CIRCUIT DESCRIPTION:

In the transmitter mode the momentary switches K1, K2, K3 & K4 provide input to the encoder intergrated circuit U1. The output of U1 modulated the RF output stage Q2 by turning on/off the transistor Q3 which is in the emitter of Q2. The Crystal controlled oscillator Q1 is coupled though C3 to the base of the RF Amplifier Q2. From Q2 the signal is fed into the tuned circuit made up of T1/C12 & then to the low pass filter made up of C9/L2/L3/C7/C8 and is then fed to the antenna. The RF frequency is determined by the crystal XTAL1. The rest of transistors are used to serve the battery charger.

ANTENNA AND GROUND CIRCUITRY

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