Subject: a Big One

Posted by PakProtector on Wed, 11 May 2005 17:26:18 GMT

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Hey-Hey!!!,I got thinking of a big PP Triode amp. Something like class A to deliver 75 Watts.this seems like a perfect chance to try the cathode drive 211's. I just got a 6k6:500 OPTx which is rated for 20W. Ought to be plenty...now what to drive it with? 2A3's or perhaps a multigrid like the 807? E-Linear here could be quite the sol'n to maximizing the available swing. pentode connection for the 807/1625's and adjust the g2 voltage for maximum power? The biasing scheme for the finals is still a bit of a question mark. I don't think that cathode bias will be acceptable for this circuit. the grids will be flowing current and I have a feeling that it will not be a trivial amount. Sticking the grids on a low impedance LC-LC filter and controlling the voltage with a bleeder and a variac on the primary of the supply TX looks OK for the time being. Running about a 1kV B+ and a 10k a-a OPTx will leave me cutting off one of the finals across the peaks....oh well. It looks like A1 to ~40 W, and A2 until it hits Redline. Now for a big 10k OPTx... This project looks like it will make Merlin appear a very minimalist design. With a voice-coil secondary instead of a high level line at the 807's it would be the Merlin design. the cathode drive finals do add a bit of complexity, no?regards, Douglas

Subject: Re: a Big One

Posted by Manualblock on Wed, 11 May 2005 18:01:31 GMT

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Sounds tantalising. Define the last sentence; a voice coil secondary, you mean the speaker is that right?

Subject: Re: a Big One

Posted by PakProtector on Wed, 11 May 2005 20:14:08 GMT

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the voice coil secondary is usually something liek 4, 8, and 16 Ohms, and represents something like a 20-30:1 step-down ratio from the plate winding. plates to 500 or 600 was what I have planned and represents a 3-4:1 voltage step-down from the anode-anode voltge swing available. 5k:500R is root10( or a little more than 3 ):1. regards, Douglas

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