

---

## **PASSWORD PROTECTED GSM BASED DEVICE CONTROL**

### **ABSTRACT**

This project is aimed to design a system to control the electrical devices in industries or homes by using GSM technology.

A GSM modem provides the communication interface. It transports device protocols transparently over the network through a serial interface. A GSM modem is a wireless modem that works with a GSM wireless network. This GSM Modem can accept any GSM network operator SIM card and act just like a mobile phone with its own unique phone number. Advantage of using this modem will be that you can use its RS232 port to communicate and develop embedded applications. Applications like SMS Control, data transfer, remote control and logging can be developed easily. The modem can either be connected to PC serial port directly or to any microcontroller.

This project gives the best solution for electrical power wastage. Also the manual operation is completely eliminated. This project is implemented on wireless technology. One of wireless communication system is GSM as it is very cheap and very easy to implement.

The project PASSWORD PROTECTED GSM BASED DEVICE CONTROL is an exclusive project which allows the user to control the electrical loads in homes or offices just by sending predefined messages to the controlling system. This project is designed in such a way that a GSM modem is interfaced to the controller through serial port interface. The AC devices/loads which are to be controlled by using GSM will be interfaced to the controller through the relays. The GSM modem performs the task of receiving the message from the mobile and sending the messages to the mobile from the controlling unit. Each electrical device or load will be provided with a unique password. These electrical appliances can be operated only if the correct password is sent to the device through controlling unit using GSM technology. If the user wishes to control the devices ON/OFF in industries or homes, he has to send correct password to the modem from his mobile. The GSM modem receives this message and intimates the same to the microcontroller. Now it is the job of the controller to switch ON/OFF the corresponding devices in accordance with the received password. If the password entered is wrong, the system

---

**A1, 2<sup>nd</sup> FLOOR, EUREKA COURT, KS BAKERY BUILDING, OPP. R.S.BROTHERS LANE, AMEERPET,  
HYDERABAD,TELANGANA-500073.**

**Call: +91 9908665239**

**email: [info@truevolts.com](mailto:info@truevolts.com)**

**Website: [www.truevolts.com](http://www.truevolts.com)**

---

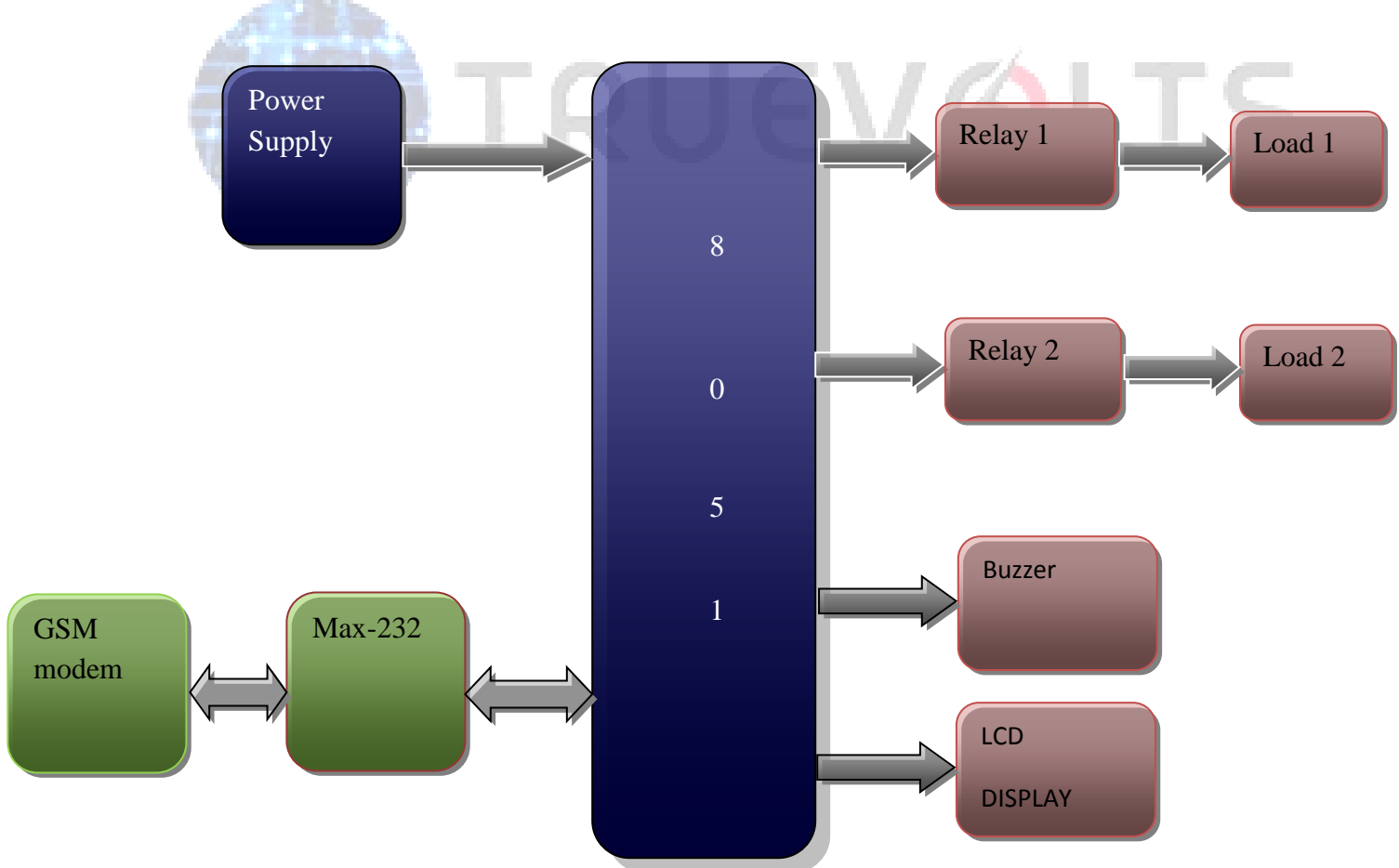
alerts the buzzer immediately. This method of operating the appliances helps in providing security to the devices and also power is saved up to some extent. A buzzer will be interfaced to the controller for providing warning sounds. A 16X2 LCD will be interfaced to the controller to display the status of the loads.

This project uses regulated 5V, 500mA power supply. Unregulated 12V DC is used for relay. 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:

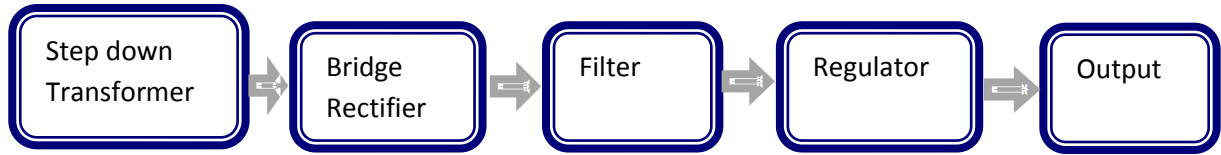
- Industrial applications
- House hold applications

### BLOCK DIAGRAM:



---

**POWER SUPPLY BLOCKDIAGRAM:**



---

A1, 2<sup>nd</sup> FLOOR, EUREKA COURT, KS BAKERY BUILDING, OPP. R.S.BROTHERS LANE, AMEERPET,  
HYDERABAD,TELANGANA-500073.

Call: +91 9908665239

email: [info@truevolts.com](mailto:info@truevolts.com)

Website: [www.truevolts.com](http://www.truevolts.com)