

# CB to 10

## — part XXII: more talk power for the TRC-11

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If you are one of the many hams who purchased a Radio Shack TRC-11 CB unit, this article will tell you how to increase its modulation considerably. Another ham and I bought a pair of TRC-11s when Radio Shack was selling them out at half price. The TRC-11 is a 6-channel, 5-Watt, 12-volt transceiver.

After replacing the crystals with 10 meter crystals, the receiver was realigned with a signal generator. The transmitter was then adjusted for maximum output. Our units had about 4-1/2 Watts output and worked fine over short distances, but the modulation was very weak even when yelling into the microphone. On a meter, the maximum modulation was 80% and the average was a small 40%.

After inspecting the schematic, it was decided that the microphone amplifier gain (also the audio amplifier gain) could be increased by bypassing R40 on Q8 or R44 on Q9. A 100-uF, 15-V electrolytic was tried, but it oscillated on Q9. On Q8, things looked good. The capacitor is simply paralleled with R40 (see the schematic with the radio). Now the maximum modulation was still 80%, but the average was now

70%. Any electrolytic capacitor 50 to 150 uF and above 15 volts should work.

A few of these radios are being used on the Civil Air Patrol frequency of 26.620 and I am sure this modification would benefit these operators. Look for us on 28.9 and 29.0 MHz AM.

Thanks to Wayne W4TZB for technical assistance and to Ed KB4GH who helped with on-the-air testing. ■



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