

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 16 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.)

ALIGNMENT PROCEDURE		FORM-4		REFERENCE DIAGRAM NO.				PAGE																			
MODEL		UNIT		BLOCK		ISSUE DATE		ISSUED																			
UT017ZH						2006/1/19		IWABUCHI																			
TITLE		ADJUST POINT		SUB TITLE				REF DIAGRAM																			
1. MAIN PCB B101 (TOP VIEW)														2. MAIN PCB B101 (BOTTOM VIEW)													
TP1 : VCONT														+6V:DC 6V													
TP2 : DISC OUT(De_Em) LOCAL OUT																											
TP3 : BAL														RF IN/OUT													
TP4 : AF OUT														UP													
TP5 : MIC IN														DWN													
TP6 : PTT														CHG:DC 11V													
TP7 : BOOST														with CHARGE JIG													
TP8 : BATT SEL																											
														L182 : VCONT ADJ.													
														L401 : DISC.ADJ.													
														RT201 : TX POWER ADJ.													
														CT401 : FREQ. ADJ.													
														RT402 : MOD. BALANCE ADJ													
														RT403 : MAX DEV. ADJ.													
														RT404 : SQ ADJ.													
REV. CODE																											
DATE																											
LOT # / RN #																											
REVISED BY																											
CHECKED BY																											