

MARA INSTITUTE OF TECHNOLOGY
SHAH ALAM
MALAYSIA

School Of Engineering
Department Of Electrical Engineering (Instrumentation)
Final Year Project Report
On
HOME SECURITY SYSTEM

By:

JAFFRIDIN BIN MUSA.

ITM IC : 86713319.

MD. SHAH MAHMOOD.

ITM IC : 87682962.

Under the Supervision of:

MR. ALI AZIZAN BIN MAAMOR.

MR. ANUAR HJ. AHMAD.

ACKNOWLEDGEMENT

BISSMILLAHIRRAHMANNIRAHIM

In the name of ALLAH, the most benefit and merciful.


Alhamdulillah, with the blessing from Allah we have completed our final year project with a great success. This project is dedicated to our loving parents and family for their support, encouragement and love through out our life.

Our highest gratitude and thanks to our advisers Mr. Ali Azizan Bin Maamor and Mr. Anuar Bin Hj. Ahmad for their guidance and help that has encourage us to work very hard in order to complete this project.

We would also like to express our thanks to all the people involve in making this project a success.

Wassalam.

TABLE OF CONTENT.

ACKNOWLEDGEMENT.	(i)
ABSTRACT.	(ii) 
TABLE OF CONTENT.	(iii)
CHAPTER..	
1.0 INTRODUCTION.	(1)
2.0 IDENTIFICATION OF THE SYSTEM SPECIFICATION.	(3)
3.0 THE INTERFACING APPROACH AND TECHNIQUE.	(4)
3.1 INPUT INTERFACE.	(7)
3.2 OUTPUT INTERFACE.	(9)
3.3 INPUT/OUTPUT CARD (DM-P009).	(11)
4.0 PHYSICAL CONNECTION TO THE DOOR AND WINDOW.	(12)
4.1 CONNECTING THE HARDWARE TO THE COMPUTER.	(16)
5.0 SOFTWARE FOR INTERPRETATION OF THE INPUT LINES.	(18)
5.1 SIMULATION OF DOORS AND WINDOWS BY SOFTWARE DEVELOPMENT.	(19)
5.2 MASKING OF THE ALARM WITH SOFTWARE.	(21)
5.3 COMPARISON OF THE DATA ARRAY.	(23)
5.4 THE COMPLETE SYSTEM.	(24)

1.0: INTRODUCTION.

In this modern world PC is widely used for developing many kinds of control system. It is wise that a software program being made to developed a HOME SECURITY SYSTEM. The system work as a control unit to switch the alarm switches (ON or OFF) whenever it is required. The PC monitor will also display the house plan and at the same time shows which door or window that had been triggered.

The controlling software program for this system is being written in TURBO BASIC. The normally open switches are being used as the alarm switches. An interface card (I/O CARD DMP009) is used to interface the computer to the alarm switches. Program is designed in such a way that the computer can received input signal from the external supply.

The objective of this project are:-

1. Developing knowledge about using the interface card (I/O CARD DM P009) and to study how the program is made to send the signal out or received the signal from the card.
2. Acquiring knowledge about high computer language using (TURBO BASIC). How to use this language to develop a system controlling alarm switches. This language is more complex and it has more command compare to GWBASIC or BASIC.

3. To design our own control system by developing software programming and make use of the PC for a HOME SECURITY SYSTEM.

4. To realise that a tight and powerful home security system can be developed by the support of PC.