DEPARTMENT OF ELECTRICAL ENGINEERING UNIVERSITI TEKNOLOGI MARA CAWANGAN PULAU PINANG

FINAL REPORT OF DIPLOMA PROJECT

MECHANICAL SENSOR FOR HOME SECURITY

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ABSTRACT

House is a safety place for protects us from any danger. So that, to make the house more safety, home security system was designed to detect any burglars from entering the house. Home security that installed by an alarm dealer can cost thousands of ringgit. As an alternative, a simple alarm system can be designed.

In this project, a simple alarm with mechanical sensor was designed using a combination from two simple circuit, which is, gate alarm and theft prevention alarm. This combination circuits will produce a system that can detect any intruder when the sensor of the system has been broke down by emit the warning sound.

The proposed of the project is to provide a more reliable and more sensitive for protect it's on from any burglars from entering the house.

The sensor can be placing anywhere in house area like at all doors and windows. The system will be operate when the sensor is broke down and automatically the circuit of gate alarm will be operate and the relay is 'on' condition and it will complete the circuit of theft prevention alarm.

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CHAPTER 1

INTRODUCTION

1.1 Background

Home security is a proven different to intruders, but a system installed by an alarm dealer can cost thousands of ringgit. As an alternative, a simple alarm system with a mechanical sensor can be designed with combination two circuits that can reduce our budgets. Our project can be used for a better home security.

Each circuit has its own application. For the theft prevention alarm circuit, it will be function when the thin copper wired is broke down. For the gate alarm it also will be function when the micro switches are connected at doors and windows are closed. For the combination circuit, which the thin copper wired would remove and replacing it with relay which as a switch at the theft prevention alarm circuit which depends on the gate alarm circuit.

The advantages for this project it is can make the security system more efficient and modern. It also cheaper from other security alarm home. It circuit are simple and not bigger. We can put it at private place where no one can know where the alarm security is.