Subject: April Meeting of the Great Plains Audio Club
Posted by Wayne Parham on Mon, 05 Apr 2004 19:53:17 GMT
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Another great time had by all!The thing I like best is the friendship that has developed between us, but we also enjoy great sounds and great food. Jim Denton graciously opened his doors to us and made the best BBQ chicken and chicken chimichangas a guy could ever want to eat. These audio club gatherings are spoiling me, I'll tell you!In attendance was Jim Denton, Akhilesh Bajaj, Bob Russell, Phil Wilson, Bill Wassilak and me. We listened to two single-driver speaker systems, both based on the Fostex 206e. One was designed by Martin King and built by Jim Denton and the other was Phil Wilson's speakers, which are a finished product sold by David Dicks in St. Louis. We also compared three amplifiers, a vintage Pilot amp, a Zen Select and Paramours. The Paramours were run using the stock entry-level Valve Art 2A3 tubes as well as with Electro-Harmonix 2A3's.Look at that spread! Good sound, Good snacks!Here you can see the setup. The speakers on the outside are Martin King designs built by Jim Denton. The inner speakers are the David Dicks models owned by Phil Wilson. Both speakers have Fostex 206e drivers and no additional electrical components, whatsoever.As you might expect, the two speaker systems sounded very similar. Both are excellent, in my opinion, and neither lacked in bass or treble. The larger Martin designs had a little more and deeper bass, but not loads more. Neither design was boomy, both sounded nice.We had intended to listen to each of these systems with Martin King's suggested baffle correction. But the coils that Jim had were physicaly small, and while their inductance value was reasonable, their DC resistance was much too high. So the coil was essentially an open circuit path and didn't do anything. That meant all that was really there to evaluate was the addition of a series resistance. I offered to go back home and gather a handful of low-DCR coils to do a proper evaluation, but we all decided to leave that for next time.Paramours with Electro-Harmonix 2A3'sWe listened to each amplifier with both sets of speakers. They all sounded great, but I thought the Paramours really sounded best. The bass became much more full, making those little 8 inch full-rangers sound pretty big. The midrange and treble was nice with each of the amps, but the Paramours gave that extra power from the deeper bass response.Back to the subject of additional passive electronics, the truth is that with the tube amplifiers used, the speakers all sounded really good as-is. Output impedance of a tube amp is a few ohms, and it has both a resistive and inductive component, since the output transformer is a coil. So different configurations of tube amps with different output transformers act like different filters having different values.The Paramour's charatcteristics sound like it's just about what Martin King would have wanted for his BSC filter when used with an amp having zero output impedance. I think I personally would have enjoyed the sound of the Zen/Fostex system more if it had something like 2-6 ohms paralleled with maybe a millihenry or two as a series BSC. An amp with lower output impedance might have needed maybe double that much resistance. But the Paramours sounded just about right.Bob Russell, Akhilesh Bajaj, Phil Wilson and Jim DentonOne of the good things about these gatherings is that we all get a chance to listen to a variety of gear and configurations. But probably the best thing is just getting together and having a few laughs.One of the things I thought was funny was the Valve Art / Electro-Harmonix comparison. I setup the Paramours with the Electro-Harmonix tubes right away, and Akhilesh immediately noticed an improvement. So did I when I first installed them last weekend. The biggest thing is that they don't have that annoying Geiger-counter clicking noise that the Valve Arts have. And it seems like they sound better too.But then we put the Valve Art's back in. They sounded pretty good, to tell the truth. For some reason, the pops didn't seem as noticable, but

probably because we had the amps cranked up and you don't hear the clicks except during quiet passages. So for whatever reason, the Valve Art's were behaving themselves.Bill Wassilak, Phil Wilson and Jim DentonAll-in-all, I had another fine time with these guys. The weather was sunny and warm, and everyone was in good spirits. We're already getting about 70o days, so spring fever is everywhere. Nothing better than a cookout with friends on a Saturday afternoon!

Subject: Re: April Meeting of the Great Plains Audio Club
Posted by GarMan on Mon, 05 Apr 2004 20:00:16 GMT
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Looks like a lot of fun. I wonder if there are enough guys in Toronto on the board for us to do something like this.

Subject: Toronto Audio Club
Posted by Wayne Parham on Mon, 05 Apr 2004 20:23:49 GMT
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Absolutely. Get hold of George Duemm at Replay Electronics in Toronto. Look him up in the phone book and give him a ring. Duemm, Epstein and Martinelli have been known to indulge themselves a time or two, so I'll bet you can talk 'em into making it a regular thing. And if you guys do ornery stuff, be sure to post bribery pics.

Subject: Martin King Fostex speaks
Posted by socalguy on Tue, 06 Apr 2004 02:08:43 GMT
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Hi Wayne,Along with several Pi designs (it's true - not just kissing butt!) I have thought about trying the Marting King design(s). Are you saying that the BSC that he advocates may not be necessary with tube amps? I got the impression that without it, the response was way to high in the HF end? Being able to build them without sacrificing 4 or 5 dB of SPL might make them even more attractive to us low-power SET guys. Your thoughts are appreciated.Rich

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Subject: Re: Martin King Fostex speaks
Posted by Wayne Parham on Tue, 06 Apr 2004 03:08:20 GMT
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I'd rather let Martin speak for his designs. But he is quick to point out that the amplifier chosen affects the values required for the filter he recommends for baffle-step correction. He suggests that some amplifiers with higher output impedance might benefit from having BSC components installed, but using reduced values. An extension of this reasoning is that there are some conditions that would make those values be zero, so that means some amps would require no additional components, essentially having a built-in filter that acts like a baffle step correction circuit would.In my comments, I essentially suggested the same thing. Amplifier output impedance interacts with the rest of the components in the output circuit. Not only does it act as a voltage divider but reactive properties in the system are modified. The electro-mechanical properties of the motor/drive interface are shifted, so the speaker acts like it has higher Q. Also, the behavior of the crossover and any other electrical components are shifted.One thing that you couldn't help but notice was that the sound from the speaker was pretty strong in the bottom octave when connected to a Paramour amplifier. That led me to speculate that the Paramours are somewhere close to being in that condition where BSC values equal zero. It sounded much like what you'd expect from the same speaker and cabinet driven by an amp with low output impedance and BSC with 6-12 ohms series resistance and maybe a couple millihenries inductance. That's not very scientific 'cause there were no measurements, but you could hear about 6dB more below 100Hz with the Paramours. Certainly enough to be noticeable.