

**FACULTY OF ELECTRICAL ENGINEERING  
MARA UNIVERSITY OF TECHNOLOGY**

**FINAL PROJECT REPORT  
KEU 380**

***DARKNESS CONTROLLED  
LIGHT SWITCH***

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**TITLE : DARKNESS CONTROLLED LIGHT.****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 house lamp and also in the light at the garden where it can ON and OFF automatically. Today we known several people are unwilling to work. So according to this time, include the modern technology used, we tried to create this project to make it very easier in a lifetime. This project is an automatically function and is very useful if we connected to the house lamp.

This is because the concept that we used now is wasting time and electricity. So, to make this problem is not occur again, the consumer can used this project at their home. This project is applicable to the consumer who is work in early day and back to home lately. When this is occurring, it will make our home save from thieves or any bad people. This is because, this people will no there is someone at home but truthfully there is no one there. 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.

DARKNESS CONTROLLED LIGHT SWITCH

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## ACKNOWLEDGEMENTS

Here we would like to take opportunity to thank the people who have helped us to complete this project until success. First we would like to express our gratitude to our Supervisor, Tuan Haji Mohd Noor Bin Tajudin for her idea and suggestion and also to Miss Taniza Bt. Tajuddin who always give us more suggestion and their comments to complete our project.

We wish also to thank those individuals who have shared their suggestion and evaluation of this report through out. The comments from those individuals have enable us to present the project report for KEU 380. Finally, to all my friends who has help us and spend a time to us to complete our project.

THANK YOU.

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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 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 Dependent 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 selected 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 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 or other lamp. It's also can help us to save our bill of electricity because it operation in several hour, not for a long time.