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FINAL REPORT FOR KEU 380

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PROJECT TITLE:

# 'DARKNESS CONTROLLED LIGHT SWITCH'

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## **ABSTRACT**

Darkness controlled light switch is a circuit that used to ON and OFF the switch automatically depend on the light. Generally, this circuit is used in the street light, at the building light and also in the light at the garden where it can ON and OFF automatically. This project circuit use a basic electronic devices such as integrated circuit, light dependent resistance, relay, transistors, diodes and resistance. This circuit need to connect to lamp where A.C supply to the lighting load is thus connected via the contact of the relay.

The main futures of this project is to switch ON and OFF the street light automatically without human control. So, we can save the time and electricity for this application. As a result, Darkness Controlled Light Switch is useful for the future application such as to control street light, building light or the others equipment.

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#### 1.0 INTRODUCTION

The darkness controlled light switch is a circuit that used as a street light and other light where it is automatically switch on and off. In generally, this light can be switch on when surrounding become dark and switch off in the specific time in the morning or can be depend on day light. For the specific time, it's can switch off depend on the time that we set at the circuit for example 3 hour, 4 hour and so on. The timer is important because if in the morning, has a hard rain or bad weather that not having enough sunlight to active the Light Dependant Resistance (LDR) to switch OFF the lamp, so it's can OFF depend on the time that we set in the circuit.

For selected the time in the circuit, we use the rotary switch to change the time that we need. We have eleven change output from the IC to select time. So it has eleven different time that the project can be operate. But the load can be ON till either the selected output of the rotary switch goes high or LDR resistance fall to a low value due to light.

This project can give us some advantages where it no need a human control to ON/OFF the light. As we today, there are so many street light that not able to be control by human ,so this project is important for the street light other lamp. It's also can help us to save our bill of electric because it operation in several hour, not for a long time.