



**AUTOMATIC WASHROOM
LIGHT WITH LCD DISPLAY**

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ABSTRACT

The Automatic Washroom Light with LCD Display is a device that consists of one microcontroller. The washroom light will be connected to LCD display circuit. An automatic washroom light will be operated when the door is closed. The lamp will remain on until the switch detects the door open. The switch that we using to detect the movement of the door is Micro Switch. The circuit will design around the popular PIC it is PIC16F877A. This project will be use the PROTEUS 8.0 to design the layout and run the simulation.

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

Plants seem to have something in common with pets. They are usually acquired or given with the best intentions, but not everybody seems to be able to look after them properly. Of course we do not expect everybody to have green fingers, but when plants are not watered enough they simply die. In any case, too much neglect usually has fatal consequences. Cactuses seem to survive such a careless treatment the longest and we have to admit that these are the only plants that manage to survive at our offices.

All it needs is for regular checks to feel if the soil in the pot has become too dry. Some people just don't seem to have the right fingers for this task. A little electronics can be used to rid us of this problem forever.

The circuit described here might be very simple, but it's a very useful soil moisture tester. Two electrodes are planting in the soil and the moisture level is shown on an LED display. The LEDs have been arranged into three colours: green LEDs indicate that the soil is moist, yellow LEDs indicate that excessive moist soil and red LEDs warn that the soil is dry.