30XT Tuning Procedure 33-531-02 723MHz···735MHz

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 2.0V.

2) RF Output power adjustment
   a) Set a frequency at CH121.
      Disconnect an antenna. Set SW4 at CN3.
   b) Connect a power meter to CN3.
   c) Adjust VR3 until power shows at 15mW.
   d) Adjust VC2 to minimize a spurious with maintaining carrier.
   e) Connect a spectrum analyzer to CN3.
   f) Make sure the spurious should be less than 40dB compare with the carrier.

3) TX Frequency adjustment
   a) Set a frequency at CH121.
   b) Connect a frequency counter to CN3.
   c) Adjust VC1 until frequency counter shows at 729.000MHz±2kHz.

4) AF Deviation adjustment
   a) Turn off the phantom power switch and connect an oscillator output to mic terminal.
   b) Set the output of oscillator at -56dBm at 1kHz.
   c) Turn on the audio switch.
   d) Adjust VR1 until level of the #1 terminal of IC1 on the AF board becomes at -31dBm.
   e) Adjust VR2 on the RF board until deviation becomes ±5kHz±0.5kHz.
   f) Make sure that one AF level meter LCD segment is shown at no AF input signal and AF level LCD segments do not shown at the audio switch off.

5) Tone modulation adjustment
   a) Turn off the audio switch.
   b) Connect the linear detector at CN3.
   c) Adjust VR2 until the deviation becomes 3.0kHz±0.2kHz.

6) AF level meter adjustment
   a) Adjust VR2 until the one AF level meter LCD segment is shown at the deviation ± 5kHz.
   b) After adjustment should to set SW4 at antenna.

7) Display
   a) Make sure low battery indicator shows three (3) LCD segment at 9.0V.
   b) Make sure low battery indicator shows one (1) LCD segment at less than 6.2V.
   c) Press the mode button and change to the time display. Then hold pressing "UP"switch more than two seconds to become "0" indication.
   d) Make sure the channel display to show the correct frequency.
   (CH001 to CH240, 50kHz step, 723.000 to 734.950 MHz)