Subject: Tube amp and Speaker Proximity
Posted by Shane on Fri, 29 Sep 2006 02:50:19 GMT
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Here's the deal. I had to move my Klipsch Heresy's into the bedroom where the rest of my decent audio gear is, including my Pi's and 12B4 amp, due to the fact that when we got our TV back from the shop after 4 1/2 months the Heresys can't be within 5 feet of the TV without fricking it up and this pretty much eliminates their use in the living room. I had my old Polk Monitors sitting right up against my audio rack in the bedroom so the Pi's could be spread out to the corners of the room. If any of you remember my speaker placement question a while back you'd see why. There are two corners, then an opening on each side to enter respective vanity areas, then a wall in the middle. Basically a short wall with two doorways near each end. The Polks have been restored to the living room due to their causing less screwage with the TV (one little 6.5" driver as compared to the Heresy).If I put the Heresy where the Polk's were, next to the rack, the woofer is even vertically with the 12B4 and about 6" away on each side of the amp.And finally, for one of the dumbest questions of the month: can the magnetic field off these big woofs cause any issues with the amp and it's operation/longevity when sitting this close? I want to leave the speakers in there because I hook my SS gear up to them. This lets the wife listen to music once in a while as she's not gonna touch the tube stuff. I don't have anywhere else for them to go except the garage = not an option. I can't move them out and leave them there as then they're sitting in the entryways. But if it's not an issue then I'm obeekaybee.

Subject: Re: Tube amp and Speaker Proximity
Posted by Wayne Parham on Fri, 29 Sep 2006 04:32:39 GMT
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Stray magnetic fields near solid state amps won't do much, but near tube amps, they might. Tube amps usually have transformers, which are electro-magnetic devices. The tubes rely on electrostatic attraction of an electron cloud or beam, which can be deflected by a magnetic field. How much is too much would be the question, and I'm not sure what the answer to that is. The cathode, grid(s) and plate are all in close proximity to each other and so would tend to be more interactive than something further away, like magnetic fields from a speaker several feet away. Then again, electro-magnetic fields have more influence than electro-static fields, which is what is in play inside a tube. I guess the answer is, hook it up and try it. It won't damage anything.

Subject: Re: Tube amp and Speaker Proximity
Posted by Shane on Fri, 29 Sep 2006 13:58:56 GMT
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Thanks Wayne. My concern is if the magnets in the Heresy's can mess up the TV from 5 feet

away, what could they do to the tube amp from 6"?As long as they won't damage anything I'm not too concerned.  I'd hate to mess up Jef's nice amp he built.

Subject: Re: Tube amp and Speaker Proximity
Posted by Wayne Parham on Fri, 29 Sep 2006 14:22:15 GMT
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The magnets won't actually damage the TV or its picture tube, they'll just interfere with the electron beam path.  The electron beam is deflected by the yoke, which is a pair of coils placed around the neck of the picture tube.  The yoke's job is to deflect the electron beam to position the scanlines.  When an external magnetic field is present, it interferes with the operation of the yoke, essentially offsetting the deflection of the electron beam.  There is a residual effect that remains after you remove the magnet, but it can be corrected by degaussing the tube.  It's very much like using a tape head demagnetizer.

Subject: Re: Tube amp and Speaker Proximity
Posted by Shane on Sat, 30 Sep 2006 00:15:58 GMT
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Don't have to worry about it for the moment.  I moved the amp to a higher shelf away from the speakers just for piece of mind.  Hooked everything back up turned on the cdp and swiched the amp on a minute or so later.  LED flashed and that was all she wrote.  Blew the fuse.  I'll need to get a hold of Jef to see what he wants to do.

Subject: Re: Tube amp fixed
Posted by Shane on Sat, 30 Sep 2006 23:07:02 GMT
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Well, I talked to Jef and he suggested to replace the fuse and see if it did it again.  He put the fuse rating right above where he thought it would blow on any catastrophic failure or turn-on.  He said it could have been a bad fuse or too low of rating.I looked the amp over and over and saw no burnt pieces or anything.  Put in a fuse holder to make it easier to change out fuses (the original was one with pigtails that was soldered in.  Hooked it up, turned it on, and viola---it works.I'll have to watch this fuse and see if it blows, too.  I may have to go to a slightly higher amp rating if it does.

Subject: Power management
Posted by akhilesh on Sun, 01 Oct 2006 16:26:24 GMT
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HI Shane,Do you use a power supply system? I can recommend stuff by panamax or tripplite or even PS audio (the ultimate power outlet is good). I use some of these, and they do seem ot help, esp in tmers of protection from lightning and voltage surges. -akhilesh

Subject: Re: Power management
Posted by Shane on Sun, 01 Oct 2006 16:43:32 GMT
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Nope. I just have a run of the mill APC surge protector on everything. I do unplug the 12B4 amp from it everytime I'm done using it though. With it just running a two prong plug I don't like the idea of leaving it plugged in when not using it due to no safety ground. I measured the voltage coming from the outlet right after the amp blew the fuse and it was sitting at 120.4V. Pretty low actually for around here.I played the amp for a good hour this morning with no troubles that I could tell, so maybe it was just a weak fuse.
APC

Subject: Re: Power management
Posted by akhilesh on Sun, 01 Oct 2006 18:55:57 GMT
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FWIW I bought an ETA pd8 a few weeks ago for the system in my family room (incl my DLP Tv). That seems to do a bit more than the surge suppressors (costs a bit more but still a good value. -akhilesh