Subject: 4-transistor linestage
Posted by Thrint on Wed, 17 Aug 2005 23:54:22 GMT
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OK, back to the MOSFET cascode buffer. Some nice cascode properties: very low input capacitance. THe lower device is screened by the upper, and it (globally) is acting as a buffer/source follower.Instead of rigging the lower gate to the current set resistor(as in a CCS), it is the input from the volume control. Current is regulated by a full-circuit CCS on a negative rail. +/- 25 volts should be adequate.5-10 uF of coupling cap, and at low voltage.Always wandered what a good L-C filter in a SS amp's power supply would do. Of course, we'll need two of them for the bi-polar rails.Of course, we'll do rectification with vacuum diodes, preferably IDH cathodes, like 6AX4's.The trouble is that my sleeve of DN2540N5 MOSFET's dissappeared in my move....:(along with my coffee can full of salvaged photo flash caps from disposable cameras.regards,Douglas

Subject: Re: 4-transistor linestage
Posted by colinhester on Thu, 18 Aug 2005 00:12:44 GMT
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I'd love to build one. As for the MOSFETs and caps, did your wife help you "pack?"

Subject: Re: 4-transistor linestage
Posted by Manualblock on Thu, 18 Aug 2005 18:52:34 GMT
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Man T; you hop around more than a flea on a griddle. Whats with this SS stuff now; are you trying to experiment or is this something you heard that had a great sound? I admitt, I am baffled.People have to have reasons for why they do stuff.

Subject: Re: 4-transistor linestage
Posted by Thrint on Fri, 19 Aug 2005 23:38:36 GMT
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The SS plate load sounds good. A few have asked me about unity gain linestages. Some of my friends have TX linestages. I think the buffer is a critical part of the job.Sooooo, how simple can it get? The cascode is a complication, but it gets around the variable capacitance induced by varying D-S voltage, and G-D voltage.Partially, it is an experiment to take something which is not

'supposed' to sound good and demonstrate the conventional wisdom isn't so wise afterall. Like PP Pentodes, no?regards,Douglas

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Subject: Re: 4-transistor linestage
Posted by Manualblock on Sat, 20 Aug 2005 18:42:14 GMT
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Boy that is some can of worms you are opening there. But I am not the right guy to discuss this; I still think the Dyna ST 70's sound pretty good. My favorite amp sound so far is the Fisher 50AZ and the Threshold Class A transistor amps.

Subject: and an option
Posted by Thrint on Mon, 22 Aug 2005 21:45:15 GMT
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Hey-Hey!!!,I am exploring a 1:1 bifilar output TX for this beastie. It will also serve to bias it. No second CCS required. Intact audio is the likely winder of these OPTx's. Bit of a research project I think. Requires a better filter for the negative rail(and a lot smaller voltage too).regards,Douglas

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