BE-059 Technical Description:

The BE-059 is a wireless microphone with frequency range 89.1-91.7MHz, the transmitted signal from it can be received by using a common 88-108MHz FM radio receiver.

From the circuit diagram, it can be seen that the audio sound is collected by the microphone (MIC 1), and then amplified by the audio amplifier (Q1 9015C and Q2 9014C). After that, this amplified signal is modulated with the high frequency (which generated by oscillator) and radiated via a 37cm single soft wire antenna. On the other hand, the transmitted frequency can be varied by adjustment of the variable capacitor (VC1).