Application No.: <u>HM156742</u>

Date: 23 June 2006

FCC ID: <u>T96SUNMATE2195</u>

## **Circuit Description**

The  $\underline{49.86}$ MHz crystal oscillator drives the base of  $\underline{Q2}$  the final/buffer amplifier. The modulation provided by  $\underline{Mic}$ . The output of  $\underline{Q2}$  has the matching network consisting of  $\underline{L1}$  and  $\underline{C16}$  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 <u>13cm</u> long telescoping 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 a <u>9 Volt ("6F22" size battery x 1)</u> primary battery.

## **Operation Descriptions**

The transmitter is a <u>toy walkie talkie</u> operating at <u>49.86</u>MHz band. The transmitter is powered by a <u>9V</u> battery (<u>6F22 x 1</u>) and the transmitting frequency is crystal controlled. The operation is achieved by different combinations of form amplitude modulating signal on the 49.86MHz carrier frequency.

## Remarks:

The transmitter is a 1 Button transmitter.

The EUT continues to transmit while Button is being pressed.

It is <u>Voice</u> transmitter, Modulation by <u>Microphone</u>; and type is <u>Amplitude</u> modulation.