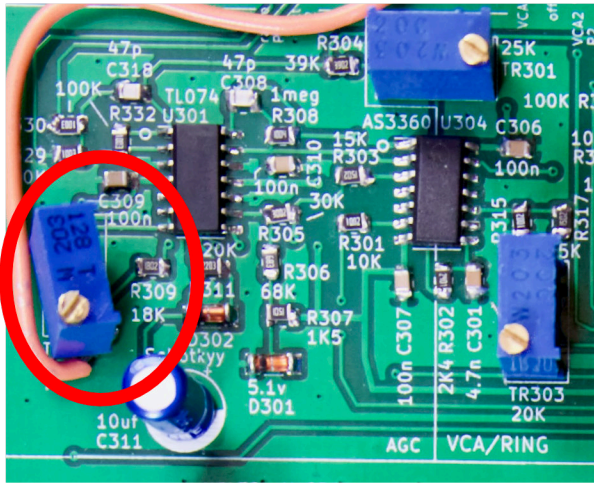


# Trimming Radio Cage VCAs



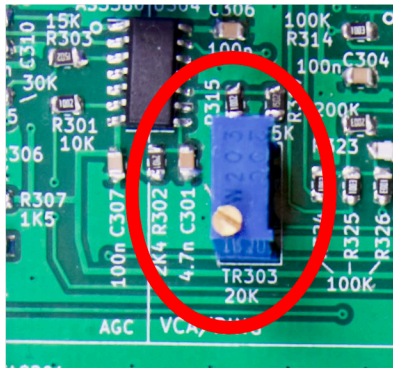
TR302 adjusts the radio AGC output level. Make sure the DIRECT/OD/AGC switch is set to AGC

Adjust for audio out averages around 2v peak to peak and peaks around 5v p/p. at RADIO OUT

Note: the kludge wire is for a prototype and not needed in the final build

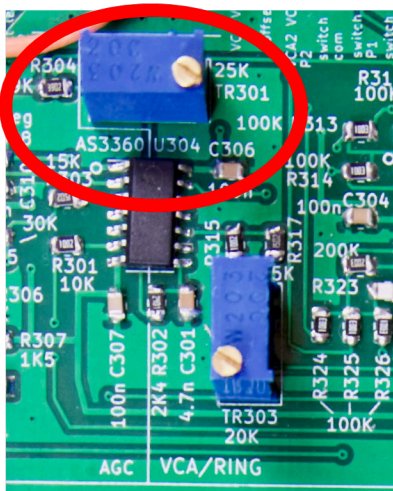
TR301 and TR303 adjust the VCA/Ring modulator circuit

Turn the radio off, RADIO full CCW on the mixer  
Set the VCF bypass switch to bypass  
Set the VCA/RING switch to VCA  
Turn the OFFSET Knob full CW



Apply a DC voltage (less than or equal to 5V) at the EXT IN jack and turn it's volume up full (CW).

While measuring the voltage at the module's output, adjust TR303 until the output voltage stops rising.



Set the VCA/Ring switch to RING and turn the OFFSET Knob fully CCW.

Measure the output voltage (it will be negative).

Turn the OFFSET knob full CW and measure the output voltage (it will be positive).

Adjust TR301 until the output is the same value as the negative reading, but positive.

Remove CV IN and turn the radio on in the mixer. Adjust OFFSET to lowest audio feedthrough and center the offset knob on the pot (the ring modulator is a basic circuit and won't fully shut off at 0 volts CV in).