

### **3. ALIGNMENT PROCEDURE**

#### **1. TRANSMITTING**

##### **1) TX VCO ADJUSTMENT**

- A. Connect the DC volt meter to the test point 1.
- B. Press the PTT BUTTON.
- C. Adjust CV2.  
LIMIT : 1.0VDC  $\pm$  0.3V at CH7

##### **2) FREQUENCY ADJUSTMENT**

- A. Connect the frequency counter meter to ANT point.
- B. Adjust CV1.  
LIMIT : Tx Frequency  $\pm$  200Hz

##### **3) TX POWER CHECK**

- A. Connect the RF level meter to the ANT point (RF level meter impedance : 50 Ohm)
- B. Press the PTT button.
- C. Check the Tx POWER  
LIMIT : < 500mW

##### **4) MODULATION SENSITIVITY CHECK**

- A. Connect the deviation meter to ANT point.
- B. Apply the audio signal 1Khz 8mVrms to the test point 7 (MIC input)
- C. Adjust SVR2.  
LIMIT : 1.0KHz Dev.  $\pm$  0.15KHz

##### **5) CALL DATA MODULATION SENSITIVITY CHECK**

- A. Press the call button and observe the deviation meter to check the deviation.  
LIMIT : 1.8KHz  $\pm$  0.5

- TO PRESS THE PTT BUTTON FOR THE TX MODE TESTING.

## **2. RECEIVING**

### **1) RX VCO CHECK**

- A. Connect the DC volt meter to the test point 1.
- B. Check the DC voltage.

LIMIT : 1.0Vdc +/-0.6V at CH 7.

### **2) QUAD. COIL ADJUSTMENT**

- A. Connect the DC volt meter to the test point 3.
- B. Adjust the IFT1.

LIMIT : 1.6Vdc +/-0.2V

### **3) SENSITIVITY CHECK**

- A. Connect the sinad meter to the test point 5.
- B. Reduce the RF output level of signal generator to get the 12dB of sinad

LIMIT : -116dBm +/-2dB

### **4) SEQUELCH ADJUSTMENT**

- A. Connect the DC volt meter to the test point 15.
- B. Same set up as the sensitivity check.
- C. Adjust the SVR1 to get the DC changing point.

LIMIT : 12dB +/-2dB

### **5) SPEAKER OUTPUT LEVEL CHECK**

- A. Connect the Audio level meter to the test point 5.
- B. Connect the 8Ohm load to the test point 5.
- C. Press the volume up button till its max. volume.
- D. Adjust the modulation deviation of RF signal generator.
- E. Check the clipping start deviation & level.

LIMIT : Clipping start deviation 1 +/-0.3KHz : level > 0dBm

- Press the Monitor button to disable the Rx power saving when the Rx is not stable.

### **3.OTHER CHECK**

#### **1) LOW BATTERY DETECT VOLTAGE CHECK**

A. Change the voltage until the Battery icon is flashing on the LCD.

B. Check the voltage.

LIMIT : 4.7Vdc +/-0.3V