

SEISMIC SENSOR

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ABSTRACT

The title of my project is seismic sensor or known as the deer repellent. This is more like an alarm, which is used to sense movements or vibrations. The circuit consists of one integrated circuit (programmable operational amplifier), resistors, diodes, capacitors, a sound maker, diodes, a sensitive loudspeaker and a voltage supply of about 12V (accordingly to the information for this for this circuit the battery source is only said to be set by a battery shell-life). The seismic sensor will be activated and produces a loud frequency modulated sound coming from the buzzer when it senses seismic vibrations. Generally the system consists of a 2 inch speaker which is used as the sensor and from where motion is transferred into voltage. In the circuit there is also a filter limiter to get rid of unwanted frequencies produced by other components in the circuit. This filter limiter determines also that there is a smooth variation in the output frequency to the buzzer and a good frequency modulated buzzer will sound.

This project is basically concerned with the design, operation, construction and assembly of the device.