

## 50 Watt Multiband AM Shortwave Transmitter Circuit

The published diagrams of Station QRP are for educational purposes only. These are offered for the furtherance of one's knowledge regarding radio frequency design and principles

Transmitter: Tube (CV5152 & EL86 & 2 x 807 parallel)

Voltage: 525 volt / 300 mA

Frequency: 9.2x kHz & 15.0x kHz

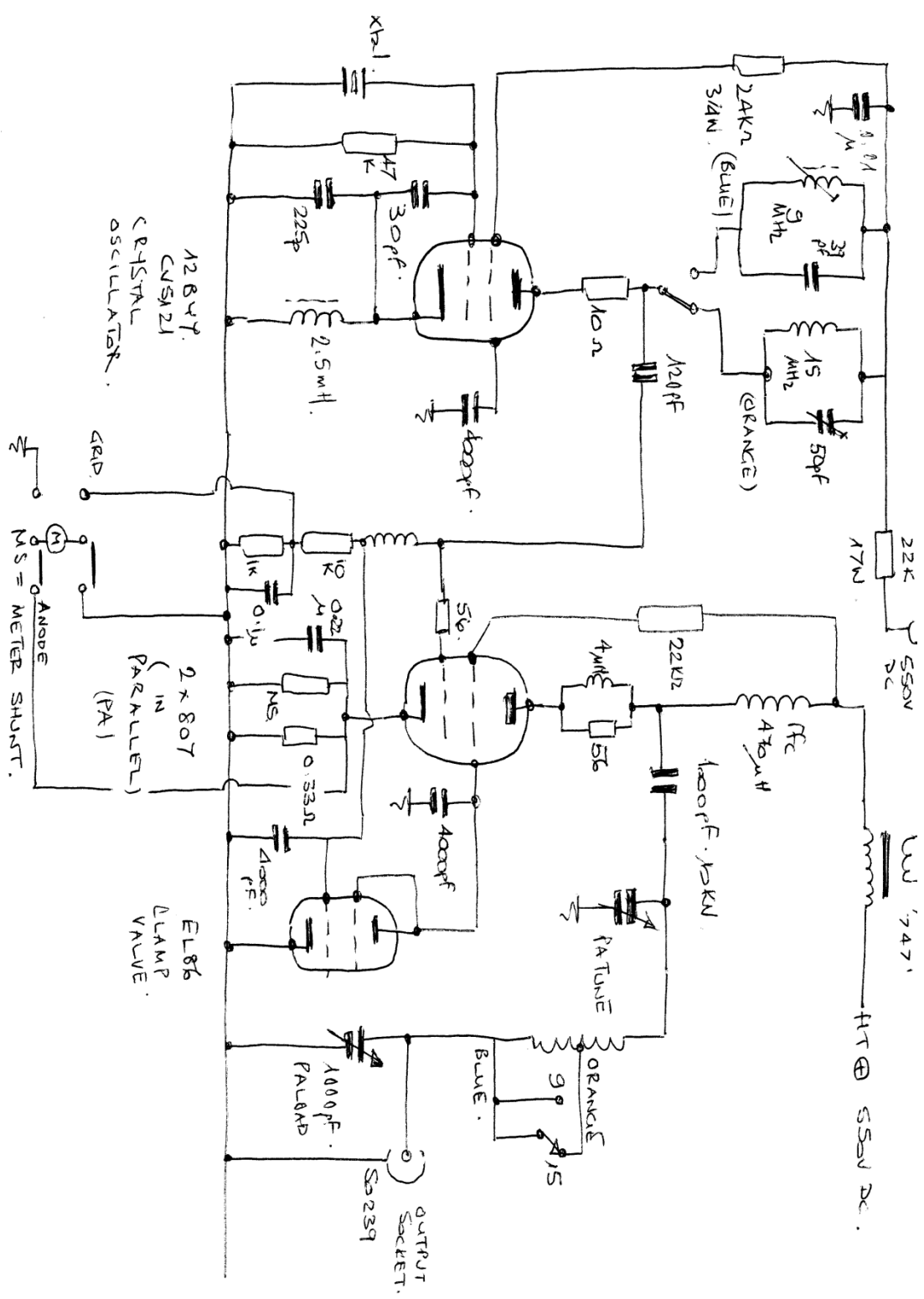
Modulation: AM (High Level Anode and Screen); 100% Mod

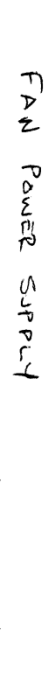
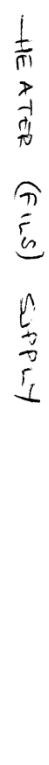
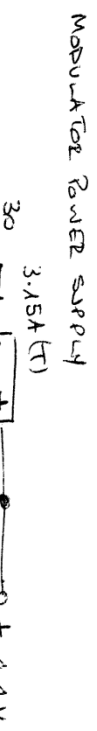
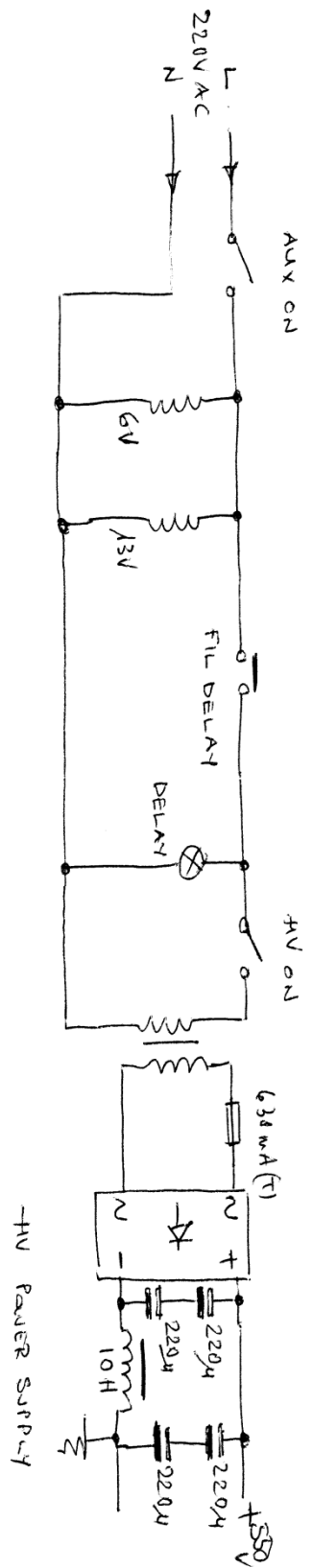
Amplifier: Internal 100W/4 Ohms R.M.S. MOSFET amplifier (BUZ900/905)

Audio filter: low pass (<220 Hz) & high pass (>5.5 KHz)

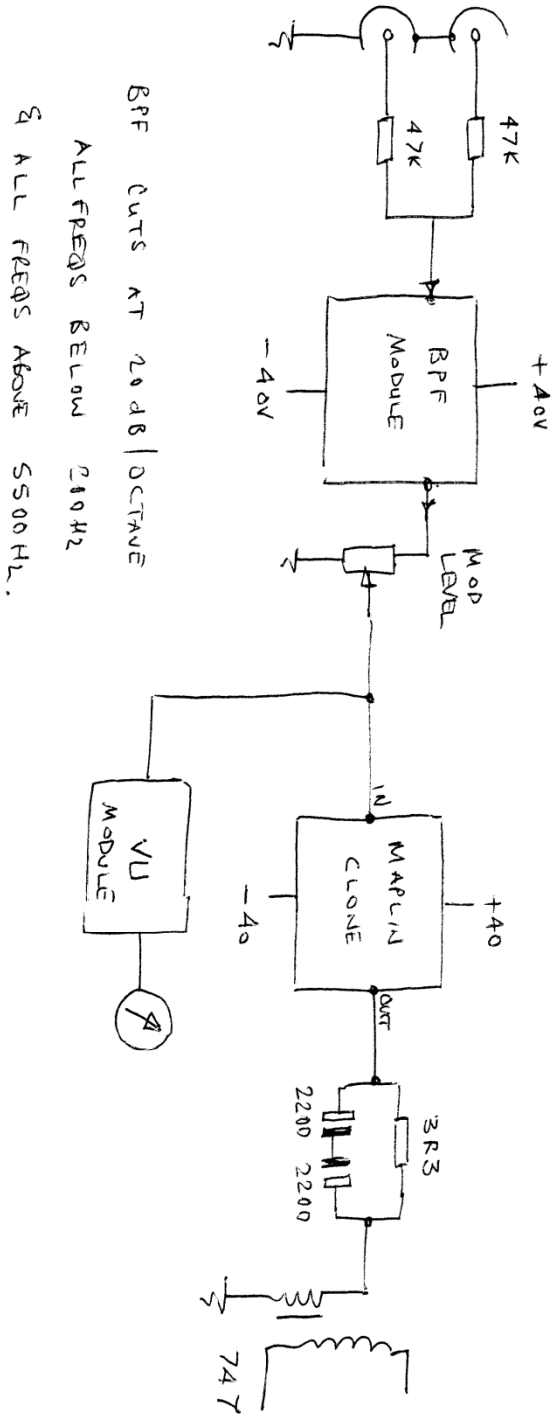
Audio impedance: 47 KOhm

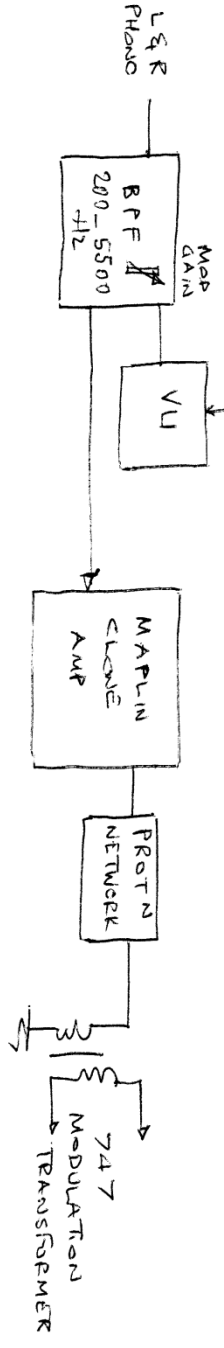
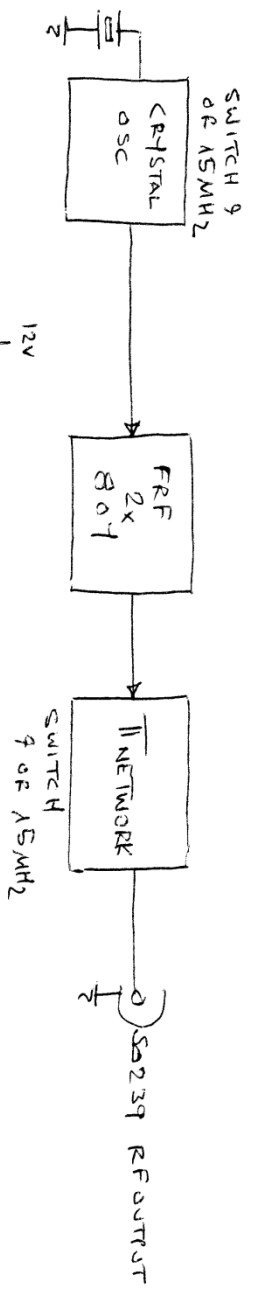
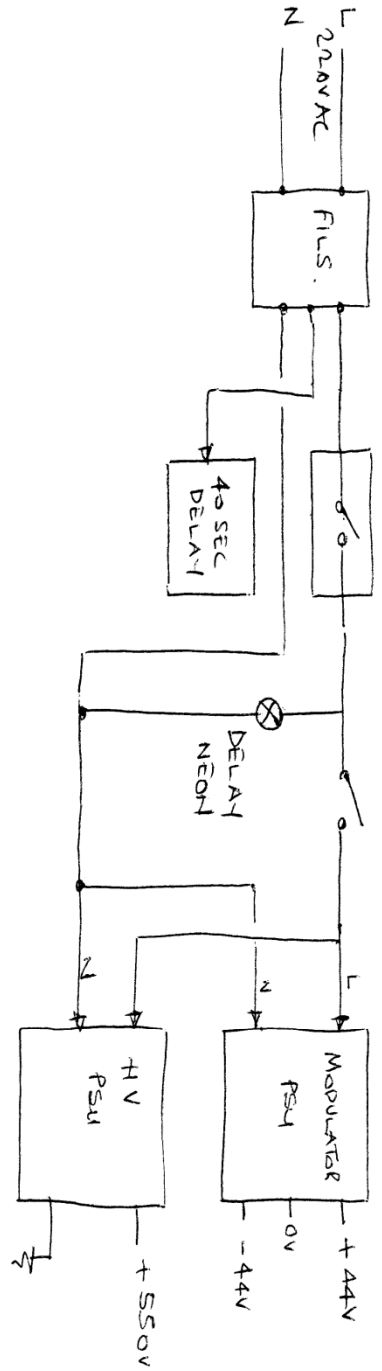
Output Power: 50 Watt carrier (AM PEP 100 Watts)





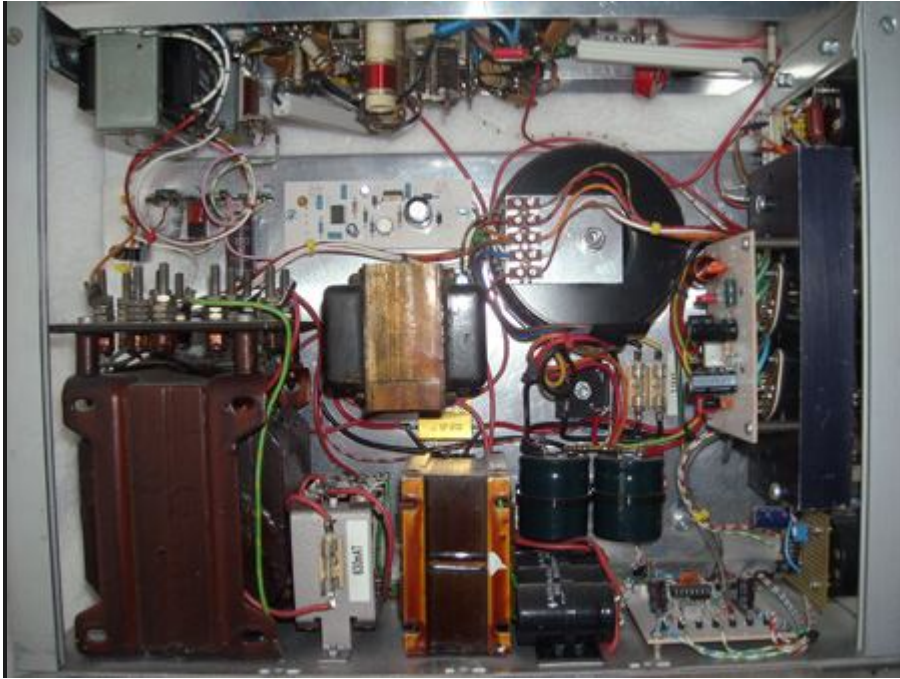
# MODULATOR







The VU meter (left) shows the peak modulation. (0VU = 100% modulation) On the right metering is provided for Grid current and Kathode current on the 807s

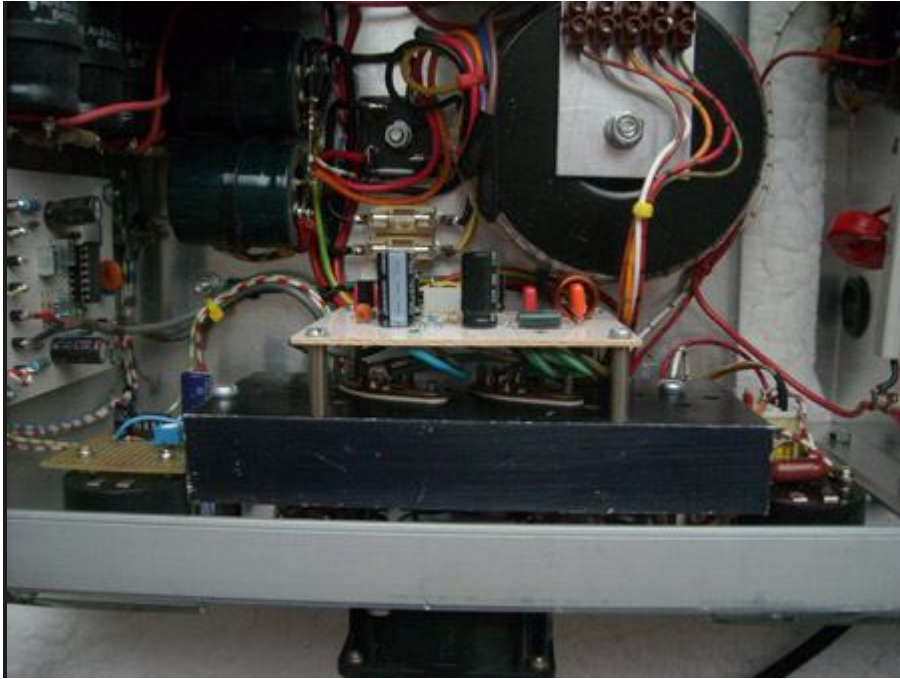


Seen from the bottom....



Inside the tube rig; CV5152 Crystal Oscillator, EL 86 and 2 x 807 Power





Internal MOSFET (BUZ900/905) 100W RMS into 4 Ohms solid-state Maplin clone modulator/amplifier



EL86, CV5121 and 2 x 807 Power Amplifier



Tank circuit