**Room Light Controller with Visitor Counter**



**ABSTRACT**

**INTRODUCTION**

This Project “Automatic Room Light Controller with Visitor Counter using Microcontroller” is a reliable circuit that takes over the task of controlling the room lights as well us counting number of persons/ visitors in the room very accurately. When somebody enters into the room then the counter is incremented by one and the light in the room will be switched ON and when any one leaves the room then the counter is decremented by one. The light will be only switched OFF until all the persons in the room go out. The total number of persons inside the room is also displayed on the seven segment displays. The microcontroller does the above job. It receives the signals from the sensors, and this signal is operated under the control of software which is stored in ROM. Microcontroller AT89S51 continuously monitor the Infrared Receivers, When any object pass through the IR Receiver's then the IR Rays falling on the receivers are obstructed this obstruction is sensed by the Microcontroller.

**BLOCK DIAGRAM OF PROJECT:**

89S51

PORT1

IR

Tx

IR

Rx

P2.0

P2.1

Tx1

Tx2

 Rx1

Rx2

RELAY

**COMPONENTS REQUIRED:**

1. Voltage Regulator 7805
2. Diode IN 4007
3. Relay
4. IR Tx/Rx Pair
5. 7 seg Display
6. optical fiber cable