DEPARTMENT OF ELECTRICAL ENGINEERING UNIVERSITI TEKNOLOGI MARA CAWANGAN PULAU PINANG

FINAL REPORT OF DIPLOMA PROJECT

IR REMOTE TOGGLE SWITCH

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MOHAMAD ARIFF BIN KARUDDIN

2001409202

NAZRUL HAQFIZ BIN NAZRI

2001407535

SUPERVISED BY: TN. HJ. MOHD NOOR BIN TAJUDDIN

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ABSTRACT

This project, entitled "IR Remote Toggle Switch" is a switch where its design to switch on or switch off an electrical equipments. This remote switch can make our job easier like to close or to open our gate, to open or close our garage and anything else. This IR Remote Toggle Switch can make our electrical equipment not easy to being damage.

This stuff will operate if there have the transmitter and the receiver. The transmitter will produced the infrared signal and send it to the receiver that we put it in the electrical equipment. The receiver will operate and make the job done like switch on or switch off the electrical equipment. This kind of switch is not to heavy to carry it from one place to another place. It's price is only less than RM50.00.

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CHAPTER 1

INTRODUCTION

1.1 **BACKGROUND**

In the house or the other places that using the remote controlling system as the main parts also make a some problem for us. The problem that's it make to us, is the electrical equipment cannot function very well or anything else. However, basically there are two types of remote control system. There are by 'radio frequency' and 'infrared signal'.

Nowadays, both of them are famous in control—system of any—devices. This is because there are easy to get, cheap, and easy to—use. Beside that, each of this type is not suitable control system. The circuit of this remote is using the infrared control system. Infrared control system which are using an infrared to transmit an input to its receiver. Normally, this types of system is suitable for indoor. The transmitter must have a sensor so it can transmit an input as good as possible. In this project, we use an IRR sensor. It more sensitivity. This designed is better because it us an infrared sensor. This IR Remote

Toggle Switch work by send the infrared signal to the circuit to on or off the circuit at the electrical equipment. This signal will transmit as an input to its receiver faster. So as an upgraded for this remote switch, an IR Remote Toggle Switch is more effective can be designed to solve this problem.