

PASSWORD BASED
DOOR LOCK SYSTEM USING PIC MICROCONTROLLER

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ABSTRACT

Security is a prime concern in our day-today life. Everyone wants to be as much secure as possible. As access control for doors forms a vital link in a security chain. The microcontroller based on Door locker is an access system that allow only authorized person to access restricted area. The system is fully controlled by the 8 bit microcontroller PIC16f887 which has 256 bytes of EEPROM data memory. The password is stored in t EEPROM so that we can change it any time. The system has a Keypad by which the password can be entered through it. Then the microcontroller compares the four-digit password with the number which is pre-programed if it is equal or same then the microcontroller will switch on the motor for the door and if we entered the wrong password, the microcontroller will switch off the motor for the door.

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CHAPTER 1

INTRODUCTION

Securities have become a need for human life as there are nowadays too many burglary crime cases. These cases cause many destructions to property and the person's life. In this scope, the part "security" becomes the main subject of this project.

1.1. Background Study

Traditional lock systems using mechanical lock and key mechanism are being replaced by new advanced techniques of locking systems. These techniques are an integration of mechanical and electronic devices and highly intelligent. One of the prominent features of these innovative lock systems is their simplicity and high efficiency. Such an automatic lock system consists of an electronic control assembly which controls the output load through a password. This output load can be a motor or a lamp or any other mechanical/electrical load. Here we develop an electronic code lock system using PIC microcontroller, which provides control to the actuating the load. This system