

## 30BT Tuning Procedure

### 1) VCO adjustment

- a) Set a frequency at CH001.
- b) Connect DC volt-meter to TP1.
- c) Adjust VC101 until DC volt-meter shows at 0.9V.
- d) Set a frequency at CH240 and then make sure a DC volt-meter shows at less than 2.1V.

### 2) RF Output power adjustment

- a) Set a frequency at CH121.  
Disconnect an antenna. Set SW2 at CN5.
- b) Connect a spectrum analyzer and a power meter to CN5.
- c) Adjust VC2 to minimize a spurious with maintaining carrier.
- d) Make sure the spurious should be less than 40dB less than carrier.
- e) Adjust VC3 until power shows at 15mW.

### 3) TX Frequency adjustment

- a) Set a frequency at CH 121.
- b) Connect a frequency counter to CN5.
- c) Adjust VC1 until frequency counter shows at  $800.000\text{MHz} \pm 2\text{kHz}$ .

### 4) AF Deviation adjustment

- a) Connect an oscillator output to mic terminal.  
(Should use 10 $\mu$ F/16V capacitor between them and + side should be connected to mic terminal.)
- b) Set the output of oscillator at -60dBm at 1kHz.
- c) Adjust VR1 until level of TP4 become at -33dBm.
- d) Adjust VR2 until deviation become at  $5.0\text{kHz} \pm 0.5\text{kHz}$ .
- e) Adjust VR5 until one AF level meter (5pcs small square) is shown.

### 5) Tone modulation adjustment

- a) Turn off the Audio.
- b) Connect terminal TP6 to ground.
- c) Adjust VR4 until the deviation become  $3.0\text{kHz} \pm 0.2\text{kHz}$ .
- d) After adjustment should to set SW2 at antenna.