

- b. Connect DC 6.0, Voltage preset to EUT.
- c. Connect "power meter" and "dummy load" (50 ohm).
- d. Adjust Tx frequency by adjusting trimmer CT201.
- e. Connect AF oscillator to mic terminals.
- f. Adjust the frequency of the AF oscillator to 1 kHz and adjust AF level for 70 mV.
- g. Check using an oscilloscope and modulation meter for a max. frequency deviation of +/- 2.5 kHz.

c) Transmitter Test

a. Output Power Test

The RF power output with 6.0 V dc applied should be Max. 1.4 Watts on a GMRS frequency. Reject any unit that exceeds 1.4 Watts output.

The RF power output with 6.0 V dc applied should be Max. 0.5 Watts on a FRS frequency. This can be set using RV301.

b. Audio Response

Connect AF oscillator to Mic terminals and confirm that the audio level isn't distorted using an oscilloscope (300 Hz to 3 kHz). Use a 1 kHz tone as the basis.

c. Degree of Modulation Test.

1. Connect AF oscillator to the mic terminals and then adjust the level to 140 mV.
2. Using an oscilloscope monitor the waveform and using a modulation meter ensure that the deviation doesn't exceed +/- 2.5 kHz while sweeping the audio frequency from 300 Hz to 3 kHz. The PTT switch should be depressed during this test.

d. Spectrum Test

1. Pad the RF output of the radio with attenuators sufficient to keep from overloading or harming a spectrum analyzer input.
2. Connect a spectrum analyzer and push the PTT button.
3. Observe the spectrum from 400 MHz to 5000 MHz. The harmonics should be 60 dBc below the carrier.

d) Receiver

a. Preparation

1. Adjust the power supply for 6.0 Vdc.
2. Adjust the audio voltage level to 0.8Vrms into an 8 ohm load after power on.

b. Connection method