Subject: E-Linear intro
Posted by PakProtector on Thu, 15 Dec 2005 20:25:19 GMT
View Forum Message <> Reply to Message

Hey-Hey!!!,Let's take a look at what is happening at an instant in time: The input grid of the input pentode goes up; its plate goes downAt the power tube, g1(cap coupled to the anode of the input) goes down; and its plate goes up. Its g2 goes up by tap %.**g2 is the other end of the pate load. The input pentode is a gm amp, and the delta-V across the plate load is gm*delta-g1. This assumes an infinite plate resistance.So, the input pentode calls for a lower plate voltage, and lowering the plate votlage lowers g1 of the power stage and raises the source voltage of the input stage. Since the input stage does not care about voltage, and causes only a gnange in current, the increase in supply(at the power stage's g2) reduces the magnitude of the lowering of its own g1.It is short path plate-to-grid, as the plate signal is fed back to its own grid through the plate winding and input pentode's voltage source.The grid choke is a substitute for a grid resistor. the TX valves I like call for a low grid circuit resistance. For example the 813 maximum g1 resistance is only 30kOhm. The low DCR/high AC impedance of the choke seems to deal with small grid current production far better than an ohmic device.If this missed something, please ask a follow-up.cheers,Douglas