

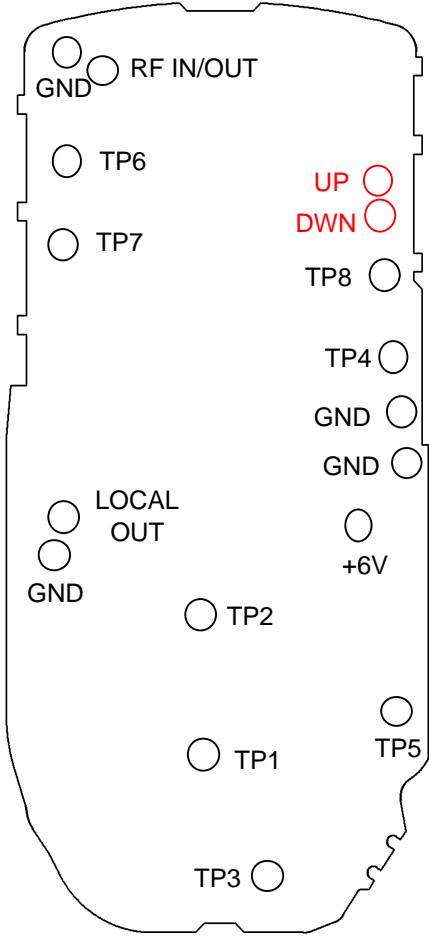
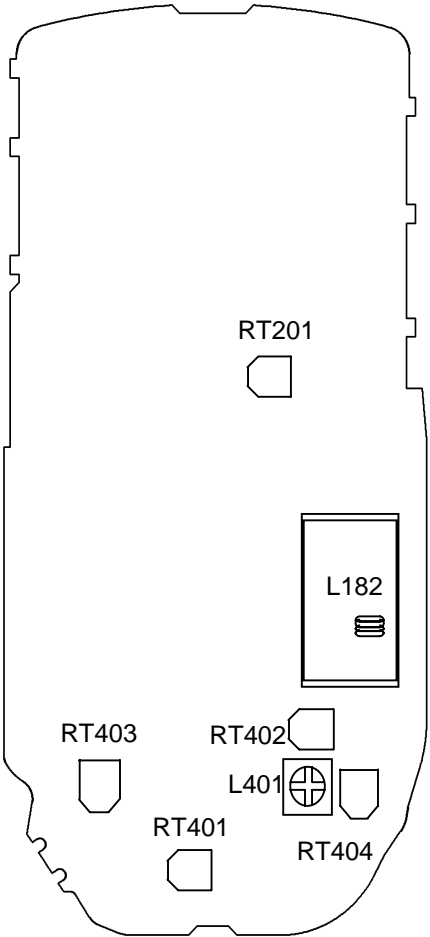
ALIGNMENT PROCEDURE FOR GMR1048-2CK(UT016ZH)

TRANSMITTER

STEP	MODE	CHANNEL	FREQUENCY	CONDITION	ADJUST	METHOD
1	TX	1	462.5625MHz	CONNECT RF WATTMETER TO THE ANTENNA PATTERN ON THE PCB.	RT201	KEY THE TRANSMITTER WITH PTT, AND ADJUST THE OUTPUT POWER AT $1.2W \pm 0.05W$
2	TX	1	462.5625MHz	CONNECT FREQUENCY COUNTER TO THE ANTENNA PATTERN ON THE PCB WITH AN APPROPRIATE ATTENUATOR.	RT401	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:3KHz DE-EMP:OFF CONNECT OSCILLOSCOPE TO MODULATION OUTPUT OF THE MODULATION ANALYZER. CONNECT AUDIO GENERATOR TO TP3 WAVEFORM:20Hz SQUARE WAVE MAGNITUDE:1.5Vp-p	RT402	KEY THE TRANSMITTER, AND ADJUST RT402 AS THE WAVEFORM ON THE OSCILLOSCOPE COMES TO BE A CERTAIN SQUARE WAVE
4	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 RT401 FULLY C.C.W., THEN TURN SLOWLY TO C.W. AND SET IT AT THE POINT WHERE WAVEFORM APPEARS AT THE SPEAKER OUT.

ALIGNMENT PROCEDURE		FORM-4	REFERENCE DIAGRAM NO.				PAGE												
MODEL		UNIT		BLOCK		ISSUE DATE		ISSUED											
UT016ZH						2005/10/24													
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 TP7 : MONI TP8 : BATT SEL					L182 : VCONT ADJ. L401 : DISC.ADJ. RT201 : TX POWER ADJ. RT401 : FREQ. ADJ. RT402 : MOD. BALANCE ADJ. RT403 : MAX DEV. ADJ. RT404 : SQ ADJ.														
REV. I S I O N S :	REV. CODE																		
	DATE																		
	LOT # / RN #																		
	REVISED BY																		
	CHECKED BY																		