Subject: Re: KT120 Class A Push-Pull U/L Mono-Blocks
Posted by gofar99 on Thu, 22 Dec 2011 01:24:00 GMT
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Hi, If you keep a design clean and simple you do not need as much gain. My sense with many designs is they start out with a more or less standard configuration and then when it is built find flaws. They then add things to fix the flaws. My projects generally start out with an idea of what needs to be done. Then I figure out what configurations will do it best (at least in my opinion). Then I build it and do a lot of testing and tweaking to get it to do what it should. I use configurations that many designers shy away from for various mostly historical reasons. I am also not afraid of using solid state devices when I feel they will do best what I want. All the power supplies in my projects are SS, I use SS regulators in the B+ on the preamps and IC constant current sources in the power amps. Purists cry foul but the results are what I care about. A good example is the distortion level in the latest KT88 monoblocks. At one watt it is at the thresholds of what I can generate and measure (around 0.05%). I also strive for high signal to noise levels. My usual target is -90dbv. I don;t want any hum or noise at the speaker. So what all this means is that the power amp designs are deceptively simple. No parts that don't contribute to purpose. You will observe that there is only one capacitor in the signal path. Also I use a rather trivial amount of negative feedback (3-4 db) to insure stability with any kind of load, not to fix the distortion or frequency response as is often done in other designs. The various parts (like the particular transformers and capacitors)are chosen to work together. The end result is amplifiers that perform excellently. I have attached the schematic of the amp below. How you build the power supply is your choice, but it does need to be clean. I recommend against tube rectifiers because of their higher internal impedance, but with careful application they can be used.

File Attachments

1) KT120 OddBlock Main Circuit October 22, 2011.PNG, downloaded 26432 times