modulatable power supply

This DC power supply, whose output voltage can be modulated by an audio-frequency or other LF signal, is intended for such applications as modulation of Gunn-diode oscillators and amplitude modulation of transmitter output stages. The supply basically consists of an amplifier with a gain of 2, comprising a 741 op-amp and an emitter follower, T2, to boost the output current capability. The DC output voltage of the amplifier may be set between 6 V and 8 V by means of P1, whilst an AC signal may be fed in via C1 to modulate the supply voltage between about 3 V and 10 V. The frequency range of the circuit is approximately 200 Hz to 30 kHz. The off-load current consumption of the supply is around 5 mA and the maximum current that the supply will deliver is about 800 mA at 6 V, provided T2 has an adequate heatsink.

