SMS BASED ELECTRICAL APPLIANCE CONTROL FOR HOME /OFFICE

**ABSTRACT** 

This project is aimed to design a system to control the electrical appliances in

home/office 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 is designed in such a way that a GSM modem is interfaced to the

controller through serial port interface, along with 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. If the user wishes to control the appliances ON/OFF in

home/office, he has to send a predefined message 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 appliances in accordance with the received

message. A 16X2 LCD will be interfaced to the controller to display the status of the appliances.

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

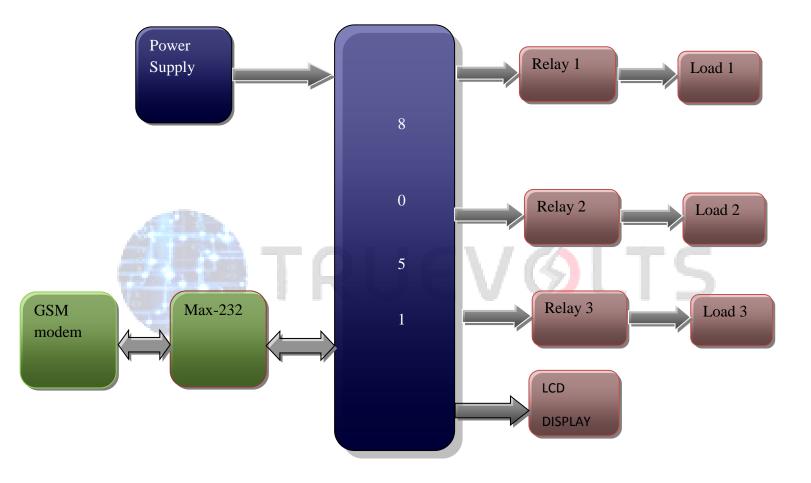
wave rectifier is used to rectify the ac output of secondary of 230/12V step down transformer.

## **APPLICATIONS**

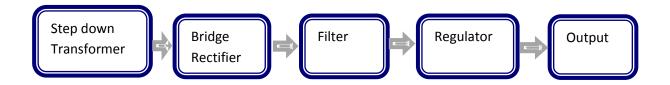
Home applications.

Industrial 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.

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