate to say that 'cause I consider those folks over there to be friends. I love their amps. But they just don't have the capacitors down, in my opinion. After a while they leak, and a megabuck cap shouldn't do that. I prefer other high end caps.

There are other brands I've tried, Mundorfs, Kimbers, even non-polarized Black Gates just to see. I don't recommend non-polarized electrolytics, even Black Gates. Might be just because I still remember the unnatural plastic sound of older NP 'lytics, but I don't trust 'em, even from Rubycon. Kimbers are fine, seem to be a little bit more etched. More HF, too much maybe. Mundorfs are good.

Now then, understand this. Everything I've just told you about caps is very subjective. Measurements of systems with most of these components don't show anything to tell me one was better than the other, and the sound differences are all too slight (if even there) to qualify as demonstrative one way or the other. Could be all psychology. I am fairly certain I can't detect differences in a blind test, with reasonable exceptions. For example, I am sure I can hear a difference between a motor run capacitor, a poly cap and a cheap electrolytic. But I am reasonably sure I could not tell the difference between a Jantzen, Solen, Erse or Dayton poly cap in a blind test. I probably couldn't tell the difference between any of those and an Auricap blind either. I could tell the Audio Note cap though, because it would not make a sound but would leave its ooze all over the table.

Subject: Re: Tweaking 2 Pi Towers
Posted by Wayne Parham on Sat, 17 Jan 2009 04:00:44 GMT
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If you do this to the drivers, don't seal the rear - leave it open. If you seal the back, you'll change the tuning. I think what Barry is saying is to damp the stamped frame basket with putty and felt. I've seen people use rope caulk for this too.

Subject: Re: Tweaking 2 Pi Towers
Posted by BarryS on Mon, 26 Jan 2009 18:57:11 GMT
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Wayne has it. Just dampen the basket frames.No pictures, unfortunately, but it is pretty easy to just pull apart the duct seal (it comes looking a bit like a brick) and push it in place on the speaker baskets. If you put the drivers back in the towers and like the way they sound you've got it. If you don't like the mod you can just pull it all off. No big deal.Good luck!