



AUTOMATIC NIGHT LAMP

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DECLARATION OF ORIGINAL WORK

Student's Declaration:

We, Muhamad Radhie Bin Norhisam (2012612296) and Mohd Amirul Faezy Bin Noor Aznam (2012413012) being members of final year project declare that this report contains only work completed by our group except for information obtained from literature, company or university sources. All information from these other sources has been duly referenced and acknowledge in accordance with the University Teknologi Mara (UiTM) Policy on Plagiarism.

Furthermore, we declare that in completing the project, the individual group members had the following responsibilities and contributed in the following proportions to the final outcomes of the project:

Name	Student's ID	Responsibility	% Contribution	Signature
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Supervisor's Declaration:

I, Miss Atiqah Hamizah Bt Mohd Nordin hereby certify that the work entitled, Automatic Night Lamp was prepared by the above name students and was submitted to the Faculty Of Electrical Engineering UiTM Cawangan Johor, Kampus Pasir Gudang as a full fulfillment for the conferment of Diploma Of Electrical Engineering (Electronic) and the aforementioned work, to the best of my knowledge, is the said student's work.

Supervisor signature.

ATIQA HAMIZAH MOHD NORDIN
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ABSTRACT

Automatic Night Lamp with Morning Alarm System is a simple yet powerful concept, which uses transistor as a switch. By using this system manual works are 100% removed. It automatically switches ON lights when the sunlight goes below the visible region of our eyes. This is done by a sensor called Light Dependant Resistor (LDR) which senses the light actually like our eyes. It automatically switches OFF lights whenever the sunlight comes, visible to our eyes and activates the morning alarm. By using this system energy consumption is also reduced because nowadays the manually operated street lights are not switched off even the sunlight comes and also switched on earlier before sunset. In this project, no need of manual operation like ON time and OFF time setting. LDR and transistor are the main components of the project. The resistance of light dependant resistor (LDR) varies according to the light falling on it. This LDR is connected as biasing resistor of the transistor. According to the light falls on the LDR, the transistor is operated in saturation and cut off region. This transistor switches the relay to switch ON / OFF the light. This project uses regulated 12V, 750mA power supply. 7812 three terminal voltage regulator is used for voltage regulation. Full wave bridge rectifier is used to rectify the AC output of secondary of 230/18V step down transformer.