27.145MHZ Transmitter Operational Description

The 27.145MHz crystal oscillator drives the base of frequency the final/buffer amplifier. The modulation provided by AM. The modulate output of AM signal has the matching network consisting of inductance L3/L4 and capacitance C6 that limit the harmonic content and effect the proper coupling of the antenna to the output stage.

Antenna, Ground and Power Source

The antenna consists of a 33cm 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 9.0 Volt primary battery

Operation Descriptions

The transmitter is a device operating at 27.10-27.18 MHz band. The transmitter is powered by a 9.0V battery and the transmitting frequency is crystal controlled. There are radio to control the forward reverse motor and director of movement. The operation is achieved by different combinations of form pulse modulating signal on the 27.145MHz carrier frequency.

Remarks:
The transmitter is a super-regenerative transmitter. The EUT continues to transmit while button is being pressed. It is super-regenerative transmitter, Modulation by _ super-regenerative ___; and type is AM modulation.