**PASSWORD BASED DOOR LOCK SYSTEM**

**AIM:**

The main aim of this project is to develop a security system to the devices.

**PURPOSE:**

The purpose of this project is to Design an automated system for authentication using password.

**BLOCK DIAGRAM:**

**MICRO CONTROLLER**

**AT89S52**

**POWER SUPPLY**

**LCD DISPLAY**

**(16 X 2 LINES)**

**KEY PAD**

**DOOR MOTORS**

**Power Supply:**

**STEP DOWN**

**TRANSFORMER**

**BRIDGE**

**RECTIFIER**

**FILTER**

**CIRCUIT**

**REGULATOR SECTION**

**DESCRIPTION:**

In the present world everyone knows the importance of security. As the technology improving we are trying to implement these kind of techniques to protect appliances in an industries. There are different ways to provide security here we are providing security by assigning password.

In the present project we are going to assign a password. Whenever an authorized person wants to OPEN the DOOR then a specified password has to be entered. According to the password which has been entered using keypad concern door will be operated and status will be displayed on the LCD.

This project uses regulated 5V, 500MA power supply, 7805 three terminal voltage regulator is used for voltage regulation. Bridge type full wave rectifier is used to rectify the ac output of secondary of 230/12V step down transformer.

**HARDWARE COMPONENTS:**

* Microcontroller (AT89S52)
* LCD display (16x2)
* Key pad
* Door motor
* Power supply

**SOFTWARE:**

1. Kiel U vision
2. Embedded ‘C’
3. Express PCB
4. ISP

**ADVANTAGES:**

1. it is used for authentication purpose
2. Provide the security from foyer access.

**APPLICATIONS:**

1. Bank application.
2. Home application
3. Security purpose

**RESULT:**

By using this project we can implement an authentication system for the devices accessing.