**WIRELESS HOME APPLIANCES CONTROLING SYSTEM**

**AIM:**

The main aim of this project is to provide security for the home appliances by using the GSM technology.

**PURPOSE:**

This paper mainly focuses on the controlling of home appliances remotely and providing security. This system provides ideal solution to the problems faced by home owners in daily life. The system is wireless therefore more adaptable and cost-effective.

**HOME SECTION:**

**MICRO CONTROLLER**

**AT89S52**

**POWER SUPPLY**

**LCD DISPLAY**

**(16 X 2 LINES)**

**MAX 232**

**RELAY 1**

**BULB**

**RELAY 1**

**WATER PUMP**

**DRIVER**

**GATE**

**GSM**

**FAN**

**TEMP SENSOR**

**SMOKE SENSOR**

**LDR SENSOR**

**ADC**

**0808**

**Power Supply:**

**STEP DOWN**

**TRANSFORMER**

**BRIDGE**

**RECTIFIER**

**FILTER**

**CIRCUIT**

**REGULATOR SECTION**

**DESCRIPTION:**

This paper mainly focuses on the controlling of home appliances remotely and providing security. When the user is away from the place the system is SMS based and uses wireless technology to revolutionize the standards of living. This system provides ideal solution to the problems faced by home owners in daily life. The system is wireless therefore more adaptable and cost-effective. The Home appliances control system provides security against intruder as well as automates various home appliances using SMS. The system uses GSM technology thus providing ubiquitous access to the system for security and automated appliance control.

The primary goal of the project is to provide security for the home by using GSM technology. The sensors always senses the different types of parameters like temperature, smoke, LDR sensors in the home, whenever these parameters exceeds a threshold value then the user gets SMS that particular value is low or high, based on that value user can able to perform on and off operation of the devices through GSM technology by passing simple SMS. And he can also open and close the gate from remote location.

In the paper low cost, secure, ubiquitously accessible, auto-configurable, remotely controlled solution for automation of homes has been introduced.

This project uses regulated 5V, 500MA 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.

**HARDWARE COMPONENTS:**

* Microcontroller (AT89S52)
* LCD Display (16x2)
* Max 232
* Smoke, Temperature, LDR sensor
* ADC 0808
* Relay
* L293D driver
* GSM modem
* Bulb, Fan, Gate, Water Pump

**SOFTWARE TOOLS:**

* Kiel U vision
* Embedded ‘C’
* Express PCB
* Isp

**ADVANTAGES:**

1. Highly sensitive
2. We can save the power
3. Large coverage area so we can control the devices from any distance
4. System can be operated in manual mode as well as in remote operated mode .

**APPLICATIONS:**

1. Home appliance control
2. Hotel lights / fans control
3. Shops and showrooms
4. Industrial applications

**RESULT:**

By this project we can control our home appliances and also we can avoid the unnecessary electricity bills by giving the response to microcontroller. By this project we can know the environmental conditions of the home based on that we can control the home appliances through GSM technology.