

# 900M RF Module ALIGNMENT

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| STEP | ACTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ADJUST                                   | READINGS                                                                                                                                            |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | <b>BASE TX</b><br>a) power on and set the test mode(21ch)<br>b) check the TX power.<br>c) if TX power spec in , it not be solder J1<br>d) if TX power is low , it must be solder J1<br>e) check the TX freq.<br>f) check the deviation on modulation, whether $12K \pm 1.0$ KHZ or not set 75 mV at pin number 1 of CON2 ( AF _ IN )<br>g) if Mod. Dev is spec in, it not be solder J2<br>h) if Mod. Dev is low, it must be solder J2<br>i) check the data modulation.     | 1.4 V<br><br>solder<br>VR1<br><br>solder | T2 ( TX VCO )<br>TX pwr : $-1 \pm 2$ dBm<br><br>J1<br>TX fre : $903.80$ MZH $\pm 1$ KHZ<br>Dev : $12 \pm 1.0$ KHZ<br><br>J2<br>Dev : $15 \pm 1$ KHZ |
| 2    | <b>BASE RX</b><br>a) power on and set the test mode(21ch).<br>b) check the RX sens(12dB SINAD).<br>condition : 1) RF input level -47dBm / Dev 12KHZ<br>c) check the Audio output level.                                                                                                                                                                                                                                                                                    | 1.4 V                                    | T1 ( RX VCO )<br>RX sens : $\leq -108$ dBm<br><br>Audio out : $220 \pm 20$ mV                                                                       |
| 3    | <b>HANDSET TX</b><br>a) power on and set the test mode(21ch)<br>b) check the TX power.<br>c) if TX power spec in , it not be solder J1<br>d) if TX power is low , it must be solder J1<br>e) check the TX freq.<br>f) check the deviation on modulation, whether $12.0 \pm 1.0$ KHZ or not set 75 mV at pin number 1 of CON2 ( AF _ IN )<br>g) if Mod. Dev is spec in, it not be solder J2<br>h) if Mod. Dev is low, it must be solder J2<br>i) check the data modulation. | 1.4 V<br><br>solder<br>VR1<br><br>solder | T2 ( TX VCO )<br>TX pwr : $0 \pm 2$ dBm<br><br>J1<br>TX fre : $926.30$ MZH $\pm 1$ KHZ<br>Dev : $12 \pm 1.0$ KHZ<br><br>J2<br>Dev : $15 \pm 1$ KHZ  |
| 4    | <b>HANDSET RX</b><br>a) power on and set the test mode(21ch).<br>b) check the RX sens(12dB SINAD).<br>condition : 1) RF input level -47dBm / Dev 12KHZ<br>c) check the Audio output level.                                                                                                                                                                                                                                                                                 | 1.4 V                                    | T1 ( RX VCO )<br>RX sens : $\leq -108$ dBm<br><br>Audio out : $220 \pm 20$ mV                                                                       |