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FINAL REPORT OF DIPLOMA PROJECT

FACULTY OF ELECTRICAL ENGINEERING



INFRA-RED REMOTE CONTROL

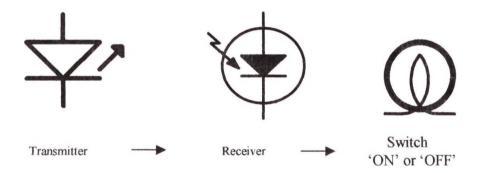
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Our project is about infra - red remote control. The main function of this device is to transmit the signal from source (transmitter) to a destination (receiver). It is used a IR-LED (infra-red light emitting diode) as a transmitter and IR RECEIVER MODULE as a receiver. This device can be used as a controller or as a switch to electrical equipment.

This device are consists of two circuits. There are a transmitter and receiver. The components used in this device are resistors (fixed and variable), capacitors (electrolytic and ceramic), diodes (rectifier, zener, LED, IR-LED), transistors (NPN), relay, switches and Integrated Circuits (ICs) (#4011, # 4013, LM567C and 78L05). Three 9V batteries are used as power supplies at the transmitter, receiver and lamp.

This circuit will operate after the IR receiver module receives an infra-red light beam from the transmitter. The output from the receiver is connected to the electrical appliances such as fan, lamp and etc. for activated that equipment. In our project, we display the produced output by using a lamp.



Acknowledgement.

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CHAPTER 1

1.1 INTRODUCTION.

Now a days many manufacturer will support remote control for their items such as VCD player, VCR,

Hifi, TV and etc. This remote control be as an important device for electronic device. The objective of

using the remote control are for making our life more easier and can save time compare to open and close
the device by ourselves. This project is also practically suitable use at home.

This report project that we make is about infra-red remote control switch. It uses to operate the electrical appliances such as fan, lamp and etc. by switch it "ON" or "OFF". The signal from the transmitter will receive by receiver and the output produced from receiver will active that such electrical appliances.

In this report, we will understand the infra-red circuit, the functions of each components, how the circuit runs. After read this report, we should know the remote control concepts and how its work.

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