

31LT216MHZ

31LT Adjustment Procedure

1) Output adjustment

- a) Put a lapel microphone into the jack(3.5mm diameter) and turn on the switch (SW101). Put an antenna on the spectrum analyzer.
- b) Adjust T101, 103, 104, 105, and VC101 and VC102. Maximize the output level of carrier frequency and minimize the spurious as low as possible. The spurious should be -45dBm less than the carrier frequency.

2) Transmitter frequency adjustment

- a) Connect the frequency counter to the mic jack (3.5mm diameter jack) and TP1 .
- b) Adjust the T101 and the transmitte frequency should be within the desired frequency ± 2 kHz.

3) Max Frequency deviation adjustment

- a) Turn on the SW101
- b) Connect the oscillator and DC volt meter to the Mic jack
- c) Put the Liner detector between the shielding of 3.5mm mic jack and TP1 then AF output of Liner detector should be connect to the Oscilloscope.
- d) Turn on VR101 clockwise(maximize) and provide AF(1KHz) output by -20dBm.
- e) Then Adjust VR102 and its deviation should be ± 12 kHz

4) Modulation sensitivity adjustment

Adjust VR101 and the frequency deviation should be within $\pm 7\text{kHz}$.

5) Transmitter frequency

Connect the frequency counter between shielding of 3.5mm Mic jack and TP1, then reconfirm the transmitter frequency allowance will be within $\pm 2\text{kHz}$.

6) Frequency response

Reduce the oscillator level by 20dBm from above (4) and change the oscillator frequency to 100Hz, then make sure the level will be within $-2.5\pm 1.0\text{dB}$. Then change the frequency to 10kHz and then its level will be within $+4.5\text{dB}\pm 1.0\text{dB}$.

6) LED check

Reduce the power voltage to 5.0V and make sure LED does not light up.