Subject: Low gain linestage
Posted by PakProtector on Sat, 24 Sep 2005 00:45:10 GMT
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Alright, got some bits on the way for testing and experimenting. In the raise my eyebrows, a 1:1 output TX for the linestage. -1dB high frequency point is in the low RF according to the manufacturer(Dave Slagle of Intact Audio).The plan is to make a low input capacitance, low output Z circuit for the active buffer. For pentodes, cathode Z is 1/gm. So either take a pentode, or build one. I am building one with a 5687 triode. With a gm number at the OP of 10 mA/V that beastie will be 100R output Z. Add the TX and we're looking at a few times that number... Still pretty good if you ask me.I drew up the schematic whilst waiting on a scheduling meeting today. Too bad audio does not pay so well as my day job! But take from that, the schematic is simple, and few in parts. I'll find some way to get the schematic up on the Projects file if I have to send somebody a hand drawn version.WOT, the gain will be nearly 1, and even with a 12B4 for my current linestage, I am very near to not needing any additional gain. Low output Z is quite another story, as the amp sounds best with a low value grid leak resistor in the input/PP driver stage.Aside from the OPTx, the build is quite comparable to Guinevere, maybe simpler by 15%.Anybody care to measure the effective gain of the pre- at listening levels? My bet is for less than 1 by an easy to compute margin.cheers,Douglas

Subject: Re: Low gain linestage
Posted by Wayne Parham on Sat, 24 Sep 2005 13:55:59 GMT
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What about Merlin? Did you ever build one?

Subject: Re: Low gain linestage
Posted by Damir on Sat, 24 Sep 2005 14:11:41 GMT
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I read the thread on Dave`s forum, interesting. Post us your findings when you receive the transformer.

Subject: Yes!
Posted by PakProtector on Sat, 24 Sep 2005 14:24:35 GMT
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Hey-Hey!!!,the Merlin schematic was drawn from the prototype. I am listening to it right now. Bela Fleck's Cosmic Hippo...I am ready to build another, with bigger finals(higher plate dissipation DH Pentode), and kicked off the group purchase over in the Group Build forum to take advantage of the bulk-rate pricing. Slight mods to the 10k a-a OPTx, on the g2/E-Linear tap location. Fortunately that design has end-of-layer points every 10% across the anode winding.The Merlin circuit keeps suprising me, even in its low power execution by how good it sounds. I wish I could take it to RMAF for a larger audience to audition and examine.and to Wayne: I'd suggest getting in on the E-Linear output TX buy...the price is quite attractive. Or wait for round II.cheers,Douglas

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Subject: Re: Yes!
Posted by Wayne Parham on Sat, 24 Sep 2005 15:09:09 GMT
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I'd really like to see and hear that Merlin amp. With my attention focused on the Prosound Shootout, I'm too busy to do much of anything else right now. But I'd sure like to listen to a Merlin amp.

Subject: Re: Low gain linestage
Posted by PakProtector on Sat, 01 Oct 2005 23:25:36 GMT
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Hey-Hey!!!,I got the 'Iron' from Dave. Nice looking stuff. Working out the PS and other details. Building it in a salvaged rack-mounted PS chassis.PS is from a Dyna SCA35. One 6.3 winding is used to lengthen the primary and reduce HV. The other is running a twin diode 9-Pin rectifier heater. I figured the rarest thing in my box was a Bendix Red-Bank 6754. Its heater-cathode rating is higher than its AC plate rating! Pins out like a WE 412(but I don't have any of those). I will get an honest 30 seconds until it even considers conducting. Plenty to warm up the cathodes of a 5687.Choke input with a UTC S-28, a 20 Hy, 100 mA potted inductor. C will be a motor run of ~100 uF. Anticipated B+ to be ~250. 30 mA of load, and I may put in a VR tube just to draw a bit more....and glow in an attractive fashion whilst back lighting the volume knob.More as it comes...cheers,Douglas

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