

**SCHOOL OF ENGINEERING**  
**DESIGN OF A LIGHT DETECTION SYSTEM**  
**FINAL REPORT**

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## **Abstract**

This report will be about the researches, theories, experimental work and development for this project, which is titled "Design of a light detection system". This project is mainly about designing a touchless switch system to control house electrical appliances using infrared transmission system. The meaning of Light Detection System is utilizing infrared as a detector which can let user switch on or off the electrical appliances without physical contact. For household conveniences purposes, this system add-on another features which is a microcontroller based automatic cooling fan. A PIC is used to control the input and set the output to the cooling fan. An analogue-to-digital converter is required to receive the input from the temperature sensor and send the output to PIC.