

ALIGNMENT PROCEDURE FOR GMR1558-2CK(UT017ZH)

TRANSMITTER

STEP	MODE	CHANNEL	FREQUENCY	CONDITION	ADJUST	METHOD
1	POWER OFF	-	-	CONNECT DC POWER SUPPLY TO THE BATT POWER SUPPLY PATTERN ON THE PCB.	-	INPUT VOLTAGE : DC6.0V/2A
2	TX	8	467.5625MHz	CONNECT RF WATTMETER TO THE ANTENNA PATTERN ON THE PCB.	RT201	KEY THE TRANSMITTER WITH PTT, AND ADJUST THE OUTPUT POWER AT $0.50W \pm 0.05W$
3	TX	1	462.5625MHz	CONNECT FREQUENCY COUNTER TO THE ANTENNA PATTERN ON THE PCB WITH AN APPROPRIATE ATTENUATOR.	CT401	KEY THE TRANSMITTER WITHOUT ANY MODULATION. ADJUST TRANSMISSION FREQUENCY TO $462.562500MHz \pm 100Hz$
4	TX	1	462.5625MHz	CONNECT MODULATION ANALYZER TO THE ANTENNA PATTERN ON THE PCB. HPF:OFF LPF:3KHz DE-EMP:OFF CONNECT OSCILLOSCOPE TO MODULATION OUTPUT OF THE MODULATION ANALYZER. CONNECT AUDIO GENERATOR TO TP3(BAL) WAVEFORM:20Hz SQUARE WAVE MAGNITUDE:1.5Vp-p(DC COUPLING)	RT402	KEY THE TRANSMITTER, AND ADJUST RT402 AS THE WAVEFORM ON THE OSCILLOSCOPE COMES TO BE A CERTAIN SQUARE WAVE
5	TX	1 +CTCSS No.27	462.5625MHz	CONNECT MODULATION ANALYZER TO THE ANTENNA PATTERN ON THE PCB. HPF:OFF LPF:15KHz DE-EMP:OFF INJECT 1KHz 60mVp-p SINE WAVE TO MICROPHONE JACK FROM AUDIO GENERATOR.	RT403	KEY THE TRANSMITTER, AND ADJUST RT201 AS THE MODULATION ANALYZER INDICATES $\pm 2.2KHz \pm 0.1KHz$ DEVIATION.

RECEIVER

STEP	MODE	CHANNEL	FREQUENCY	CONDITION	ADJUST	METHOD
1	RX	1	462.5625MHz	CONNECT DC VOLTMETER TO TP2 INJECT -47dBm RF SIGNAL WITHOUT MODULATION FROM SSG TO THE ANTENNA PATTERN ON THE PCB.	L403	ADJUST L403 AS THE VOLTMETER INDICATES $1.3V \pm 0.05V$
2	RX	1	462.5625MHz	CONNECT SINAD METER TO SPEAKER JACK WITH 16Ω DUMMY LOAD. INJECT RF SIGNAL FROM SSG AS FOLLOWING CONDITION. MAGNITUDE:AS LARGE AS THE RECEIVER OBTAINS 10dB SINAD SENSITIVITY. DEVIATION: $\pm 1.5KHz$ AF FREQUENCY:1KHz	RT404	TURN TO C.W. MAX, SET TO 10dB SINAD FIRST. TURN TO C.C.W. MAX. ADJUST SLOWLY TO THE POINT WHERE WAVEFORM APPEARS AT THE SPEAKER OUT. (C.W.)

[illegible]