**DIAMOND SECURITY SYSTEM IN A MUSEUM WITH LOUD 60DB SIREN**

**ABSTRACT:**

Security is primary concern for everyone. This Project describes a design of effective security alarm system that can monitor the diamond in a museum using LDR sensors. An LED is connected to this system for visual indication of the safety of the diamond. This LED shows whether the sensor has been activated and whether the wiring to the sensor is in order

The burglar alarm is built with LDR sensor. A glowing LED is placed near the diamond and a highly sensitive LDR is placed under the diamond. Whenever somebody picks the diamond, the light of LED falls on the LDR and it triggers the SCR through a switching transistor. A loud 60dB siren is connected to this SCR. This siren is activated in triggered conditions.

The system is provided with a unique lock type switch. Only the authorized person will be having the key, and he only can deactivate / activate the system.

This project uses regulated 5V, 750mA power supply. 7805 three terminal voltage regulator is used for voltage regulation. Bridge type full wave rectifier is used to rectify the ac output of secondary of 230/12V step down transformer.

**Applications:**

Museums

Home / Office security

Jeweler shops

Banks

**BLOCK DIAGRAM**

