Subject: By Sunday night...
Posted by PakProtector on Fri, 18 Feb 2005 19:24:44 GMT
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I would really like to hear from somebody with a working Guinevere linestage!regards,Douglas

Subject: Re: By Sunday night...
Posted by Manualblock on Fri, 18 Feb 2005 20:17:20 GMT
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I think you overestimate us. I am still waiting for parts to arrive! Maybe by the following Sunday. See; you have the up-front knowledge to know what to order. We had to wait for the final revision before we could even place those orders. The final revision wasn't even established until about a week and a half ago; then finding all the different places to place orders. I have 5 different parts sources not including RS and other local houses. Some people ordered parts that were not part of the final revision so hence scrapped.And to be truthfull; until I start to wire it up; I am not sure if I have everything I need. The original BOM has changed several times. T; allow me to offer up a small observation from my own perspective. When you guys answer a question; you give first;The answer;Next you say something along these lines(I am not quoting directly)"You need blah blah blah; O'kay.. but you can also do this; this or this!" Those also rans kill me! By the time you get to the third also possibility I am lost. I am so busy trying to figure which choice to go with that my head explodes.Please don't take this as a criticism; it's not. Just an observation.The reason I personally haven't had any questions for you is I don't know what to ask until I start building, then I will have plenty!I will admitt those giant size caps look great; big trans/big caps/big tubes=BIG SOUND.How about a coupla simple voltage test points and small tutorial on how to do them safely.How about a buss bar for star grounding made from 14ga. romex?A example of what you're using for selector switch and which 4.7k filter caps do you use. Thats the last part I should need.

Subject: Yeap, a week from Sunday
Posted by colinhester on Fri, 18 Feb 2005 20:55:04 GMT
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That's pretty much what I'm shooting for as well.  I have a couple of resistors back ordered.  I agree with John that there will be lots more questions when the solder statrs flowing.  I'm not sure I quite understand everything that's going on, and I'm pretty much building off of Damir's schematics (insert GREAT BIG THANKS - I could not have hooked up the MOSFETS without your help.)We have a lot of money invested, and the build needs to be done right.  This is my first major build from a schematic, and I'm pretty nervous about making sure things go as planned.  I don't want the smoke check to be that - smokin'.  I think an updated BoM would be a great future reference for all.  I know there are people lurking, and if you have not kept up on a daily basis,

there is no way to really know what's being built.  There have been subtle and not so subtle changes since this project began.  And yes, my head hurts too.....Regards, Colin

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Subject: Re: Yeap, a week from Sunday
Posted by PakProtector on Fri, 18 Feb 2005 21:31:27 GMT
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hey-Hey!!!,I'm just chompin' at the bit( well, *YOUR* bit actually ). This is a new experience for me as well. I suppose I should give you less choices *OR* more clearly defined reasons/options. In the past when I have responded to a "how shall I build a linestage?" there has been a bit more noise in the background and even more options.On caps, I think I got them from RS as well. If you're careful with making sure there is a load, you can get away with 25 volt rated caps. Root2 times 12.6 is less than 25 and an L-C filter with 25 v-in also yields less than 25 volts.I've worked with two other folks who built regulated PS versions of this line-amp and it took months longer than this. forgive me for getting excited on your behalf.regards,Douglasask more questions like open ended 'Why?', you'll not upset me.

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Subject: buss bar
Posted by PakProtector on Fri, 18 Feb 2005 21:36:25 GMT
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Hey-Hey!!!,For attachments to the caps, I took something like an inch and a half of 14 ga bare copper and bent it into a 'U' and soldered one to each terminal of the cap. it left a nice pair of wires sticking out to attach stuff to.Further grounding instructions: gather all the signal grounds, like the jacks and cathode and volume pot negative together and lead a single connection to the cap's negative terminal.I forgot that one and chased a bit of noise out of the new one when I rolled the last one over( to take its stepped attenuator volume box out ) and discovered the difference.regards,Douglas

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Subject: Re: Yeap, a week from Sunday
Posted by Damir on Fri, 18 Feb 2005 21:42:35 GMT
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Huh...of course, it`s not a kit, but a "living" project, no need for rush (give me more time for SE amps, I`m slow, too :-)). Doug and I are here every day, and I`m confident that it`ll be alright...:-)Well, I`d build it with PS in the one (say left) corner, from the behind the chasis. Mains wiring (AC outlet, fuse holder, switch - all in the same place, only a few cm of wire. Then transformer(s), close to it, and rectifier tube. On the right corner - input jacks and (stereo) pot

close to them, then 5687 - close to the input. Outputs jacks more to the center of the chasis. Leave the place for additional input jacks and selector switch, and couple of tubes (maybe one day we`ll find another "briliant" idea :-)). When look from the front, we`ll have some symmetry, I hope...First measure everything, cut/drill the holes, mount heavy components first (transformers, caps, outlets, tube sockets...), then jacks, pot, CCS, etc.And the last "joke" - of course, it`s not the one and only, "ultimate" way to build it, you can - for example... (To be continued:-)).

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Subject: Fewer choices
Posted by colinhester on Fri, 18 Feb 2005 23:23:57 GMT
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At this stage of my abilities, fewer chices would hurt the brain less. I want to build with the big boys, but I must learn to crawl first. The technical information readily cite is greatly appreciated but hard to digest all at once. I have learned more than I expected, but realize now I'm just learning to ask questions. This is good.No one is more excited about getting this done then I am (OK, maybe my wife's pretty excited too but for different reasons.) - I finished punching and polishing the copper top last night. - The heater is ready to go, except I'm waiting on a 1 ohm 5W resistor. - The CCS is done. - The base was completed, but thanks to my 2 yo son and some paint is wating to get remade. Any thoughts on a possible 2A3 PP. I've got two 12 x 18" copper plates that are getting lonely.....Colin

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Subject: Re: Fewer choices
Posted by Manualblock on Fri, 18 Feb 2005 23:33:01 GMT
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Say Colin; what is the thickness of the copper plates?

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Subject: Re: Fewer choices
Posted by colinhester on Fri, 18 Feb 2005 23:37:20 GMT
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If I had to guess it would be about 18ga. It's a little thinner than I would like to work with in this application. It does work wonders as a counter top over 3/4" ply or formed into tiles.

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Subject: Yes...of course!

Posted by PakProtector on Sat, 19 Feb 2005 00:12:13 GMT
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What do you think I do all day, save for think about and mess with Vacuum tube audio?I am working on the 2A3 circuit. With the power Iron, a suitable choke must be specified. I don't know if an off-the-rack Hammond would be a better deal than a custom from Heyboer. Going to have to examine that one a bit...GZ34 rectifier, and one motor run ought to take care of the rest. A bias supply capable of -75 volts is easy enough. A votlage doubler with 30vac input and decent caps will be adequate I think.And then there is the OPT design. I think a 6k6 with 10-20% E-Linear taps would be an ideal sol'n. Something like an Acrosound TO-300 with a modified tap location. I did some work with a PP 6A5 amp and found that a bit of proper NFB was better than none. The usual doctrine says no NFB with Triodes, but I have reached other conclusions.We need a driver which can do 120V p-p per phase. Out of a 250-260 VDC B+, this puts some restriction on the plate resistance( lower plate z valves have a more nearly vertical V-grid=0 plate line). The closer to vertical it is the greater percentage of B+ you can swing. Look at 6SL7 and 6SN7 curves, try a 60k plate load and see which can swing more AC.A 5687 is a likely suspect. It would be a bit light on the gain, but with Guinevere at the input, I think it can be done quite well. It is also a bit simpler with one stage. ECC99 is slightly higher gain, and is reputed to be a good sounding valve too.The grid choke is available from a few suppliers and is a *BIG* benefit to sonics. Every single amp I have wired one into has been improved drastically over resistive grid circuits. Even fairly low value ones ( down to 47k v. the usual 100k, or 270k for a Dynaco St.70 ).that's the bones of it at this time now. You could also do a SE 300B at a fairly conservative OP point with the Guinevere power Iron. Finding OPT Iron for SE is not something I have any practice doing.regard,Douglas

Subject: Re: Top Plates
Posted by Skip Pack on Sat, 19 Feb 2005 20:21:43 GMT
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As a non_participant, but interested obseerver, I wanted to floatan idea here on top plates. When I built my Foreplay a couple ofyears ago, I wasn't totally comfortable with the thin top platethough it doesn't seem to have caused anyone any difficulties(the new Bottlehead kits are coming with thicker plates). Ifor reasons that changed, got two Foreplay kits, so I built theone preamp using two plates with a layer of soft, thinpacking foam in between. There are enough through mounting screwsto hold it tight, and it is very stiff, and very dead. My onlyreservation was problems with heat and flammibility. The Foreplayhas always run cool, and there have been no problems. I'd think this would work with any metal. You would need to make sure you had a good connection between plates to avoidmaking a funky capacitor, and grounding the plate(s) to anythingother than power ground would probably be bad.Skip

Subject: I like it
Posted by colinhester on Tue, 22 Feb 2005 02:46:38 GMT

Pretty good idea.  It might be worth it asking Doc to make a one-of-a-kind plate.  It would be just a call to his CNC shop.  The setup is already done and the cost difference should be just the materials. I've got to do something about the buzzing in my FP.  I bought the kit in '98, just as something to do.  Little did I realize this kit would be a giant killer.  I need to go back and do a nicer job on it.  I also bought Doc's original PARASex amps, which I still use everyday.  I got one of the last ones he sold and was upgraded to the 8.1 iron.  As far as Guinevere is concerned, I'm using 20 ga copper sheeting which is way too thin.  I'm having to do some supports under the hood just to keep the top for sagging.  The Heyboer Tx weighs at least 7 pounds and then there's the choke and filiment Tx on top.  All in all I have 12-13 pounds of iron sitting on top.....Colin

Subject: Re: I like it
Posted by Skip Pack on Tue, 22 Feb 2005 20:04:25 GMT


The funny thing was that I used the sheet foam packing material thatcame in the Foreplay kit. When we make up our top plates, assuming that we're doing the hacking, boring, punching, and drilling ourselves,it's virtually as easy to make a double set of plates for the sandwich. My wife has a cheap source of copper (around 15 gauge, I guess). The art department at our local community college buys large sheets for the printmaking class, and has the big shear to cut it. The cost is very low in comparison to anything commercial that includes a cutting charge.Skip

Subject: Re: I like it
Posted by colinhester on Wed, 23 Feb 2005 02:06:38 GMT


It's pretty amazing how inexpensively one can do projects if just materials are factored in.  I still really like the idea of using two top plates with insulation between.  Right now the problem I'm running in to is that the 20ga copper palte I'm using is anything but quite.  It's going to take a considerable amount of damping to quite it down.  That's awesome you have a source of heavy gauge copper to play with.  The one thing I do, however, like about the thinner ga is that it is easy to work with.  It can be scored and cut with a sharp utility knife.  And thanks to the guys over at the craftsman forum, I now know holes can be cut with a wood hole saw.Does your wife teach printing at the CC?  I worked in the printing industry making inks (Flint Ink) for several years.....Colin