Subject: Amp schematic
Posted by PakProtector on Tue, 15 Mar 2005 17:32:05 GMT
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Alright, the amp schematic is scanned. and it's big, not tomention in four big pieces. If you want one, email me, and it shall be on its way tomorrow night. Make sure you have ~50 megs to take it, I'd rather not send it twice.regards,Douglas

Subject: Re: Amp schematic
Posted by colinhester on Tue, 15 Mar 2005 19:48:43 GMT
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Please send to colinhester (at) yahoo (dot) com. I look forward to seeing it .....Colin

Subject: Re: Amp schematic
Posted by Manualblock on Tue, 15 Mar 2005 20:39:40 GMT
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Recieved the first part no problem. Made a nice copy. Thanks; eagerly awaiting the next section.

Subject: Re: Amp schematic
Posted by cheetah on Tue, 15 Mar 2005 21:17:03 GMT
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I'd like one please!Joej_armocida (at) yahoo.com

Subject: On the way...
Posted by PakProtector on Wed, 16 Mar 2005 02:02:17 GMT
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Can you send part one to the guys on the Cc list? BTW, forty2wo, the size exceeds your limits. I will hand draw you one at teh Meet if youcan wait that long. Or perhaps somebody can shrink the files for you?regards.Douglas

Subject: GroupBuild/Projects directory
Posted by Wayne Parham on Wed, 16 Mar 2005 08:21:14 GMT
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Send it to webmaster@audioroundtable.com and lets put it in the GroupBuild/Projects directory.

Subject: Re: On the way...
Posted by Manualblock on Wed, 16 Mar 2005 12:29:50 GMT
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Absolutely; I just woke up so give me a couple hours, should be there by 2pm. Looks real nice.

Subject: Questions
Posted by Old Brown Eyes on Wed, 16 Mar 2005 22:38:39 GMT
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So just what is this amp? Chances are I'd love to see the schematic.Am I correct in assuming that you are looking into driving cathodes and perhaps AB2 or A2 (grounded grid) operation? If that is so, can you elaborate on the why's other than a linear input Z to the cathode as the transistion is made to drawing grid (G1) current?I trust you got my email and will favor me with a reply. The attachment I got from from the person of interest was removed by my work's filter system (and I'm not sure he feels like sending it a third time:(. So please, no attachments and no (4 letter) words that would offend a catholic nun or I won't see it.RussP.S. Can we chat at vintage?

Subject: Re: Questions
Posted by PakProtector on Wed, 16 Mar 2005 22:59:12 GMT
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This one does not drive the cathodes, or even run to grid current. It is a PP DHTetrode design. Cascode input stage. Diff amp/LTP phase inverter which is attached to the finals(1624's a glass envelope 1619) with the E-Linear cicruit. Two stage amp, single B+, and a valve rectified L-C filter. I am shooting at SE 300B power, with sonics which will cause SE300B amps's to undergo a ballistic trajectory flight in the direction of the storage bin.I am not certain that the cathode drive has merit. Perhaps for a more ocnventional design, but I think I have a bit of research and experimentation to do first. I also think 70W from a pair of E-Linear rigged 813's will be of higher quality than a cathode driven pair of 211's (not to mention more powerful and lower output Z). As proof of reasonable potential, I keep comming back to the 813's. I have heard the arguement that

they don't like U-L connection, but I figure if they can survive as triodes, I can run them U-L/E-LI did favour you with a reply to your note. I am not sure what you meant by 'chat at vintage'...regards,Douglas

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Subject: Re: Glad to see you are here
Posted by Old Brown Eyes on Thu, 17 Mar 2005 00:00:03 GMT
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Sure, I'd like to see your schematic....especially the HY69 if that's not asking too much (I have a T1 connection but best to send separately). I look forward to reading the email for my own peace of mind if nothing else. It must of arrived after 15:30 EST or the filters caught it (if I don't see it in the AM I'll send you my home email addy). By vintage I meant the vintage asylum over yonder. I was trying to be...uhh...circumvent which might not be required.I too feel that cathode drive is not the way to go for your purposes. I only see it as a plus for UHF/VHF stuff. It puts the entire cathode AC current in series with the driver circuit (out of phase at that which is part of why it's more linear) and ends up netting less power than G1 drive (darn near 50% less depending upon type of tube and class of operation). I think 813's in UL have potential or I would not of mentioned same (but feel tertiary windings for G2 are needed). I do think they will present some "problems" but feel you would enjoy the work. I would look towards perserving a voltage between G2 and anode based upon the physical spacing of these elements and feel that the common practice of operating G2 at a higher voltage than anode was only done for certain tubes in the hi-fi wattage race and not in the interest of good sound (or reliable operation).If you don't have it, Eimac's "care and feeding of power grid tubes" is worth looking at for high voltage transmitting stuff. If I run across a copy I'll send it your way. I shall certainly miss you over yonder and pray you will return soon.RussP.S. I'd like to hear about your new job and where you will be located....always looking for a good M.E. (mostly HVAC related) for work's projects.

Subject: answers...
Posted by PakProtector on Thu, 17 Mar 2005 00:17:09 GMT
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The schematic will be for what is effectively the HY69 amp. Minor changes to account for g3 being attached to the filament in the 1624 and to its own pin in the HY69. I'll be drawing monoblocks, as mine is a stereo chassis(not again I can tell you that!).I am trying to decide between tertiary winding for cathode fedback to be run with a pentode connected final, or U-L in the traditional fashion. I also don't quite know where the u-L point exists for the 813, that is at what percentage should the tap go. A tertiary winding that is ~30% of the anode winding takes up a lot of room. I don't think of any over ~15%, like Acro's 350 and Dynaco's A441. I have a pair of 441's and they need to be better. they are acceptable, but that's about *IT*. I need a stellar one...I think I will go with a cathode tertiary winding. It will net me ~80W without getting to nutsy with dissipation and I can put g2 right where I want to. Fortunately I have a reasonable design OPTx for both apps. I just

need to decide.On the schematic distribution. I am going to draw them tomorrow and the next day. Such things need a good proofing I can say with confiddence. Also notes on limitations, and variations. more importantly Limits are a personal requirement. Then off to the scanner and ~4 pages at ~1 meg each ought to be fine resolution.regards,Douglas

Subject: Thanks
Posted by Old Brown Eyes on Thu, 17 Mar 2005 01:28:08 GMT
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gotta say I'd vote for UL over cathode feedback because I see cathode feedback as being more like Mac sound, as..hmm..souless/unconnected? But then I am thinking of high wattage as doing the boogy thang at the cost of fine inner detail.I look forward to hearing the "whys' of your final decison.Russ

Subject: anytime...
Posted by PakProtector on Thu, 17 Mar 2005 01:39:22 GMT
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I am not going for the mac sound. Having had several of the 75's in both stereo and mono, I think I can avoid that. I read somewherre tht the CFB, if kept to ~10% reduces third H a bit more than just that amount of nfb would from g2 current contributions. Even with the so-so Dynaco OPTx, and more than 10% it did not sound 'souless' or dry. The leakages caused some interesting behaviour with certain connections, and I decided to try something else. Either way, it is only a pair of OPTx, probably ~$400/pr, and I may get the main plate TX wound so I can use it for both U-L @ 700V B+ or the full 1kV for pentode conection. But until I get some funding improvement(and keep the schedule open enough to build), I am not having either one wound. I don't think I will be certain until I do it both ways anyway, so I'll probably get both done and stop wondering.regards,Douglas

Subject: Re: Amp schematic
Posted by cheetah on Fri, 18 Mar 2005 02:52:07 GMT
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Douglas,Don't want to seem impatient!To date I have only recieved pieces 2 & 3 of the schematic. What is the status on the rest?Joe

Subject: Re: Amp schematic
Posted by PakProtector on Fri, 18 Mar 2005 12:05:44 GMT
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My email service fro Netscape sucks. It is giving me fits and seems to have bolluxed up what I have sent. It is a shame because the fine detail from the original drawing I made was preserved. I am making a more complete set of schematics, and will send them to the forum projects files managed by Wayne. A bit more patience please, I will deliver this as promised. Figure Monday by thetime I can distribute the scans(even a pre-liim proof found mistakes and omisions, this must be done right the first time).regards,Douglas

Subject: Re: Amp schematic
Posted by cheetah on Fri, 18 Mar 2005 21:49:13 GMT
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Hey Douglas,Understand! Take your time. Just knowing is half the battle.Joe