2. Receiver

312 Mhz Receiver

It is a super regenerated system. The oscillation is generated by Q2. The output signal from Q2 is amplified by U3C and shaped by U3D.

Low voltage detection

U3b,Q5 and Q6 are used to detect the battery low.

4x4 Key Matrix

The 4x4 matrix keypad consist of 15 keys. All the setting and operation are activated by this keypad.

PIR Sensor

U5 is a passive infrared detectot which detect human motion. The signal is then be amplified and filtered by U2. When the amplifiled signal higher than the threshold voltage of U3A, U3A will send a pulse the MCU.

Buzzer Amplifier

Q3 and Q4 form a buzzer amplifier which amplify the siren signal generated by the MCU.