Subject: Theater 4 passively biamped
Posted by Garland on Sun, 05 Jan 2003 18:48:34 GMT
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I've successfully rewired the crossovers to passively biamp the Theater 4 Pi's. After a bit of a problem with adding an extra output to my Foreplay tubed preamp the Theater 4's are sounding better than ever.Modified Bottlehead Paramour 2A3 amps are handling the highs and a rewired Heathkit AA-111 EL-84 amp is in charge down below! There is more separation between notes, imaging has improved and the dynamic ceiling has lifted. Now I can't wait to get the system actively biamped with the tubed crossover that Wayne and others are working on. Wish I knew enough to chip in!G.

Subject: Re: Theater 4 passively biamped
Posted by BillEpstein on Sun, 05 Jan 2003 20:34:19 GMT
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Okay: the SET is direct to the horn taps and the P-P to the woofer taps on the crossover, that much I follow. And the benefits. Hope to have that soon with the Ella EL-34 on the woofer.What does the "active" crossover bring to the table, besides a longer signal path and more parts?

Subject: Re: Theater 4 passively biamped
Posted by wasteh202 on Sun, 05 Jan 2003 20:40:28 GMT
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Garland, that sounds pretty good to me. When I build the Theater 4's, I might fool around with such mods as well, after hearing the Studio 2 Tower with no XO I can understand the desire to go active on the XO. It does suprise me a bit that the passive route benifitted you as much as it did but to that I say congrats! we never know about those things till we try. Some will try to discourage others because they have tried things and it did not bring the results they were looking for. Still do the same because they do not believe that "on paper" it makes sense. I say keep an open mind, try it, and see for yourself. Good job.

Subject: Re: Theater 4 passively biamped
Posted by wasteh202 on Sun, 05 Jan 2003 20:50:18 GMT

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To answer you question about "what does this bring to the table besides a longer signal path?" (from my own perspective) I would say that besides the obvious reason... allowing two amps the do the job of one, and more specifically fine tuning a paticular amp for the high or low end. In my opinion the biggest benifit to bi-amping with an active XO allows the amp signal to go directly to the speaker without having an XO in the way to alter the signal or the hinder the power. The XO is between the preamp and the amp instead of the XO coming after the amp.

Subject: Re: Excellent
Posted by bmar on Mon, 06 Jan 2003 00:23:21 GMT
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Nice job! I have never tried to do a passive biamp before. Always used an active unit. Results have also been like yours, and biamped sounds so much more fulland detailed to me. It seems to unleash a whole new set of dynamics. cool stuff huh.Bill

Subject: Can you send me your schematic you are using??
Posted by spkrman57 on Mon, 06 Jan 2003 12:29:57 GMT
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G, I would like to passively crossover between the preamp and amps like you have described. If you can send me the scheatic with the crossover points (I am guessing 1.6khz) I would appreciate. I think if you could post the schematic to the Pi forum, there are many others who would do the same. I would be using Dynaco SCA-35 and ST-70 for mine, but crossover at 800hz using Altec horns and drivers. I will take the signal from the volume control in the SCA-35 (it is integrated amp) and custom rewire for preamp out and power amp inputs. Thanks for posting this, I have been waiting for a post like this one. Regards, Ron

Subject: Re: Theater 4 passively biamped
Posted by DRC on Mon, 06 Jan 2003 13:12:43 GMT
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Man, no dust gathering on your system!I think you'll have an even greater sense of no dynamic limiting when you go active. Tailor the response and then amplify it, rather than amplify it, then

soak up gobs of the output in passive component. Keep your ears and your mind open.

Subject: Re: Can you send me your schematic you are using??
Posted by Garland on Mon, 06 Jan 2003 14:30:11 GMT
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Hi Ron,Sorry, but the crossover is still between amps and drivers. I just separated the two filters from being parallel to each other to being totally separate. Paul Joppa has designed a simple passive line level crossover for experimental purposes which could be adapted for use with Pi speakers. Unfortunately I can't advise on adding a suitable compensation and zobel network to this crossover. Check out the Bottlehead forum for more details. Paul's schematic may have been E-published on the latest Valve Magazine and is free for download. Valve can be accessed trough the Bottlehead Forum or the Bottlehead.com.

Subject: Re: Can you send me your schematic you are using??
Posted by spkrman57 on Mon, 06 Jan 2003 14:37:56 GMT
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I guess I misunderstood your original post, I thought you had passive between the preamp and amps. Thanks for reply, ron

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Subject: Re: Theater 4 passively biamped
Posted by Garland on Mon, 06 Jan 2003 14:44:59 GMT
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Well you know, the difference is in someways subtle but when we're talking about the sound generated with very efficient drivers and low powered and simple tube circuits every little change made is distinctly audible. Basically my goal was to get the quality of treble responce that the Paramours deliver along with the power capable from the PP amp on the woofers. I image a good bit of the improvement was from now having 3.5 watts on the horns and 7 watts+/- on the woofer. I had the Heath amp running in ultralinear and loved the pacing and attack of the notes with decent tone but the treble was a bit rough which seemed to make the midrange a bit grainy as well. Rewiring to triode mode and biamping with the Paramours seems to work pretty well but by no means am I at the end of my tweaking and will definitely be going to active crossovers asap.G.

Subject: Re: Theater 4 passively biamped
Posted by Garland on Mon, 06 Jan 2003 15:01:21 GMT
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I think the ultimate goal is to have a system where the filtering is done in a low current circuit ie. line level with a minimal use of capacitors/resistors with the inherent phase problems. Tubes are much better at doing this (is what I understand). Then you can modify/ design you amplifiers to have the required freq. roll-offs which eliminates elements in the filter. So with what seems like adding complexity, you can end up with actually more optimized and simpler circuits with inherently more purity of sound. The reason this isn't usually done is that manufacturers don't want to design all the components in a system to work well with only those components. Bill, I look forward to hearing about your Ella and Pi's. Do you have the amp up and running?G.

Subject: Re: Still unpacking boxes from the move
Posted by BillEpstein on Mon, 06 Jan 2003 21:01:31 GMT
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Where the hell are the hemostats?

Subject: Re: Theater 4 passively biamped
Posted by Garland on Mon, 06 Jan 2003 21:20:22 GMT
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Sorry, I just re-read my post and I can bearly make sense out of it. I hope you were able to figure out what I was trying to say. Harvey Rosenberg, aka "Dr.Gizmo" ran a few articles in ? a few years ago about the benefits of tube crossovers mostly focusing on the Marchand units. These articles can be found at the Marchand website and by searching for "Tube crossovers" on google, etc.G.P.S. Bill, Are you back in Fla??

Subject: Yes, but there was actual progress on you cabinets today!(nt)
Posted by Garland on Mon, 06 Jan 2003 21:22:14 GMT
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nt

Subject: Ooh! Ooh! Tell me more!
Posted by DRC on Mon, 06 Jan 2003 23:41:06 GMT
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The anticipation and suspense is killing me. ;-)Well, the former yes, the latter, no. I'm really ready to enjoy these bad boys. Keep your ears and your mind open.