**COMMAND BASED STREET LIGHT CONTROLLING THROUGH PC**

**AIM:**

The main of the project is to control the street light using pc whenever we need.

**PURPOSE:**

The purpose of the project is to implement a system to control the street lights via instructions which are given through the pc.

**BlocK Diagram:**

**MICRO CONTROLLER**

**(AT89S52)**

**LIGHTING SYSTEM**

**PC**

**MAX232**

**LED’s**

**POWER SUPPLY**

**RELAY**

**Power Supply:**

**STEP DOWN**

**TRANSFORMER**

**BRIDGE**

**RECTIFIER**

**FILTER**

**CIRCUIT**

**REGULATOR SECTION**

**DESCRIPTION:**

Now a day's every system is automated in order to face new challenges. In the present days Automated systems have less manual operations, flexibility, reliability and accurate. Due to this demand every field prefers automated control systems. Especially in the field of electronics automated systems are giving good performance. In the present scenario of war situations, unmanned systems plays very important role to minimize human losses.

PC control has become an indispensable item of every day’s life. Starting from routines like gate openers, window shutters through metering and PC fire alarms to automotive applications like remote keyless entry and tire pressure monitoring systems. Wireless control devices have established themselves as a cost-efficient and robust solution for a broad range of control applications.

In this project we are controlling various devices i.e. various street lights through PC just by typing the commands in communication terminal, in which PC is interfaced with the microcontroller serially. According to commands given by PC the controller makes the devices ON or OFF.

**HARDWARE COMPONENTS:**

1. Microcontroller (AT89S52)
2. LCD Display (16\*2)
3. Max 232
4. Relay
5. Lightening system

**SOFTWARES USED:**

1. Keil uvision
2. Express PCB
3. ISP

**ADVANTAGES:**

1. Operation through single control room can be possible.
2. Taking measures to reduce the human effort
3. Avoid individual manual operation

**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.