
Subject: Re: My idea...

Posted by [Damir](#) on Thu, 23 Dec 2004 14:41:31 GMT

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Thank you for your confidence. It's no problem - when we have a driver, SET power amp is just a few resistors, capacitors, OPTs, output tubes+sockets. But - if we use about 300V B+, then we have a few choices for the output tube. One of the simpler solutions would be EL34, triode connected. Pro`s - IDHT with "standard" 6,3V heater, easy to drive (say 16Vrms max, then our line-stage can "drive" it with 1Vrms input, +"reserve" 6dB with 2Vrms CD output). Bias is easy - just one resistor + capacitor (cathode bias). Con`s - With U_{ak} about 280V, and $U_{gk} = 20...24V$, and OPTs with $Z_a = 2,5k-5k$, we can expect only about 2-3,5W output. Sensitive speakers is a must...Another candidate could be 2A3, "classic" OP ($U_{ak} = 250V$, $U_{gk} = -45V$, $I_a = 60mA$, $Z_a = 2k5$, $P_{out} = 3,5W$). "Cool" DHT, but now we have some complications - we need 2,5V filament winding, filament hum balancing pot, and the most important - 2A3 "needs" $45V_p = 90V_{pp} = 32V_{rms}$ input AC voltage for max. power. Our 5687 linestage has $A \sim 17$ and this is just enough, but with no "reserve" - it's desirable to have at least 3dB more amplification, for "quiet" CDs. We can (almost) get it if we use similar ECC99 tube ($\mu = 22$). Well, I'd like to see some discussion (if anybody is interested) - what to do - separate linestage and power amp, or no. Then - which tube to use, topology, etc. I can post a schematics, calculate the component values, give descriptions and some building guidance, etc. Where to find the parts - I'd like to see a discussion, too.
