

Technical Report
Transmitter Module Model NET-JS72/NET-JS75
FCC ID# BRWNETJS725SYN

5.4 Transmitter R.F. Tune-Up Procedure

1. Remove 2 screws from transmitter Module. Remove PC assembly. Put PC assembly on bench, component side up.
2. Refer to transmitter schematic Figure 5.2.2.
Soften bee's wax on cores in L1, L2, L3, L4 ,L5 and L6.
Using oscilloscope with small 50 ohm loop, starting at L1, adjust these cores for maximum oscilloscope reading.
Repeat this tuning sequence until no further increase in oscilloscope reading can be obtained.
3. Extend the aerial, and adjust L1, L2, L4, L5, L6 (in this order) to get maximum output. Try 2 times.
4. Shorten the aerial, and adjust L4 to make the current minimum.
5. Extend the aerial fully, and adjust L5 and L6 to get peak.
6. Adjust the frequency.
First, set up the Spectrum Analyzer.
Level Scale is : Log = 5dB/Div, Center Frequency = 72.550MHz, Span = 5KHz, RBW = 1KHz, VBW = 1KHz.
Then adjust the Amplitude and Attenuator to the right level.
Then, transmit the frequency Band 38 (72.550MHz) from the Standard Transmitter. Then store wave form to the Spectrum Analyzer.
By using VC2 and P2 and p1 in the transmitter, adjust it to make the same wave form.
7. Confirm the power.
8. Using spectrum analyzer with small 50 ohm loop, verify that sub harmonic and harmonic components are at least 50dB below carrier component. Pay special attention to 144MHz components.
9. Remove PCB assembly from Transmitter. Reapply bee's wax to L1, L2, L4 , L5 and L6. Put PCB assembly back into its case, replace the 2 screws.