IR ALARM SYSTEM

APRIL 2010



WAN NUR AMANI BT WAN NORDIN

(2007262896)

FARHATASYA BT AMRAN

(2007242028)

SITI HAWA BT AZMAN

(2007262926)

SUPERVISOR'S NAME:
EN.FADHLI DZUL HILMI BIN MOHD FAUZI

"I declare that this report entitled "IR ALARM SYSTEM" is the result of my own group research except as cited in the references. The report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree."

Signature: MY

Name: WAN NUR AMANI BT WAN NORDIN

Date : 22 APRIL 2010

Signature :

Name: FARHATASYA BT AMRAN

Date : 22 APRIL 2010

Signature : _____

Name : SITI HAWA BT AZMAN

Date : 22 APRIL 2010

ACKNOWLEDGEMENT

First, we would like to wish my grateful to Allah S.W.T. for blessing and allowing us to complete this project.

Besides, we would like to thank to our supervisor En. Fadhli Dzul Hilmi Bin Mohd Fauzi for the valuable guidance and advice. He inspired us greatly to work in this project. His willingness to motivate us contributed tremendously to our project. We also would like to thank him for showing us some example that related to the topic of our project. We also, would like to thank to our ex-supervisor Puan Zakiah Binti Mohd Yusuff because she was gave us planty of advice acknowledge.

Also, we would like to take this opportunity to thank to the Fakulti Kejuruteraan Elektrik for offering this subject. It gave us an opportunity to yield own project with the basic that we are learn.

Finally, an honorable mention goes to our families and friends for their understandings and supports on us on completing this project. Without helps of the particular that mentioned above, we would face many difficulties while doing this project.

ABSTRACT

In every period of time, everybody has tried to get facilities for human being. So, now days, security is a great matter that has been discussed between people. There are great number of devices that are used to make your home secure from theft and other kind of crimes. PIR sensor have been used for many years as motion detectors due to their high reliability and resilience to false triggering. They are not adversely affected by airflow like some sensors can be. Also, due to their passive nature, PIR sensors are very low on power consumption and thus suitable for battery powered applications. In this project, we prefer to use PIR detector because this sensor are inexpensive, simple, small than the another type or sensor like ultrasonic detector, microwave detector, glass break detector and Photo-Electric Beams. We also use PIC 16F876A act as a brain of our project. Furthermore, this microcontroller are self-reprogrammable under software control. We only build some instruction and load into the PIC. This project is starting to function if the sensor detect the infrared radiation emanating from objects in the field of view. There are 4 mode condition. First, scan input, second processing output, third scanning mode and fourth is detected mode. Once the motion is detected the buzzer would be active and LED will blink more frequency. For the conclusion, alarm system will alert the person in the home from the outsider.

TABLE OF CONTENT

CHAPTER	CONTENTS	PAGE
	DECLARATION	iv
	DEDICATION	v
	ACKNOWLEDGEMENT	vi
	ABSTRACT	vii
	ABSTRAK	viii
	TABLE OF CONTENT	ix
	LIST OF TABLES	xi
	LIST OF FIGURES	xii
1	INTRODUCTION	
	1.1.1 Calibration Of the sensor	2
	1.1.2 The Sensitivity of Sensor	2
	1.2 Objectives	3
	1.3 Scope of work ->	4
2	LITERATURE REVIEW	
	2.1 UltrasonicMotionDetector	5
	2.1.1 Main Advantages and Disadvantages	6
	2.2 PIR Detector	6
	2.2.2Main Advantages and disadvantages	7