

Technical Description on Bug'EM G9914 49.860Mhz Transmitter

(1) Battery :

It operates with a 9V alkaline battery, and is used to provide power for the circuit.

(2) On/Off Switch:

It is a slide switch which is used to turn on or off the power of the circuit.

(3) Sound selector:

It is a rubber key which is used to select sound1, sound2 and sound3 alternately.

(4) Audio amplifier:

It is used to pick up and amplify the surrounding sound which is used to modulate with the 16.620Mhz frequency.

(5) 16.620Mhz Generator:

It composes of Q3, R10, R8, R9, X1, T1, C12, C11 and C14. It is used to generate the 16.620Mhz frequency.

(6) Frequency Modulation:

It composes of R11, R12, R13 and C15. Its function is to frequency modulate the audio signal and the 16.620Mhz frequency.

(7) Frequency multiplier:

It composes of T2, C27, C9, R6, R7 and Q2. It is used to amplify the third harmonic frequency of the 16.620Mhz to provide the 49.860Mhz transmitting frequency.

(8) 49.860Mhz Amplifier state:

It composes of T3, C5, C7, C8, R5, L1 and Q1. It is used to amplify and filter out the rest of the signal from passing to the antenna.

(9) Antenna:

The signal is transmitted out from the antenna.