

MUSICAL ELECTRONICS LIMITED

GMRS1100B-EBC700

Alignment procedure:

1.VCO Section:

- a. Set unit to CH14 w/o CTCSS and TX mode.
- b. Adjust L101 to have a reading of 2.8V on VT test point.
- c. Install the VCO Shielding Box and confirm reading on VT test point must not over 2.5V.
- d. Set unit to CH1 and RX mode (w/o battery saving), confirm the reading must be 0.4V or over.

2.Transmitter Section:

- a. Set unit to CH14 w/o CTCSS and TX mode.
- b. Input a 100mV ,1KHz audio signal to External MIC socket .
- c. Adjust R292 for a reading of +/-2.3KHz Deviation on Modulation Meter.
- d. Set unit to CH14 CTCSS 1 , w/o 1KHz audio signal and TX mode.
- e. Adjust R304 for a reading must not over +/-0.6KHz Deviation on Modulation Meter.
- f. Set unit to CH14 w/o CTCSS and TX mode.
- g. Re-adjust R292 for a reading of +/-2.3KHz Deviation on Modulation Meter.
- h. Confirm the input level of 1KHz audio signal not over 15mV for a reading of +/-1.5KHz Deviation on Modulation meter.
- i. Confirm the deviation for CH1 ,CTCSS 1 and 38 (w/o Audio signal) must not over +/-0.6KHz deviation.
- j. Confirm the deviation for CH14, CTCSS 1 and 38 (w/o Audio signal) must not over +/-0.6KHz deviation.
- k. Set unit to any Channel w/o CTCSS and w/o Audio signal and TX mode.
- l. Adjust C43 for a correct Channel frequency reading +/-100Hz on Frequency Counter.
- m. Set unit to CH14, w/o CTCSS and w/o Audio modulation ,adjust R112 for 0.44W reading on power meter.
- n. Confirm the transmission power from CH8 to CH14 should be within 0.44W. Other Channel be 1.83W.

Transmission Power
Tune-up procedure

3.Receiver Section:

- a. Set unit to CH1 w/o CTCSS and RX mode.
- b. Disable Squelch function by adjust R25 to CCW.
- c. Input RF signal (Same as Channel Frequency and +/-1.5KHz Deviation of 1KHz Modulation signal)not more than -5dBuVemf for a 12dB SINAD reading on SINAD Meter.
- d. Decrease the RF signal by 6dB.
- e. Adjust R25 for just Squelch enable (w/o audio signal from speaker).
- f. Confirm to disable the Squelch function by increase the Input RF signal by not more than 3dB.
- g. Check the SAME results on CH14 for a 12dB SINAD reading on SINAD Meter.

END of alignment.

