

## **RF008B**

### Technical operation for the RF008B.

The RF008B transmitter mainly consists of a CMOS(U1), 2 CR2032 batteries, some transistors, a crystal, some resistors, some coils, some capacitors, a spring motion switch and an antenna.

When the switch(S1) vibrating, a signal will be generated and it will trigger the U1 to make the pin 6 from High to Low( This signal is 37mS(keep Low) and 180mS(keep High)). When pin 6 keeps low, the transistor Q1 conducts and then make Q2 conducts. Since the potential different between the crystal(Y1) has slightly different and this makes crystal(Y1) to induce 27.145MHz signals These signals will pass through the capacity(C5) and then amplify by the transistor(Q3), resistors(R5, R6, R7), coil(L2) and capacitors(C6, C7). Also, this amplified signals will pass through the capacitor(C8) to the coil(L3, L4) and the capacitor(C9, C10) for selecting signals having a specific frequency range and then emitting these signals to the receiver.