

ALIGNMENT PROCEDURE FOR GMR535-2(UT020ZH)

TRANSMITTER

STEP	MODE	CHANNEL	FREQUENCY	CONDITION	ADJUST	METHOD
1	TX	1	462.5625MHz	RF POWER METER TO ANTENNA PATTERN (HOT AND GND) OF THE PCB .	-	CHECK THE RF OUTPUT POWER "LESS THAN 0.7W ".
2	TX	1	462.5625MHz	CONNECT FREQUENCY COUNTER TO THE ANTENNA PATTERN ON THE PCB WITH AN APPROPRIATE ATTENUATOR.	RT102	KEY THE TRANSMITTER WITHOUT ANY MODULATION. ADJUST TRANSMISSION FREQUENCY TO 462.562500MHz $\pm$ 100Hz
3	TX	1	462.5625MHz	CONNECT MODULATION ANALYZER TO THE ANTENNA PATTERN ON THE PCB. HPF:OFF LPF:15KHz DE-EMP:OFF INJECT 1KHz 50mVp-p SINE WAVE TO MIC LAND FROM AUDIO GENERATOR.	RT101	KEY THE TRANSMITTER, AND ADJUST RT101 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 L109 AS THE VOLTMETER INDICATES 1.6V $\pm$ 0.05V
2	RX	1	462.5625MHz	CONNECT SINAD METER TO SPRED&SPBLK LAND WITH 16 Ω 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	RT103	TURN RT103 FULLY C.C.W., THEN TURN SLOWLY TO C.W. AND SET IT AT THE POINT WHERE WAVEFORM APPEARS AT THE SPEAKER OUT.