

■ CIRCUIT DESCRIPTION

In the transmitter mode the momentary switches SW-1, SW-2, SW-3 & SW-4 provide input to the monomer integrated circuit U1. The output of U1 modulates the RF output stage Q3 by turning on/off the transistor Q3 which is in the emitter of Q2. The crystal controlled oscillator Q1 is coupled through Q3 to the base of the RF amplifier Q2. From Q2 the signal is fed into the tuned circuit made up of L1/C12 & then to the low pass filter made up of C2/L3/L4/C3/C4 and is then fed to the antenna. The RF frequency is determined by the crystal XTAL1.

In the charging mode the transistor Q4 turns on and the current flows through the resistor R15 for limiting the charge current. The transistor Q4 will turn off by the timing transistor Q5. The time made up of R14/C13 and is then fed to the gate of the transistor Q6. The transistor Q6 which is in the base of Q7 and the collector of Q8. The rest of transistors are used as switching drivers.

■ ANTENNA AND GROUND CIRCUITRY

This unit makes use of a telescopic rod antenna. The antenna is inductively coupled. The antenna is self contained, no provision is made for an external antenna. This unit is powered from two 1.5V battery. No ground connection is provided. The unit relies on the ground track of the printed circuit board.