Multi Coin and Multi volume based water Vending machine
(Volume Based- V3.1)

Dear sir

With all due respect I (A. Mohammed Ibrahim) would introduce myself. I am the Project Manager for Brainz Infotech in Villupuram district, Tamilnadu – India .At present we manufacture coin water vending machine with qualified and efficient technicians and (W.F.M) team of 20 members in a sufficient place, who does stringent monitoring towards Quality, Time Factor and Customer service. We established this company in 2001 and our first mile stone was portable coin water vending machine and in due course of time, efforts and R&D we took leap into Jumbo Coin water vending machines. Our machines ranges from Rs.6000/ up to Rs 5, 00,000/ and

We do customize to the clients request too.

Our vending machine product has won "Best Innovation Award 2012" by Excellency governor of Tamilnadu
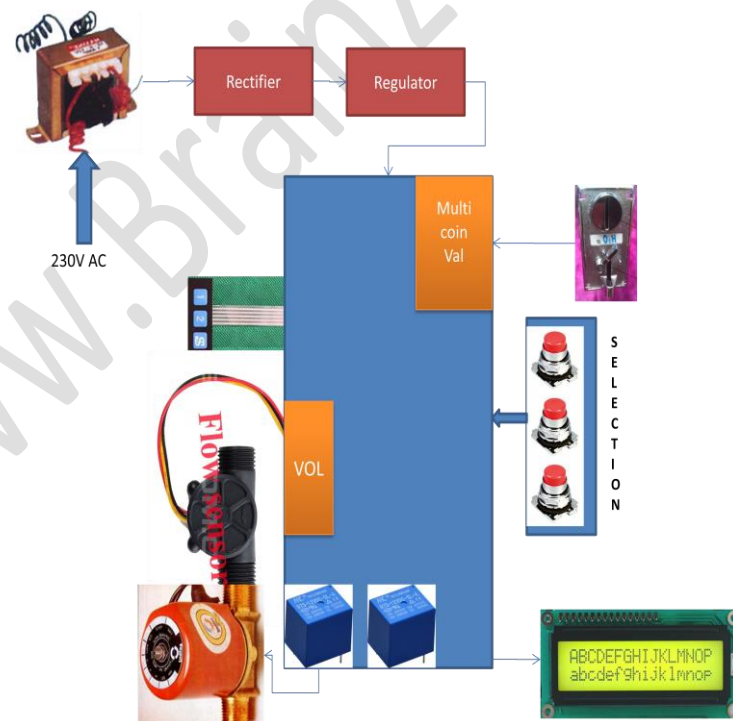
Intro:

This Vending machine is perfectly designed with Multi coin Acceptor Exclusively for Flow based coin operated water vending machines. This Microcontroller Featured coin operated water vending unit proves its own way by its accuracy. Unlike other vending machine control board which works with time based, this board works as volume based system. It means output dispensing water of this kind of vending machine remains constant and accurate irrespective of change in storage tank capacity.
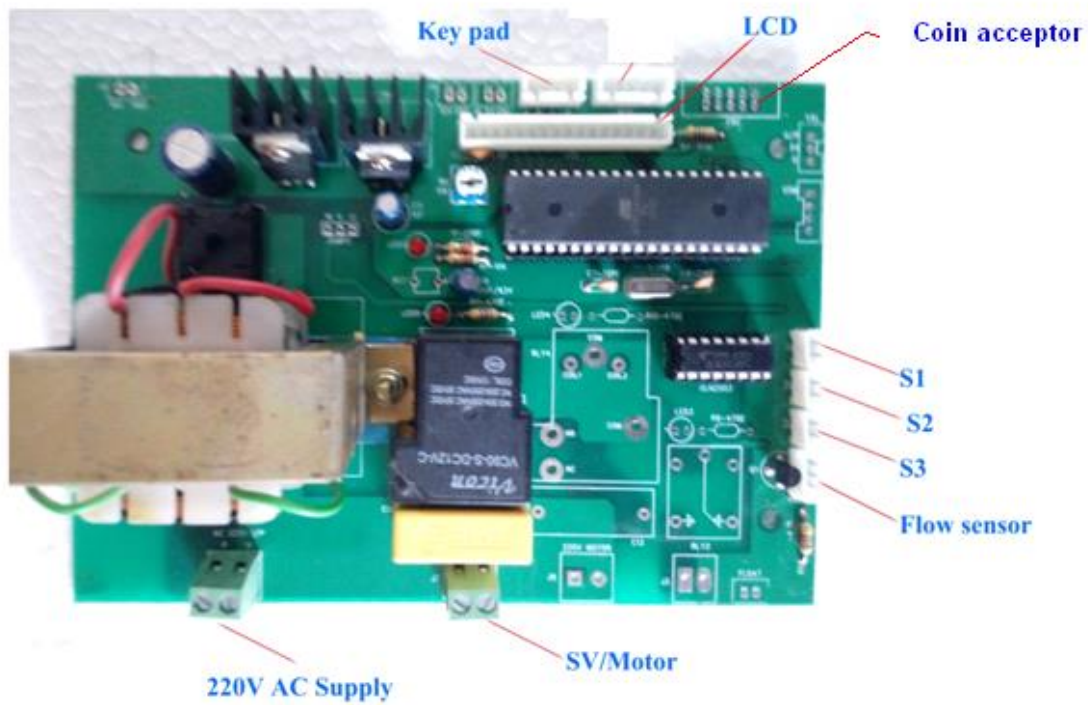
Features:

- Fully Microcontroller based Design
- Multi Coin Acceptor (configured up to 6 coins)
- Multiple volume with multiple coins
- Volume based Vending
- Works on 220V AC supply (or) 12 V Battery
- 220v Relay output for Solenoid valve

- Make: Stainless steel
- Multiple volume for multiple coin
- Customized volume adjustment 500ml to 150 Liters per coin
- 2 Line Alphanumeric LCD display with back light
- Inbuilt Regulated power supply
- Inbuilt 1KB EEPROM to store info about collected coins
- Fine-tuned against better quality slugs and frauds
- In Built Noise filter to protect system from noise and surges
- Dual 7 Amps Relay (220V, 12V)
- SMS option for Tank Empty (optional)
- Inbuilt memory for Coin collections
- Onboard Reset
- Plug and Play
- Size : 31B* 46H * 18L cm
- PCB type: Epoxy board with Green masking

Block Diagram:

Multi coin Acceptor:

Specifications:

- ·Rating voltage: DC+12V with 20% discrepancy
- ·Stand by Current: 50mA-55mA
- ·Operating Current: 310mA-340mA
- ·Accepted coin diameter: 18mm-30mm
- ·Accepted coin thickness: 1.2mm-3.5mm

Operations

This coin acceptor will take up to 6 different kinds of coin! Whether you're building your own arcade cabinet or just charging admission to your house, this programmable coin acceptor makes it easy to monetize your next project.

The sensors in this coin acceptor use the thickness, diameter and fall time of the coins to identify them and it's fully programmable so you're not limited to any particular type of currency. Simply use the buttons and 7-segment display on the side of the unit to select a coin profile, insert a bunch of coin samples (or the same one, over and over) then designate the value. After you've programmed the coin profiles, simply read the serial output of the coin acceptor and it will tell you the value of each coin as they're inserted. It reports these values as binary bytes and the baud rate is selectable on the unit.
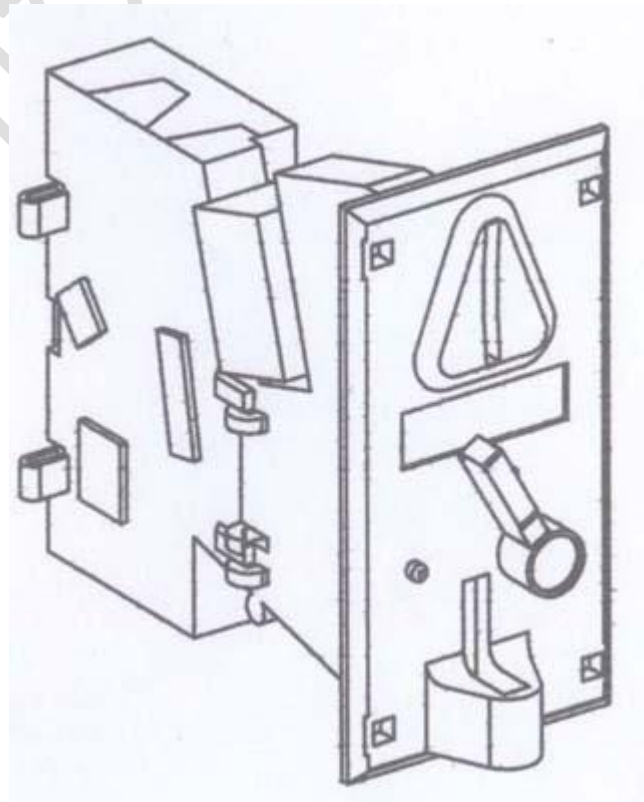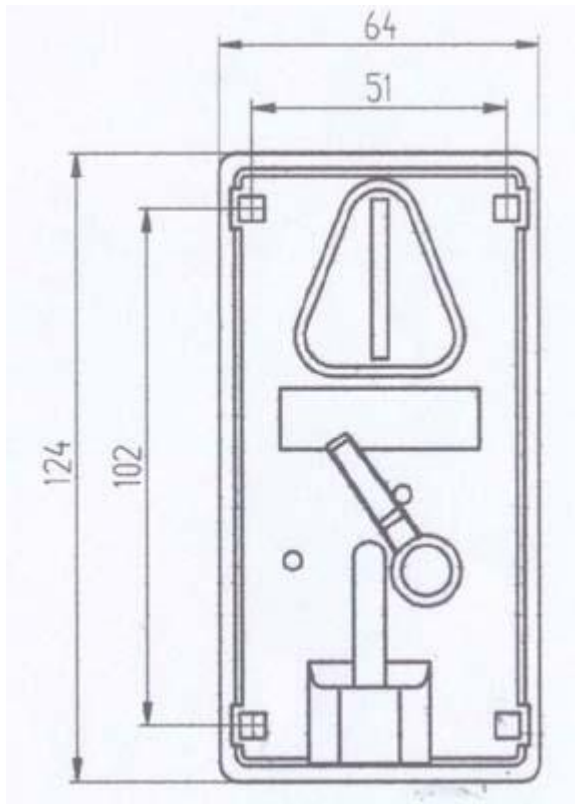
This coin acceptor also has a coin reject, so your controller can tell the coin acceptor not to take any more coins, as well as a (very loud) alert beeper. All you need to get the coin acceptor working is a pocket full of change, a 12VDC supply and somewhere for the change to fall after it's accepted.

Feature

- Easy for installation.
- Good level of security at a very competitive price.
- Uses independent diameter sensing that discriminates shaved coins or tokens.
- Recognizes 6 Programmable Groups of Coins in Different Denominations
- Accepts coins from 17-30.5mm in Diameter and 1.25-3.5mm in Thickness
- Serial , Parallel or Pulse-Width Output with Selectable Speed/Baud Rate

- Can be Set to Stop Accepting All Coins

- Industrial Standard 10Pin Parallel Port Connector

- Simple 0.1" Spaced 5-Pin Serial Port Header

- Draws 50mA @ 12VDC Standby, 450mA At Instant of Collection

- Able to release coins in jam

- Fine-tuned against better quality slugs and frauds

- Double-door design , improve the stability

- High-sensitive judgment of singlechip, prevent wrong-count, pulse-lose so on

- All mechanisms 100% coin tested before shipment

Dimension:

Outlook:

a. Front view

Keypad

Flow sensor

SV/Motor

b. left side view

Video Link:

https://www.youtube.com/watch?v=7VAkWdQGp0g

Setting up the system Operation:

Keys

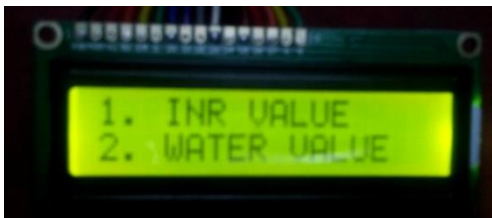**S** >>>> **Select/Set**

1 >>>> **Menu1/Increment**

2 >>>> **Menu2/Decrement**

I.   **Setting up coins value for each switch**

1. Switch on the board

2. Now hold " **S**" key continuously to enter in to setting mode

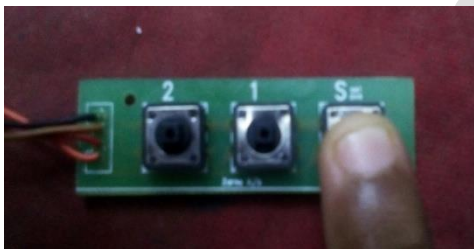3. Release the "**S**" key once the system enters in to Menu mode as shown below

4. Now select "**1**" for enter into currency value setting.

5. Now set INR value for **S1** by using Increment and Decrement Keys (1,2)

Don't forget to use "S" button in keypad to save the value

6. Press "S" button to save

7. Now repeat the above to set currency/Rupees value for S2 and S3

II. Setting up Water Dispensing Volume for each switch

8. By selecting Menu2 (**pressing Key 2**) , you can set value of water to be dispense for Each switches

EX:

Now set Water Volume for **S1** by using Increment and Decrement **Keys (1, 2)** and press save "**S**"

9. Now switch OFF the system and switch it ON
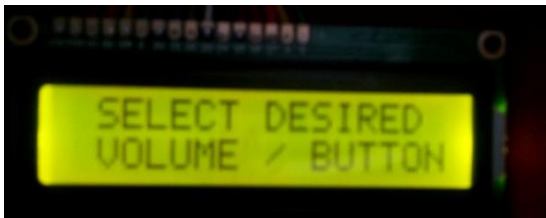
III. Volume Calibration:

10. Setting pulse is for volume sensor. <u>For 1000 Liters tank the pulse can be 37 per liter</u>. You can increment or decrement pulse depending upon tank capacity.

11. After setting pulse press "**S**" key to save

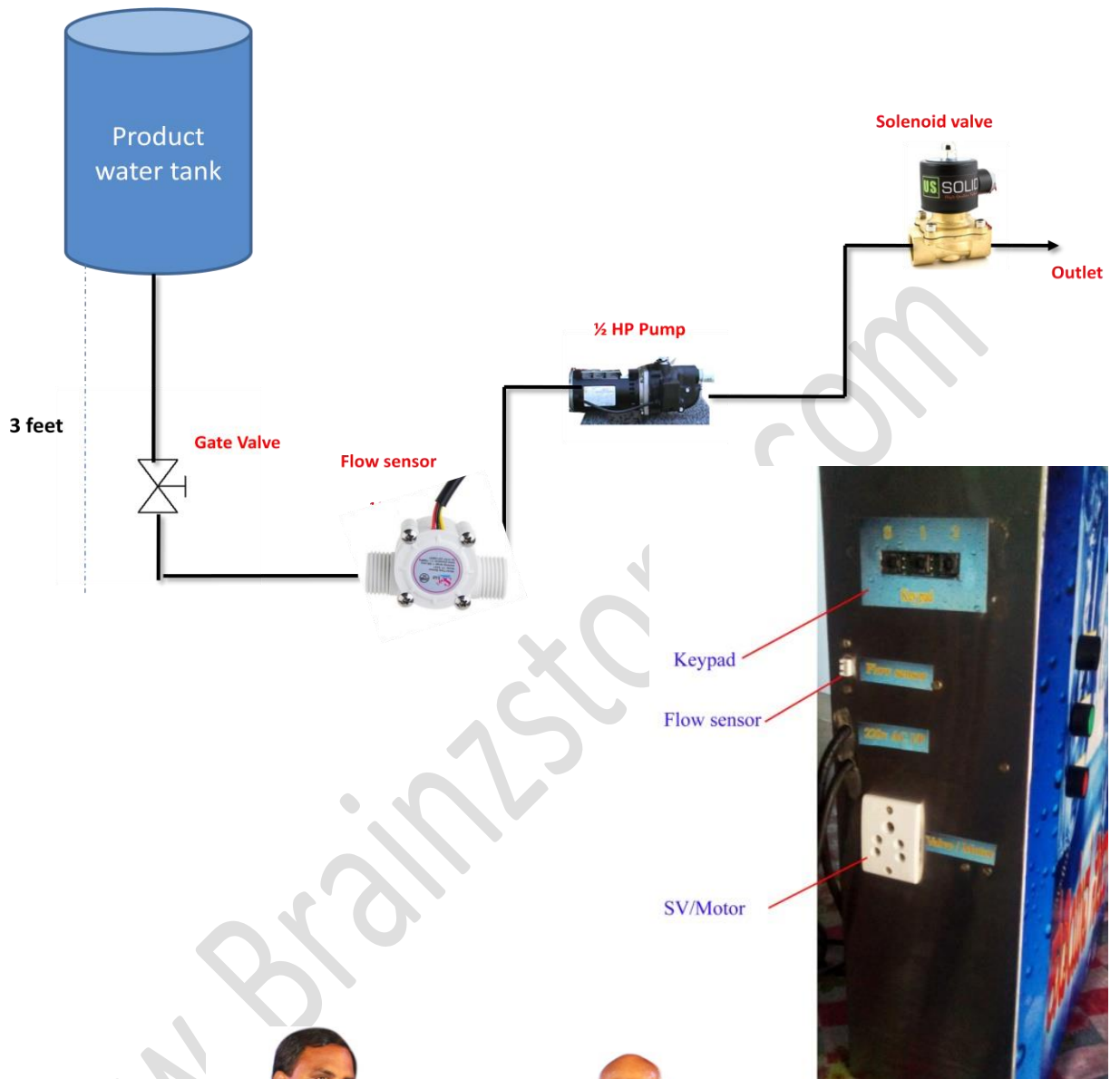

12. Now Switch OFF and ON the unit. LCD will display as below means , its ready to Accept coin and Dispense water

Includes:

- Stainless cabinet vending machine with coin collection
- ½ inch flow sensor
- ½ 220v Solenoid valve.

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Product water tank

Solenoid valve

½ HP Pump

Outlet

3 feet

Gate Valve

Flow sensor

Keypad

Flow sensor

SV/Motor

Winner of CK Innovation Award – 2012 by Honorable Governor of Tamilnadu