## ALIGNMENT PROCEDURE FOR GMR1035-2(ST DI) / UT024ZH

TRANSMITTER

| STEP | MODE | CHANNEL | FREQUENCY | CONDITION   | ADJUST | METHOD  |
|------|------|---------|-----------|---|--------|---|
| 1    | ТХ   | 1       |           | RF POWER METER TO ANTENNA<br>PATTERN (HOT AND GND) OF<br>THE PCB .  | -      | CHECK THE RF OUTPUT POWER<br>"LESS THAN 0.7W ".   |
| 2    | ТХ   | 1       |           | CONNECT FREQUENCY COUNTER TO<br>THE ANTENNA PATTERN ON THE PCB<br>WITH AN APPROPRIATE ATTENUATOR.   |        | KEY THE TRANSMITTER WITHOUT ANY<br>MODULATION. ADJUST TRANSMISSION<br>FREQUENCY TO 462.562500MHz±100Hz      |
| 3    | ТХ   | 1       |           | CONNECT MODULATION ANALYZER TO<br>THE ANTENNA PATTERN ON THE PCB.<br>HPF:OFF LPF:15KHz DE-EMP:OFF<br>INJECT 1KHz 60mVp-p SINE WAVE TO<br>MIC LAND FROM AUDIO GENERATOR. |        | KEY THE TRANSMITTER, AND ADJUST RT101<br>AS THE MODULATION ANALYZER INDICATES<br>±2.2KHz ±0.1KHz DEVIATION. |

## RECEIVER

| STEP | P MODE CHANNEL FREQUENCY |   | FREQUENCY   | CONDITION   | ADJUST | METHOD  |  |  |  |
|------|--------------------------|---|-------------|---|--------|---|--|--|--|
| 1    | RX                       | 1 | 462.5625MHz | CONNECT DC VOLTMETER TO TP2<br>INJECT -47dBm RF SIGNAL WITHOUT<br>MODULATION FROM SSG TO THE ANTENNA<br>PATTERN ON THE PCB.   | L109   | ADJUST L109 AS THE VOLTMETER<br>INDICATES 1.6V±0.05V  |  |  |  |
| 2    | RX                       | 1 | 462.5625MHz | CONNECT SINAD METER TO SPRED&SPBLK LAND<br>WITH 16 DUMMY LOAD.<br>INJECT RF SIGNAL FROM SSG AS FOLLOWING<br>CONDITION.<br>MAGNITUDE:AS LARGE AS THE RECEIVER OBTAINS<br>10dB SINAD SENSITIVITY.<br>DEVIATION: ± 1.5KHz<br>AF FREQUENCY:1KHz | RT103  | TURN RT103 FULLY C.C.W., THEN<br>TURN SLOWLY TO C.W. AND SET IT<br>AT THE POINT WHERE WAVEFORM<br>APPEARS AT THE SPEAKER OUT. |  |  |  |

| ALIGNMENT<br>PROCEDURE                          | FORM-4 | RENCE DIAGRAM NO.   |             |    |            | F          | PAGE |       |        |         |       |  |
|---|--------|---|-------------|----|------------|------------|------|-------|--------|---------|-------|--|
| MODEL   | UNIT   |   | BLOCK       |    | ISSUE DATE |            |      | ISS   | ISSUED |         |       |  |
| UT024ZH   |        |   |             |    | 20         | 2006/11/22 |      |       | TKMZW  |         |       |  |
| TITLE ADJUST                                    | S      | UB TITLE  | REF DIAGRAM |    |            |            |      |       |        |         |       |  |
| 1. MAIN<br>T                                    | V)     | 1   |             |    |            |            |      |       |        |         |       |  |
| TF<br>TF<br>MI<br>SF<br>SF                      |        | L109 : DISC.ADJ.<br>L122 : VCONT ADJ.<br>RT101 : MAX DEV. ADJ.<br>RT102 : TX RF FREQ. ADJ.<br>RT103 : SQ ADJ. |             |    |            |            |      |       |        |         |       |  |
| REV. CODE<br>DATE<br>LOT # / RN #<br>REVISED BY |        |   |             |    |            |            |      |       |        |         |       |  |
| CHECKED BY<br>ENGLISH VERSIC                    |        |   | <u> </u>    | 05 | 06 E01:    | 3280       |      | 2077) |        | :E0132. | XI 9- |  |