

CIRCUIT DESCRIPTION



The varactor diode DC 1 makes up the reactance circuit. R4 and R5 establish a voltage divider network that bias DC1. Capacitor C5 interacts with DC1 to cause a varying capacitor reactance directly influenced by the input modulating signal created by the IC TX2C.

The varactor – controlled crystal oscillator comprised of Y1 or Y2, R7, R8, R9, C7, L1 and Q1. Its output is doubled by the frequency doubler circuit consists of L2, C13 and Q2 to form the carrier frequency 27.045MHz or 27.145MHz. The modulated signal is then amplified by Q3 and finally coupled to the antenna through a matching network consists of C4, C15, C16, C17, L4, L5 and L6 which suppresses the harmonics and allows maximum power output.

The antenna is a 5 inches long spring type steel wire. There is no external ground connection. The ground is on the circuit board only. Electric power of the transmitter is supplied by a 9 Volt primary storage cell.