AUTO LIGHT SAVING SYSTEM WITH COUNTER

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ABSTRACT

Automatic light saving system is a reliable circuit that takes over the task of controlling the room lights as well as 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 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 AT89S52 continuously monitor the Infrared Receivers. When any object pass through the IR Receiver's then the IR Rays falling on the receivers are blocked. This obstruction is sensed by the Microcontroller.

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INTRODUCTION

1.1 BACKGROUND STUDY

The leading of innovation around the world make people keep thinking how to keep our life simple but at same time it more futuristic. That's why an automatic control system become most popular features which rapidly gaining its popularity. The auto light saving system is one of the automatic control system that can save the extra usage of electricity especially lamp in the building such as room. This system is to prevent the user from forgetting to close the room light. In the room, there have many switch that make complicated, which may make the user to turn off the other switch.

The auto light saving system is the system that uses two infrared sensors that will act as switch to turn on/off the microcontroller. It will be activated in the event of a change of light waves after obstruction by user at first infrared sensor. Thus the lamp will turn on. When the user exit the room using the second door, the infrared sensor will work like the first sensor but when the signal sent to microcontroller, it act to turn off the light. This system also has LED display to show the number the person enters and exit the room. Theoritically, if the number of the entering and exit the room is not same, then the light will be turn on.