

The 5869 panic alarm transmitter consists of a message encoding chip (U1) , a SAW - stabilized Colpits oscillator (Q2) , and PA stage (Q5). The message encoding chip is responsible for:

1. generating the alarm message
2. generating the tamper and supervision messages.
3. performing all watchdog functions.

When sending a message, the message encoder chip turns on the SAW oscillator (Q2) using Q1 to Apply VCC , R1 and R2 bias Q2 on, SAW device Y1 sets the frequency, capacitors C1 and C2 set the feedback , R3 sets the current through the oscillator, and C3 couples the RF into the PA. The encoder chip then uses transistors Q3 - 4 to key the PA (Q5). This is on / off AM modulation (FCC Type 100KK1 modulation )C5 and L2 tune the PA, C6, L3, suppress harmonics, and C7 / C8 tune the antenna to resonance.