

**Application No. : 06101887**  
**Date : 2006-10-23**  
**Model No. : 13000 – 27MHz**

### **Circuit Description**

U1 is a modulation encoder, which provided pulse modulation and transmit enable signal to Q1 (buffer amplifier). The 27.145 MHz crystal oscillator drives the base of Q2 the oscillator. The output of Q1 has the matching network consisting of L1, L2, VL1, C4, C6 and C7 that limit the harmonic content and affect the proper coupling of the antenna to the output stage.

Antenna, Ground and Power Source

The antenna consists of a 45cm long metal antenna. There is no external ground connection. The ground is only that of the printed circuit board. Electric current is supplied by a 9Volt ("6F22" size battery x 1) primary battery.

### **Operation Description**

The transmitter is operating at 27.145 MHz band. It is powered by a 9Vd.c. battery (6F22) and the transmitting frequency is crystal controlled. There are six control knobs to control the forward/reverse motor, the up/down motor and direction of movement. The operation is achieved by different combinations of form pulse modulating signal on the 27.145 MHz carrier.

Remarks:

The transmitter is a six control knobs transmitter.

The EUT continues to transmit while the control is being pressed.

It is a Pulse modulation type transmitter, the modulation signal is provided by IC.