

**Model SS-433 APPLICATION for FCC****TECHNICAL DESCRIPTION****MODEL SS433 REMOTE TRANSMITTER****DESCRIPTION**

The transmitter is a low-power communication device operating at frequency 310 - 390MHZ or 433.9MHZ by tuning the trimmer (VC1). The signal is a digital-coding modulated transmission which transmitted data to a receiver. This digital-coding provides different patterns by proprietary IC (U2).

**FUNCTION**

The microphone (M1) acts a sound detector to pickup the alarm signal from 2KHZ to 4KHZ, the signal is amplified by Darlington transistor (Q1) and couple to the bandpass amplifier (U5B). The volume (VR2) acts a gain control and couple the signal to second stage opamp (U5A)

The signal couples to two different circuit, one couple to the tone control circuit (U6) to distinguish the alarm tone of 2KHZ to 4KHZ. Then it will latch the logic circuit (U3B) and (Q7). Another signal is coupled to the integrated circuit (U4), this IC forms the timing control to the presence of the alarm signal. The presence of the alarm signal last for 10 second, it will latch on logic circuit (U3A) and (Q5) to power up (U2) simultaneous with (Q7) if the alarm tone is valid.

The integrated circuit (U3E & U3F) and the zener (ZD2) forms the low battery detection at about 7.5V to flash the LED (DS1). The integrated circuit (U3A & U3C) acts the power up delay to let the circuit stabilize for approximate 15 seconds before the operation.

The digital modulator is employed in the integrated circuit (U2) and (U1), which sends encoded digital data. Resistor (R17) and Capacitor (C9) established the clock rate of 4MHZ

The oscillator is a LC oscillator formed by transistor (Q4) and associated components (C11, C12, C13, C14). The frequencies of oscillation are controlled by VC1. The inductive load L2 is configured on the PCB as the principle-radiating element which similar to an elementary dipole. Resistor (R20) in conjunction with the base bias circuit (R19) regulates the power output of the transmitter.

The unit operates from a 9V battery. The transmitter is function with the receiver of FCC ID NBQSCAD, KUT838R.