Subject: Stereo chassis or mono's?
Posted by PakProtector on Sat, 29 Jan 2005 00:57:44 GMT
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Hey-hey!!!,before y'all get too stoned on solder fumes building, I figured I'd ask about some basics in build preferences.Pros and Cons seems a bit on the square side...stereo chassis seems OK to ~20W. L-C power supplies for anything bigger get too heavy to carry easily. Mono construction requires matched stuff. Can't have one channel 40V different from the other.So, class A output stage. 15-25Watts. No rare or expensive valves. No scary voltages.This leaves a few possibilities. I am trying to decide on the next amp project. Expanding to 813's for personal use and 'research' is one possibility. Some small, comparatively inexpensive stuff like 6V6's or 6L6's is another. The new 7591's look quite appetizing as well. The ease of driving them is not to be ignored. the question of where they like their U-L taps is probably going to be a somve by building thing. Multiple taps is no big deal with a lot of the designs I'd use for OPT's.regards,Douglas

Subject: Re: Stereo chassis or mono's?
Posted by Manualblock on Sat, 29 Jan 2005 13:34:06 GMT
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I kinda like mono amps for ease of placement and no need for long speaker runs. Matching I see could be a headache but all we have is time. The 6L6 is a nice ballsy tube.Just to clarify; why low plate volts? Is that why you did not list the 807's?

Subject: Re: Stereo chassis or mono's?
Posted by cheetah on Sat, 29 Jan 2005 17:33:46 GMT
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Douglas,Been following your group build pre. Looks like it is going to be alot of fun. Would have liked to join, but too many other irons in the fire right now.For an inexpensive amp, with great sound, what about the: a) Simple 84 b) Compact 84 c) PP 84 on both the Electra-Print & Chris Brady sites d) PP 6v6 on Poinz's site.Joe

Subject: Got links? (nt)
Posted by colinhester on Sat, 29 Jan 2005 19:51:49 GMT
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Subject: Re: Got links? (nt)
Posted by cheetah on Sat, 29 Jan 2005 20:24:37 GMT
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Chris Beck http://www.geocities.com/n9zes@sbcglobal.net/EL84PSA.htmlElectra-Print http://www.electra-print.com/el84psa.htmlPoinz http://audiotropic.netfirms.com/blurb1.htmlSimple EL84 http://diyparadise.com/simpleel84.htmlCompact EL84 http://diyparadise.com/ultracompact.html

Subject: Thanks for the quick reply!
Posted by colinhester on Sat, 29 Jan 2005 20:38:48 GMT
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Have you built or heard any of these designs?.....Colin

Subject: low voltage
Posted by PakProtector on Sat, 29 Jan 2005 21:04:47 GMT
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Low voltage is to ensure easy class A bias w/o running the valves to their dissipation limits. Makes getting replacements easier, after building an amp to use Type II KT90's ( and then having the supply of good ones vanish ), I have changed the philosophy.Besides, the power diff between 80% and 95 is not a big difference. 807's are not out of the runing yet, they fall into good 6L6 cassification for me.regards,Douglas

Subject: Re: Stereo chassis or mono's?
Posted by PakProtector on Sat, 29 Jan 2005 21:07:20 GMT
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I like Poinz's amp. Small changes which also simplify things will get a bit more power from it easily. Same good two-stage amp. EL84 is getting into the sought-after/expensive category for the good ones, so I put it a distant second to some other choices.regards,Douglas

Subject: Re: Thanks for the quick reply!

Posted by cheetah on Sat, 29 Jan 2005 23:46:37 GMT
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I have not!That said, I did get a chance a while back to audition some "high end" equipement which included a SE 845, SE EL34, PP EL34. The amp that caught my attention was the PP EL34. I really enjoyed it. It could have been a system syngery thing, but I did have time to sort that out. Sooo, I've been looking at a lot of PP designs.I've been looking at the Nutshell HiFi site, Bruce Rosenblitz site, Vacuumstate Electronics, Gary Pimm, as well as the sites listed earlier.Nutshell Hifi favors PP DHT's. The others are into PP Pentodes and OTL's. I have favor PP Pentodes due to what I HAVE heard, which isn't much. Beside I figure you get more bangh for the buck here on the "dark side." So my earlier post.What about Cris Brady's 6AU6 style SE input, autoformer coupled to a PP 6V6/6L6 output stage. The OP points would need to be wporked out, but it should hold its own with ALL comers.Using Heyboer power tranies, and Electra-Print autoformer/output iron should be cost effective.Joe

Subject: Re: Thanks for the quick reply!
Posted by Manualblock on Sun, 30 Jan 2005 00:35:01 GMT
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I listen to my homebuilt EL 84 amp everyday. That's my main amp. It sounds good, no matter which amp I find to replace it, I end up going back to this amp. PP EL 84 SS rectified with Dyna output trans. I bought the circuit traced on a PC board, it was beautiful dual trace phenolic board. Then stuffed it and wired it into a chassis. Sounds really nice with the Pi 4's.

Subject: autoformer Iron?
Posted by PakProtector on Sun, 30 Jan 2005 15:17:41 GMT
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please elaborate on the autoformer Iron 'thing'. Sounds like parafeed would be required to keep the speaker isolated from B+.I have gone through a few really nice EL34 amps, and then got an eye opener from the 6L6 family. While older G and GA types are a bit on the 'spensive side, NOS 807 and Svetlana 'Winged C' 6L6GC are nice valves in the cheap end of the pool. There are *MANY* good sounding valves in the cheap end BTW. For low NFB designs, I got a really nice design from Heyboer. It's a copy of the Peerless S-265, a 20-20 Series, 10k:16,8,4,2/40 Watt design with a core bigger than the Dynaco 60W Mk.3 design. The winding design leaves it really easy to put U-L screen taps where the design calls for them( semi-custom designs do have their benefits, No? ). Or putting in more than a single pair of taps if you want to experiment a bit. No matter what sort of religious dogma might be heard about winding OPT's, it isn't all that dificult to get a good design. Just pick a design which can be used in a few different circuits. For example the 265 can be done with 807's, 813's and GM-70/845 designs. If proper care is taken, silly B+ is not required, and 40W is a lot of power if you have efficient speakers.regards,Douglas

Subject: Re: autoformer Iron?
Posted by Wayne Parham on Sun, 30 Jan 2005 15:50:06 GMT
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Heck, 40 watts is plenty even for speakers with not-so-high efficiency.  A lot of these tube guys are happy with 2 or 3 watts.  I like 10 or 20 myself, and 40 would be great.

Subject: Re: autoformer Iron?
Posted by Damir on Sun, 30 Jan 2005 16:32:45 GMT
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Hi, do you made some measurements with S-265 copy (Frequency response, Lp,...)? What about max. DC primary current? Sound?I agree with simple design, but personally don`t like "cheap" / compromise solutions, or expensive and complicated 2W designs. I like 6L6 "family" too, but 807 needs top cap...Maybe 6B4G, NOS is not too expensive (but not cheap, either), and Russian version is good. But, DHT, not so easy to drive and we`ll end with ~7W...enough?Or "bite the bullet" and do PP 300B, Raa=10k seems just right. Again, DHT, not easy to drive (more complicated splitter/driver needed), but ~15W DHT triode A-class is attractive:-)Maybe for the begining use simple, but versatile and good solution - amp with individual bias per tube, UL or triode, that can "accept" various tubes, say EL34, 6L6GC, KT66, 6550...And later in phase 2 amp with more "exotic" (300B) tubes?Just some thoughts...

Subject: Re: autoformer Iron?
Posted by cheetah on Sun, 30 Jan 2005 17:52:04 GMT
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Yeah it does involve para-feed. Uses a center tapped autoformer for the phase splitting duties. Simple and elegent.Joe

Subject: Re: autoformer Iron?
Posted by Manualblock on Sun, 30 Jan 2005 18:45:08 GMT
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I haven't used more than 20 watts in years. I like 6L6 also.

Subject: Oh...
Posted by PakProtector on Sun, 30 Jan 2005 18:59:14 GMT
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I tried some of that stuff. I built a few versions, and helped another winder as well with his version. Jack has probably done a better job than MQ did. Tried them as phase splitters, in-circuit and on the bench. While the ones designed for phase spliting work well on the bench, they did not sound as good as a simple diff amp. Such things do make good PP grid chokes. Leave teh CT split and you can do individual fixed bias. regards,Douglas

Subject: Re: Oh...
Posted by cheetah on Sun, 30 Jan 2005 19:01:52 GMT
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Just throwing out ideas. Thought one of those would be a good starting point.Joe

Subject: Re: Oh...
Posted by cheetah on Sun, 30 Jan 2005 19:05:28 GMT
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For what its worth, I think Poinz's PP 6V6 would be a good choice as well.Joe

Subject: from Homer's cloning Hammock
Posted by PakProtector on Sun, 30 Jan 2005 19:08:03 GMT
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I did not measure the copy(yet). I got them 2 days before the 2004 Oswalds Mill Tasting meet. I slapped them in, 30% taps to the E-Linear driver, 50% taps to the g2. Got 6 Watts from a pair of HY69's. Sounded pretty good. I got an improvement when I put g2 to the 30%. 9.5 Watts and a bigger more natural sound. I keep grinning to myself every time I hear something soooo inexpensive sound so good.I ran the amp with a signal generator, and go no misbehaviour at the frequency extremes. 9.5 watts down to where my signal generator got a bit loopy( ~16 cps ), and it ran out into the ultra-sonic with out any wiggles in the curve. I will do a more comprehensive measurement when I am done with the new linestage.As far as other ratings, like DC I would stick with the originally published specs. I think it was 120 mA per leg, and 10% imbalance. With fixed bias, I can get to a small fraction of that easily.regards,Douglas

Subject: Re: Oh...
Posted by PakProtector on Sun, 30 Jan 2005 20:24:06 GMT
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Those are fine amps, and a modification of Poinz's amp, running 6V6's or one of the close subs like 6EV6 or 6EY5 is one I am considering for my own personal consumption. 20% U-L taps and a 10k a-a OPT. E-Linear rig something like a 12AY7 and we're off to the races.Something like a properly done Dynaco Mk.4. Choke input filter. Oil cap for the PS energy storage and a 20 Hy/200 mA choke. I will probably step back to 15 Hy because I have a pair of them the size of Mk.3 outputs. Killer overdone PS. Hell, it will be taking no more than about 80 mA. 35 each for the power valves and 5 or so for the front end.good ideas are just that: good. Keep 'em comming.regards,Douglas