ALIGNMENT PROCEDURE FOR GMR1448-2CK(UT026ZH)

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±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±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 ±2.2KHz ±0.1KHz DEVIATION.

RECEIVER

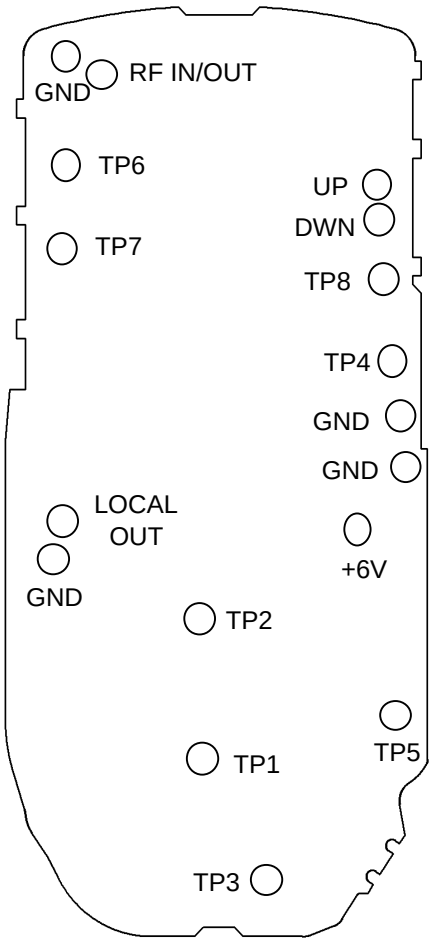
STEP	MODE	CHANNEL	FREQUENCY	CONDITION	ADJUST	METHOD
1	RX	1	462.5625MHz	CONNECT DC VOLTMETER TO TP2 INJECT -47dBm RF SIGNAL WITHOUT MODULATION FROM SSG TO THE ANTENNA PATTERN ON THE PCB.	L403	ADJUST L403 AS THE VOLTMETER INDICATES 1.3V±0.05V
2	RX	1	462.5625MHz	CONNECT SINAD METER TO SPEAKER JACK WITH 16Ω DUMMY LOAD. INJECT RF SIGNAL FROM SSG AS FOLLOWING CONDITION. MAGNITUDE:AS LARGE AS THE RECEIVER OBTAINS 10dB SINAD SENSITIVITY. DEVIATION:±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

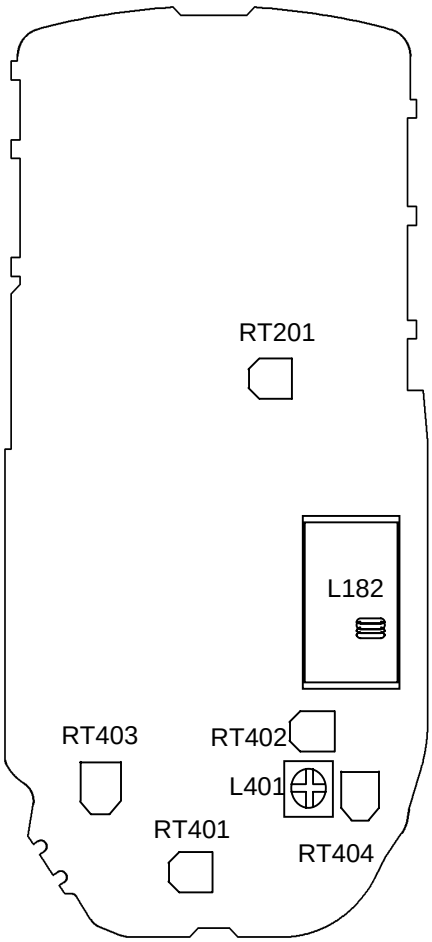
MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT026ZH			2006/12/4	

TITLE	ADJUST POINT	SUB TITLE		REF DIAGRAM

1. MAIN PCB B101 (TOP VIEW)



2. MAIN PCB B101 (BOTTOM VIEW)



TP1 : VCONT
TP2 : DISC OUT(De_Em)
TP3 : BAL
TP4 : AF OUT
TP5 : MIC IN
TP6 : PTT
TP7 : MONI
TP8 : BATT SEL

+6V:DC 6V
LOCAL OUT
RF IN/OUT
UP
DWN

L182 : VCONT ADJ.
L401 : DISC.ADJ.
RT201 : TX POWER ADJ.
RT401 : FREQ. ADJ.
RT402 : MOD. BALANCE ADJ
RT403 : MAX DEV. ADJ.
RT404 : SQ ADJ.

REVISIONS:															
	REV. CODE	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	DATE														
	LOT # / RN #														
	REVISED BY														
	CHECKED BY														