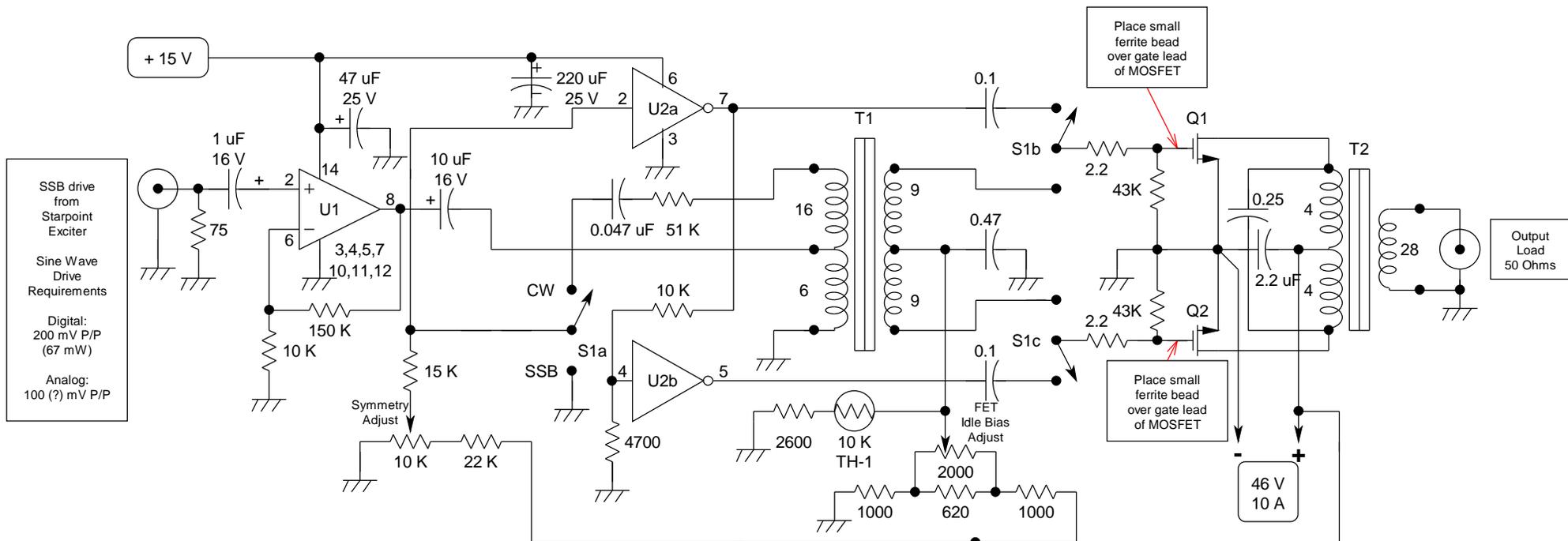


500 KC 200 Watt CW / Linear Amplifier
 for the ARRL 500 KF Experimental Group
 Designed by Ralph Hartwell W5JGV
 16 June 2005
 version 2.05
 >> Preliminary - Not For Release <<



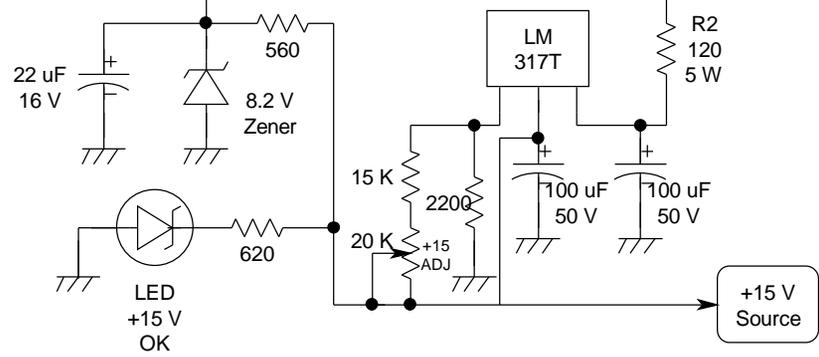
SSB drive from Starpoint Exciter

Sine Wave Drive Requirements

Digital:
200 mV P/P
(67 mW)

Analog:
100 (?) mV P/P

- OPERATING NOTES:**
- 1) Set idle bias to 0.5 A total drain current with cold heatsink.
 - 2) Do not operate without a load on the output.
 - 3) Good heat sink and fan cooling required!
 - 4) Ferrite core may be used for T2.
 - 5) 2.2 uF tuning cap will be different for CW. Value shown is for SSB.
 - 6) CW operation requires reducing drain voltage to limit out power to the licensed value.
 - 7) If increased distortion is tolerable, 100 W output on SSB may be obtained with reduced drain voltage.
 - 8) Thermistor TH-1 is optional, and not required if GOOD heat sinking is accomplished.
 - 9) Switch S1 changes between linear and square-wave switching mode of operation.
 - 10) The digital components are not required for 100 W CW operation, but the digital mode has better efficiency.
 - 11) R2 - 100 Ohms 5 W for 24 to 36 V, 200 Ohms 5 W for 36 to 48 V.



Frequency range as shown
 10 KHz to 800 KHz
 Analog and Digital Modes