Automatic Water Tap

Abstract

This system uses a microcontroller where the Microcontroller programmed by C language using IDE. The systems have a selector switch where the selector used to choose the type of output depend on what we need.

This system is equipped with infrared motion detector where the infrared is using to detect the movement around the water tap and it is input for this system because the system will be operates when a movement has in designated areas.

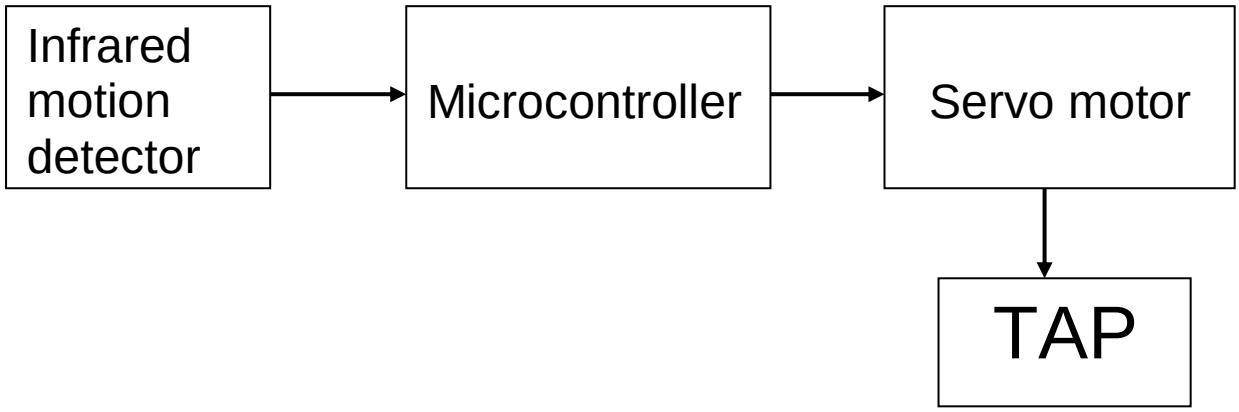
By using infrared motion detector users need only place their hands under the water tap and after the detector detect the movement in designated area the output will come out.

Introduction

Digital water tap base liquid control that consists of four major unit which is microcontroller unit, sensing unit, motor unit and power supply unit. The microcontroller unit functions as interface for input and output system and its peripheral extensions is the major responsible component for the functionality of an instrument. The sensing unit is used to measures a physical quantity and converts it into a signal which can be read by an observer or by an instrument. The usage of motor unit consist from two different application is pump and blower. The power supply unit, it plays major rules in distributing the power to the other unit according to the

requirement of the system such as if the microcontroller requires 5V voltage, the power supply must provide 5V supply to the microcontroller.

Block Diagram



Component

- Microcontroller
- Infrared motion detector
- Servo motor
- Software implement.
- MPLAB software

Application

- It is extremely valuable in Hotel and eatery.
- Home Application
- School and Industrial Application

Advantages

- No water wastage.
- It is good for hygiene.