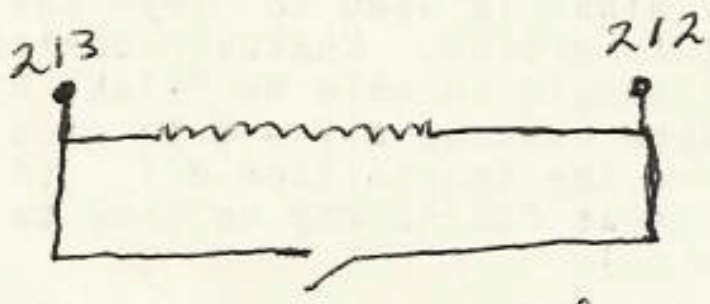
SCT-110 TRANSMITTER

transceivers in that it adjusts the amount of audio "clipping" of the transmitted signal. The deviation control on the board sets the absolute max peak deviation and is normally factory set for 6KHz max. (This prevents overdeviation of the transmitter regardless of the audio input level.) For Repeater service, the audio input level control should be adjusted so that a signal into the repeater receiver (deviated 5KHz) deviates the repeater transmitter to just 5KHz also. This will keep the transmitter audio stages out of clipping and will result in lowest possible system distortion. In this manner, only overdeviated received signals will drive the transmitter into clipping - thus preventing overdeviation of the repeater transmitter. Remember - all signals coming into the repeater are already speech processed. Any further processing (clipping) only results in needless distortion.

If desired, the audio response (pre-emphasis) of this board may be "custom tailored" by changing the value of C201,(0.005uF normally). For more "lows" (bassy sound), increase the value ofC201. The smaller the capacitor value, the less "lows" and more "highs". Normally, this should not be required, as the pre-emphasis is near perfect. (6db/octave.) Typical AF Input level for 5KHz deviation is 100mV p-p for a 1KHz tone.



15 Ω = 2 W
10 Ω = 4 W
5 Ω = 5 W
2.5 Ω = 7 W

add switch in parallel with power drop resistor to return power to original.

If necessary to reduce power to drive an amplifier, as mentioned in tune up 1.0 add resistor from E 212 to E 213 see fig. 7

Note (1). On 2M unit - if the SCT110 is used to drive the BA10 Amp., a 7 Wt. version of the SCT110 is used. *(Q207 driver stage is not used.) ON 2 METER UNITS.*

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