

## Wireless microphone circuit description of SG-866

### **AUDIO CIRCUIT**

The audio signal is injected via the microphone sensor into the audio circuit composed of the op amp IC U4 4558, & compandor IC U5 NE571. The signal is compressed via the compandor circuit at a 2:1 ratio and is pre-emphasized by U1. The level of the output signal is controlled by the resistor R44,R50.

### **MODULATOR CIRCUIT**

The modulator circuit is a direct FM type built around the local oscillator controlled by Crystal X2, variable capacitance diode D2, IFT T5~8 and C47~49. The modulated output from the oscillator is sent to the RF pre-amp consist of Q5,6,7 (Type 1906).

### **RF PRE-AMPLIFIER & FINAL AMPLIFIER**

One transistor amplifier stages, using Q8 (KSP10) transistors, culminating with a normal transmitter output of <1mW. The output filter comprised of C58, 59, 60, VC1, VC3, L11,12, L6 suppresses the output harmonics and matches the output to the integrate antenna.