ANTI-THEFT DOOR LOCK SYSTEM

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ABSTRACT

In recent years, cases of house break-ins increased dramatically. This causes anxiety in the population of Malaysia to overcome this problem. A system will be proposed to deal with this widespread matter. The system is called as the anti-theft door lock system. The system utilizes the latest technology of improving the conventional locking system that currently used. Therefore by using this system, the burglary cases can be reduced and the safety of Malaysians residential is guaranteed. The regular door lock system possesses a lackness to be easily be breached-in and sometimes the doorknob is stucked causes the door is hard to be opened. The magnet is used as an actuator to open and close the door. By keying the pin number which been programmed earlier, the magnet will demagnetise and the door will be opened if the pin number entered is correct. Otherwise if the pin number entered is wrong then the door will not able to be opened. The simulation is performed using proteus software and micro c programming for programming the controller. The expected results for this project is when the correct password is entered the relay will act as 'normally open' therefore the magnet will be demagnetised and the door can be opened.

CHAPTER 1

INTRODUCTION

1.1 Background of Study:

In recent years, cases of house break-ins increased dramatically. This causes anxiety in the population of Malaysia to overcome this problem. A system will be proposed to deal with this matter widespread. The system is called as the anti-theft door lock system. In order to open the door, a person have to key in the correct pin code which have been set up by that particular person. This project can be used by hotel, houses, offices and etc.

This project concentrates on the door lock system to ensure and protect the safety of the people from dangerous activities. This project uses veroboard to operate the circuit which is a brand of stripboard, a pre-formed circuit board material of copper strips on an insulating board. Veroboard, components are suitably positioned and soldered to the conductors to form the required circuit. Besides, the softwares that had been used are proteus and micro c programming. Proteus is used to design the schematic diagram for the project. Micro C was used to program the PIC.

This project uses LCD 16x2 and keypad 4x4 to key in the pin code. The pin code and relay is set based on the programmed PIC pins. When the correct pin code had been entered then the relay will act as 'normally open' which then demagnetised the magnet hence the door can be opened.