

**APPLICANT: Yick Shun Electronic Toys Manufactory LTD.**

FCC ID: **J7I-YS212**

### YS212 Circuit Description

#### RX Portion

Receive the 49.860 MHz signal from Antenna, the RF signal will couple from T1- L1 to T1- L2 & Q1 Super-regenerate osc circuit. The RF signal will detect from Q1&T1-L2 from center point output audio signal, the RF signal will through the R8, C8, C9 pass to Q2 base and drives the Q3 and T2 output transformer drives the speaker unit.

#### TX Portion

The sound signal will pick up from speaker unit and the AF signal will pass to Q2 base and output to drives the Q3, the enlarge signal will output at Q3 Collector pass to Q1 & X1 Crystal 49.860 MHz Oscillator circuit to modulate, after the modulate RF signal will pass to T1 transformer transmit sent out the 49.860 MHz modulation signal by L1 and Spring Antenna.

#### Antenna, Ground, and Power Source

The antenna consists of a 132 mm long iron spring with PE sleeve. There is no external ground connection. The ground is only that of the printed circuit board. Electric current is supplied by a 9 Volt primary storage cell.