## Circuit Description

The 49.86 MHz crystal oscillator drives the base of Q2 the final amplifier.

The modulation provided by <u>U1</u>. The output of <u>Q1</u> has the matching network consisting of <u>L2</u> and <u>C4</u> 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 17 cm 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 3.0 Volt ("AAA" size battery x 2) primary battery

## **Operation Descriptions**

The transmitter is a <u>remote control toy</u> operating at <u>49</u>MHz band. The transmitter is powered by a <u>3.0V</u> battery (<u>"AAA" size battery x 2</u>) and the transmitting frequency is crystal controlled. The operation is achieved by different combinations of form pulse modulating signal on the <u>49.86 MHz</u> carrier frequency.

## Remarks:

The transmitter is a <u>two</u> joystick transmitter. The EUT continues to transmit while joystick is being pressed. It is joystick transmitter, Modulation by IC; and type is Amplitude modulation.