

Electronic Eye Dial Up

https://www.youtube.com/watch?v=qW_IK3Sezz0

The purpose of this project is developing a home security system using GSM technology and PIR sensor.

The main controlling device of the whole system is a Microcontroller. PIR sensor and GSM modem are interfaced to Microcontroller. PIR sensor continuously monitors regarding person's presence in its surroundings and feeds this information to Microcontroller. Microcontroller processes this information and dials predefined number through GSM modem to house owner as well as to the police, if person presence is detected. Also, the system horns a buzzer to alert the people nearby to catch the culprits. To perform this task, Microcontroller is loaded with an intelligent program written using embedded 'C' language.

This system can be mounted at any place/room that needs to be monitored. For example, the house owner can mount this sensor at one of the corners of the room so that it can cover the entire room area. Whenever a human being enters inside the room, this system senses the Infrared rays emitted from the human body. This sensor output is given to the Microcontroller for further processing. Microcontroller takes necessary action like dialing to the pre-programmed phone numbers.

The main objectives of the project are:

1. Providing security to house.
2. Alert dialing to owner.
3. Buzzer to alert near by

The project provides the following learning's:

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Ameerpet: #A-7, 2nd floor, Eureka court, Above KS bakers, Ameerpet, Hyderabad – 73.

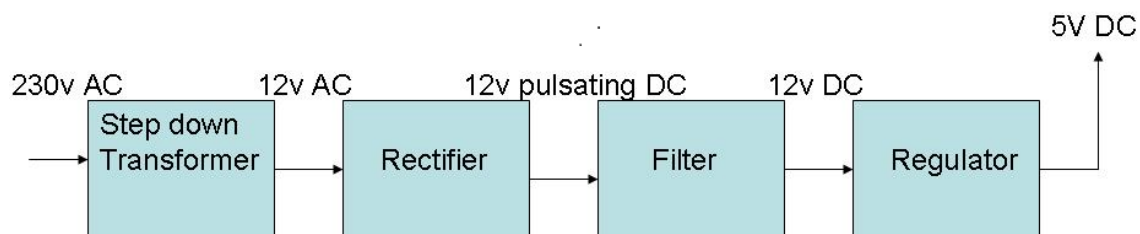
Dilsukhnagar: #F-8, 1st floor, Sreemaan Rama Towers, Opp:Kalanikethan, Chaitanyapuri, Hyderabad - 62.

1. PIR (Passive Infrared Sensor) characteristics
2. Serial communication protocols
3. AT commands used in GSM modem.
4. GSM modem interfacing to Microcontroller.
5. Embedded 'C' programming concepts.
6. PCB design concepts.

The Major building blocks of this project are:

1. Regulated Power Supply
2. Microcontroller
3. GSM Modem.
4. PIR Sensor.
5. Crystal oscillator
6. Reset
7. Buzzer with driver
8. LED Indicators.

Regulated power supply:



Block Diagram:

ELECTRONIC EYE-DIAL-UP

