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Subject: SE or PP?

Posted by [PakProtector](#) on Sun, 17 Apr 2005 12:47:22 GMT

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Hey-Hey!!!,For those of you planning to build an amp companion to Guinevere, is there any feelings regarding PP or SE topology? I have a feeling that E-Linear amp as described by Pete Millett is a fine choice for a SE topology. It remains to be studied if another valve than the KT88 be used instead. EL34 comes to mind, and as a true 3-grid pentode, I think it will be a better performer. The input Pentode is another point of substitution, or perhaps creating a pentode with the cascode.regards,Dougals

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Subject: Re: SE or PP?

Posted by [Wayne Parham](#) on Sun, 17 Apr 2005 18:12:50 GMT

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I like 'em both, and for different reasons. SET is easier to build, and with good large components, sounds very nice. PP is more complex, and requires matched components for best performance, but offers more power and less noise. So I guess I'm decidedly undecided. But I think I'm leaning towards SET because it's easier for a first time build.

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Subject: Re: SE or PP?

Posted by [Manualblock](#) on Sun, 17 Apr 2005 20:06:40 GMT

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If I may, SE is a strange bird. Some circuits sound great others so-so others sound like crap-ola. And I think SE is very speaker dependent. PP has a definite advantage in terms of LF weight and body, good power, good freq extremes and working well with most speakers. I like some SE's but my vote would go to PP providing the buildup has adequate support on the forum. Save some cash on the transformers also. Even considering the extra phase splitter parts.Should SE prevail I like Pete's design. And I am sure there are some tweaks to be explored there. The only thing is Pete's amp uses different oil caps than Doug's. I already have the values from Guinevere so it would be great to be able to use them.Either way it's good to see some activity again.You know what would be nice. Scope readings and how to do them for these projects.

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Subject: I'm with you

Posted by [colinhester](#) on Sun, 17 Apr 2005 20:15:35 GMT

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PP would be cool. I know Doug is busy, so maybe we could ask Damir for some help. Maybe he could do his magic on Doug's schematic.....Colin

[http://www.audioundertable.com/GroupBuild/Projects/Merlin\\_Schematic.gif](http://www.audioundertable.com/GroupBuild/Projects/Merlin_Schematic.gif)

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Subject: Re: I'm with you

Posted by [Damir](#) on Sun, 17 Apr 2005 21:45:06 GMT

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Unfortunately, I don't have experience with this topology (E-linear, Hedge-style differential cascode driver + grid choke, etc.), nor I have the parts - Raa=10k OPTs, grid chokes, DHT output pentodes, etc. This is entirely Doug's "territory" and I can't help a lot. But, IMO - we can have various projects here, SE or PP, whatever. It's not "obligatorily" that we must build every one - I think that (in the future?) various people can present their projects. Anyway, I plan to present my SE 300B project in more posts (probably stretch to several weeks/months/years, hehe). Some basic theory, experiments with various drivers, PS, then final build in the chassis, etc. Lot of work:-).

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Subject: As always.....

Posted by [colinhester](#) on Mon, 18 Apr 2005 00:02:18 GMT

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you are the voice of reason. You should have a package on its way to you. It's the extra DN2540s that were not used for the preamp. Is there anything else one of us could pick up for you for the 300B or other projects? Just our way of saying thanks.....Colin

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Subject: Re: As always.....Ditto!

Posted by [Manualblock](#) on Mon, 18 Apr 2005 14:10:47 GMT

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Nothing wrong with two top-notch designs going at the same time.

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Subject: Re: As always.....

Posted by [Damir](#) on Mon, 18 Apr 2005 18:11:39 GMT

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Hey, thanks to you for the mosfets! And thanks to all for your support... I actually have (almost) all the parts, but some of them are "suboptimal" - some capacitors, and power transformer. As I said, I ordered custom PT ("ae-europe.nl"), but really don't know when I can expect it - they are very "economical" in E-mail explanations/answers:-). However, better than "Amplimo" (I used their toroidal transformers before) - they never responded to my two E-mails where I ask for quotation for custom PT :-). Anyway, I'm grateful for your offer, I'll send you E-mail.

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Subject: me too

Posted by [PakProtector](#) on Tue, 19 Apr 2005 00:13:16 GMT

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you know I hate this level of required activity. I shudder( sometimes ) to consider what full time work will be like again...Sorry about the required complexity. It is not all that bad( POV dependant ). There's lots of bits, but I think the operation is still fairly simple. The grid choke can be done away with for IDH valves like 6L6's( and of course the DH factor as well ). to build this with 6L6GC, the Svetlana offering or the Groove tubes KT66 come to mind are quite acceptable simplifications.Or 807's...and then leave room for filament and grid Iron and not have to get anode caps to run HY69's...This would get rid of the filament complexities, and save the space equal to a Dynaco Z565 OPTs when dealing out the grid Iron.I like PP for a few reasons, one being PS requirements. Single L-C filter is acceptable for this design. For the 6L6 amp, a re-issue of the Dynaco Mk.III power Iron from Triode Electronics or Hammond similar looks good. L-C filter to yeild low 300's of B+...Or, if you're feeling ten feet tall and covered with Hair, just build from the ground up with a 1kV B+ and run 813's!regards,Douglas

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Subject: Re: me too

Posted by [Manualblock](#) on Tue, 19 Apr 2005 18:05:45 GMT

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So Doug; you post a good summary of the amp with personal observations and clues to how it could be done... Then you wipe the slate and offer the concept that there is; in the 813, a real tube to deal with that promises so much more. I for one am in for the long haul; so whats it gonna be? Why not just do it once for the gipper?You have tried them all so there's a leg up on all of us. Or does it really matter that much which triode you use?Thanks J.R.

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Subject: well, it sort of goes like this...

Posted by [PakProtector](#) on Wed, 20 Apr 2005 00:09:43 GMT

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The 813 has a lot of unknown territory to cover I suspect. That and not-so-simple power supplies. So, it depends on where you want to draw the line at 'too complex' or 'too expensive' or 'too heavy' or...The topology I laid out for Merlin is quite adaptable. Remarkably so I think. Where ever you feel like jumping in, there will be support and help, and you'll probably wind up learning something important that neither of us knows now at the begining. There are many choices, and options in this world of DIY amps, I am not used to applying blinders or shades to the development or discussion. I'm also not quite comfortable saying that there is only one 'Best' for All. This leads to a muddle of options. gather some of them up and present them for discussion, and we can try to figure out what is the better path to experiiment on. regards, Douglas

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Subject: Re: well, it sort of goes like this...

Posted by [Manualblock](#) on Wed, 20 Apr 2005 02:47:37 GMT

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sounds good. The thing is you have heard all the amps so therefor how about this; What would you choose that would be interesting for you to realise that provides minimum 20 watts; triode PP with tube rec and as far as power supply choke input with B+ as high as is required to obtain that big sound such as you describe with the 813's? And whatever sounds personally intrigueing. I think you can get some dedicated experimenters here now that Guinevere turned out so well. As little feedback; or even variable feedback as possible. Set a reasonable limit of say 800\$ in parts. Construct it in sections that can be individually tested before moving on to the next section. E-Linear with seperate DC filament supplies. Start with the PS maybe; whatever seems best. Draw up a common top-plate template that can act as a reference for other projects but provide some uniformity between samples. Group buy whatever parts we can. Just a thought, J.R.

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Subject: that's still wide open

Posted by [PakProtector](#) on Wed, 20 Apr 2005 12:15:23 GMT

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this one: minimum 20 watts; triode PP with tube rec and as far as power supply choke input with B+ as high as is required to obtain that big sound I'll assume we're still full-on Class A. This 20W minimum still puts us in the moderate 845 B+ territory. Not exactly a bad thing. I have been itching for a serious experimenter's power TX. Multiple taps on the primary like Varian requested from Paeco. Change the primary hook up to yeild 500-800V after an L-C filter Full-Wave with vacuum or Hg-vapour dioides. 300 mA deliverable at even the highest voltage. Probably ~\$250 each. Slightly less if several are ordered. On the 813 thing, I have not yet heard any, just an assumption I can get them to work well for me. The PP 845 is complex enough, and I am sure of that one. And I have OPTx's nearly tailor made for it. This is not a small thing to consider, availability of reasonably priced excellent OPTx. As a swing for the fence( with a paid-off pitcher ), the PP845 amp is quite appetizing. 30W ought to be available fairly conservatively, and with no exotic parts.

If it weren't for the 813's challenges, I'd build one next.regards,Douglas

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Subject: Re: that's still wide open

Posted by [Manualblock](#) on Wed, 20 Apr 2005 12:50:44 GMT

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So how would you proceed with this?

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