Subject: Would Anyone Feel Like Discussing DC Filament Supply Methods?
Posted by Manualblock on Sun, 23 Jul 2006 16:13:40 GMT
View Forum Message <> Reply to Message

How about seperate supplies for the Driver tubes and the Power tubes? I would love to hear some good ideas and how they are implemented here.Thank You.

Subject: Re: Would Anyone Feel Like Discussing DC Filament Supply Methods?
Posted by Damir on Mon, 24 Jul 2006 12:12:07 GMT
View Forum Message <> Reply to Message

IMO/IME and generally:-with indirectly heated tubes and a power amplifiers, DC supplies for the heaters (both driver and output tubes) are often not necessity, especially with PP amps-preamps, especially low-level signal types (mics, RIAA) usually need DC-powered heaters-filaments in DHT-based power amps (power tubes) can be AC operated, but sometimes DC in needed, in SET low power amp + high efficiency speakers cases. Some people claims that AC sounds better, especially in comparison with simple/bad DC fillaments supply -there`re several types of DC supplies - from simple, pasive types (CLC, CRC...) to the regulated ones. With IDHTs, simple series voltage regulators (transistors or ICs) are "good enough". But, with DHTs (where filament = cathode = signal path), probably more "refined" versions are in order (CCS, shunt regulation...)-see, for example, some heaters/filaments and supplies article by Mark Kelly:
http://www.members.iinet.net.au/~quiddity/audio.html

Subject: Re: Would Anyone Feel Like Discussing DC Filament Supply Methods?
Posted by Manualblock on Mon, 24 Jul 2006 13:53:59 GMT
View Forum Message <> Reply to Message

Thanks D; that is a very good article. What empirical evidence can you offer regarding why you used what you used in your 300b amp.

Subject: Re: Would Anyone Feel Like Discussing DC Filament Supply Methods?
Posted by Damir on Mon, 24 Jul 2006 17:56:57 GMT
View Forum Message <> Reply to Message

No evidence you can find - I even wiped up fingerprints from the tubes...
http://www.lyricsbox.com/television-lyrics-prove-it-hzw4zzr.html

Subject: Re: Would Anyone Feel Like Discussing DC Filament Supply Methods?
Posted by Manualblock on Mon, 24 Jul 2006 19:42:09 GMT
View Forum Message <> Reply to Message

I have a very good design and explanation for a PS used in a SE 300B built by J.C. Verdier written up in SP # 14. If you won't share yours I will have to study his; so there! Only his is regulated. Pete Millet has a regulated supply he did for a pre-amp that uses two EL 34's as a CCS. That looks interesting. Lots of folks like the tuner tube front ends now; why is that?

Subject: First question...
Posted by PakProtector on Mon, 24 Jul 2006 23:38:36 GMT
View Forum Message <> Reply to Message

are you sure you need them? or is it a 'Want' thing?I can see the use for front end stages of a high gain amp, but I have not found them a requirement on my normal designs(that are high enough gain I can get by with no additional gain).cheers,Douglas

Subject: Re: First question...
Posted by Manualblock on Tue, 25 Jul 2006 14:04:48 GMT
View Forum Message <> Reply to Message

Well; I assumed that we want the quiet low noise floor for very efficient loudspeakers; no?

Subject: Re: First question...
Posted by PakProtector on Wed, 26 Jul 2006 23:42:20 GMT
View Forum Message <> Reply to Message

Well...I am not certain that DC is needed. I have heard AC amps with no hum. I would also suggest that making that much DC will have challenges all its own, and perhaps divert resources from other parts. It's also a noise risk itself, with multiple paths wo sneak in noise.it's an interesting challenge, and I don't feel qualified to say what should be done. Matter of fact, it's your amp, work it out, and learn a lot along the way, and then build another...:)cheers,Douglas

Subject: Re: First question...

Posted by Manualblock on Wed, 26 Jul 2006 23:55:07 GMT
View Forum Message <> Reply to Message

Can't argue with that. Say; have you done anything with the Dyna ST 70 e-linear driver mod lately?

Subject: Re: First question...
Posted by PakProtector on Thu, 27 Jul 2006 10:39:14 GMT
View Forum Message <> Reply to Message

Hey-Hey!!!,I drew it, but I have no St.70 to experiment on. It's a remarkably generic front-end. With a few component changes, it can be applied to nearly any U-L final stage. So far I've only used it on DH finals, but any ole power tube should be just as happy. There's a few other folks who have run 6L6's with it.I need to work out some details on the 813 amp. I have to rig a fairly high-power umbilical for those 2-channel beasties. That and getting the Peerless S-271-S output's wound, stacked and waxed...:) That big 5k should make for an interesting comparison between the stock Citation II iron. Fortunately Heyboer is in no rush to get those TX's underway. The project is getting bigger and bigger, I suspect some of the issues will need solved as it is built. It will have 10VAC on its filaments.cheers,Douglas