

Water Wending Machine

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Abstract- This project presents the description of Coin Operated Water Dispenser. The water dispensing machine dispenses water on the detection of the right coin (correct denomination).The dispenser is designed using At mega controller. It can be used in public places like Roads, Railway stations, shopping Malls etc. It can prove to be of great use and comfort for people.

Keywords- Coin sensor, printed circuit board (PCB), microcontroller PIC16F877A.

I. INTRODUCTION

With the improvement in the technology there are many advanced devices and machines that are useful to the mankind. One of them is coin operated telephone.

As we know the function of it and how it works. With the same technology used we are going to design a project which is based on liquid (water, cold rinks). Coin Operated Water Dispensing System as the name indicates it is based on COIN operation.

System Design & Implementation:

the sufficiency of its output ports without having to use a decoder or multiplexer and the flexibility with regards to programming and reprogramming. The overall circuit performs coin sensor sense the coin and microcontroller start working.

II. BLOCK DIAGRAM

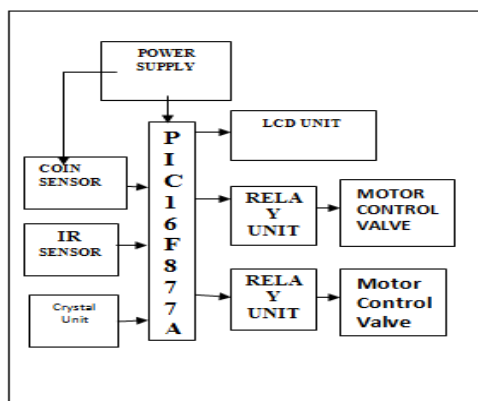


Figure 1.0 block diagram of Water Wending Machine

WORKING

Our system works on the principle of coin detection. When we insert the coin in the slot, it will detect by the sensor we used. Here we used IR based opt coupler for the coin sensor.

With an optocoupler, the only contact between the input and output is a beam light. When coin is passed through the slot Infrared light beam is interrupted, pulses are generated at the output of coupler . It will passes output signal to the microcontroller and according to the output signal microcontroller start for working.

First it will check output, if there are pluse on signal it means coin is inserted

Microcontroller display ” put glass“message on lcd. Then it will switched on water pump. And water will fall in glass. Time is set for water pump. When set time is over pump is switched off automatically.

MICROCONTROLLER

A microcontroller is a small computer used in one IC containing a processor core, memory and programmable input output peripherals. A microcontroller is used and designed for embedded applications.

RELAY

A relay is an electrically operated switch. A relay used an electromagnet to operate a switch mechanically. Relays are used for controlling a circuit by a low power signal

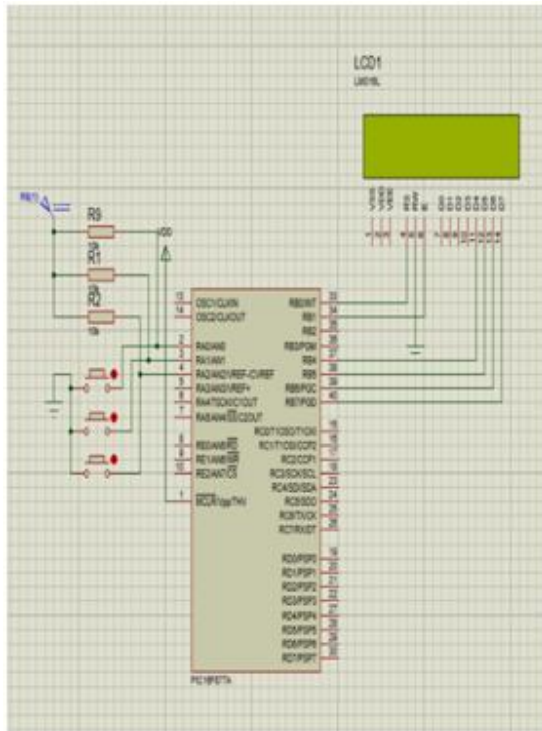
Existing System

In water wending machine froud cases are also common in this kind of business by customer who formulates means of hacking into system of the machine to dispense products.

Proposed System

The proposed system overcomes all the drawbacks of existing system.

III. CIRCUIT DIAGRAM



IV. CONCLUSION

As per public requirement a coin operated portable vending machine is designed and fabricated and tested in real time.

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