1. Circuit description

U_2 generates code modulation signals which are shaped via Q_5 Q_4 R_{17} R_{15} C_{18} D_1 cause frequency modulation on quartz crystal X1 (13.5475MHZ).

Q_3 T_4 X1 form signal frequency oscillation circuit.

A carrier signal of 27.095MHz is amplified via pulse Q_2 , which drives amplifier Q_1.

A matched network circuit is formed by L_1 L_4 T_2 T_1 and C_1 They enable the best coupling state of the high frequency carrier signal and the antenna.

2.Antenna ground and power source.

The antenna consists of a 1.1m long telescopic chrome over brass tubing. There is no external ground connection. The ground is only that of the printed circuit board . Electric current is supplied by 12 Volts Primary storage ceil.