

# Fuel Dispenser

## Introduction

### **Brief**

Fuel Dispenser micro computer controlled fuel dispenser adopts with advanced computer technology of electromechanical integration equipment. It suits for car, field depot, farms, and factories etc, dispensing vehicles or other devices to add oil whose ignition point less than 55 degrees. This series of fuel dispensers are made up of motor, oil pump, high precision meter, sensor and computer control. Import chip has been adopted in the computer control. It is easy to carry, high reliability, fast operation, easy maintenance, rich feature, easy to use, etc. It shows the volume, the amount and the unit price. Quantitative liter and amount is easy for the handlers to oil the vehicle. The data display on the LCD screen, clear and beautiful. Fuel Dispenser micro computer oil machine can enhance station reputation, plug up loopholes in management and improve the efficiency of the business.

### **One: Specification:**

1. flow range: 5~50L/min
2. outlet hose: 4M
3. accuracy: 0.3%
4. voltage: AC220V, 110V, 12V, 24V
5. display: volume : 6, total price: 6, unit price: 4

6.unit price : 0~99.99

7.total volume: 0~9999.99L

8.total price: 0~9999.99

9.totalizer: volume: 9999999.99      price: 999999999.99

10.suction: 3M

11.max head: 15M

12.dimension: 450X420X560MM

## **Two: working principle**

Pick up the nozzle, press , the main board send start signal to the power driver board, then start motor.The motor drives the pump to work.

The fuel first enter the oil filter and oil pump, and then flow into the flow meter to push the plunger forward and back repeatedly.

Then it drives the counter to produce the pulse signal, and send the signal to the main board.

The main board operates the received pulse signal, measure the oil quantity and amount, and show the result. The fuel then flows through the outlet hose and the nozzle.

After dispensing , press , the main board send turn-off signal to the motor driver board, turn off the motor. Put the oil gun back to the holder. One dispensing finishes.

## **Three: Preset dispensing**

(1)**liter preset dispensing:** Press “L/P”, choose L(Liter)to enter the total volume you want to dispense, Press , the machine will automatically shut off when the volume is the preset one.

(2) **price preset dispensing:** Press “L/P” , choose P (Price) to enter the total price you want to dispense, Press **Start**, the machine will automatically shut off when the price is the preset one.

Press the number to preset, if wrong pressing, press cancel.

(3) **non-preset dispensing: pick up the nozzle or press START, the machine will start to dispense, Press STOP to exit.**



#### **Four: Accuracy Calibration**

Due to use for a long time caused the accuracy of measuring errors, it can be adjusted by keyboard operating computer coefficient, the method is as follows:

##### 1. coefficient adjustment

When standby, press **Stop**, then press **Set**, input the password 78787878, press **Set**. If the keyboard shows **U 1380**, clearing it and then input what you want.

Press **Stop** to exit. The bigger coefficient is the smaller amount of oil is in fact.

The smaller coefficient is the bigger amount of oil is in fact.

##### 2. Unit price adjustment

When standby, press **Stop**, then press **Set**, input the password 11223344, press

**[L/P]**. If the secondary keyboard shows **[P]**, clearing it and then input the unit price what you want.

3. When standby, press **[Stop]**, then press **[Set]**, input the password 55667788, press **[Set]**, press **[L/P]** shows recent 10 records of refuel and totalizer.

L1 is the latest dispensing amount. LC is the total liter, P1 is the latest dispensing account. PC is the total price.

### **Five: Computer common failure inspection steps and elimination method**

(1) When sensor is faulting, pick up the nozzle and press **[Start]** but it failed. The keyboard shows **[E1]**.

(2) Voltage is not stable, the battery is low. The keyboard shows the tip **[E 2]**.

(3) When price pass 9900.XX for one time, stop the motor, the keyboard shows **[E 3]**. pick up the nozzle and press **[Start]**, continue to dispense.

(4) When Liter passes 9900.XX for one time, stop the motor, the keyboard shows the tip **[E 4]**. pick up the nozzle and press **[Start]**, continue to dispense.

(5) When the coefficient is zero, the keyboard shows the tip **[E 5]**.

### **Six: Use and maintenance**

(1) Use the keys to open the door, for easy install and maintain.

(2) After preset the volume and price, pick up the nozzle, 2 seconds later, the motor starts. pen the nozzle and the dispensing starts.

Motor and nozzle automatically shut down while the volume or price is the preset one.

(3) In the dispensing process, if the nozzle spout touch the liquid level in the container, the nozzle will be automatically shut off and avoid oil leaking.

- (4) The fuel dispenser should be keep clean. And you should periodic clean the sundries and impurities in the oil tank and hose.
- (5) Filter should be clean (once every week). If broken, change it in time.
- (6) The vane of oil pump should be periodic cleaned.
- (7) The accuracy of flow meter should be regularly detected by professional staff; the staff to operate dispensing are not allowed to do so..
- (8) Turn off the electricity before repair. No way to repair when the electricity is on.

### **Seven: brief introduction of the function**

1. Easy to carry: Fuel Dispenser micro computer oil machine is smaller than regular one, light weight, so it is easy to carry.

2. Accurate measurement: Fuel Dispenser micro computer oil machine can accurately calculate the volume and amount.

3. Shows clear: beautiful LCD screen shows the fuel volume when; and switchover the screen, the gas amount is shown after refuel.

The display screen with a back LED plate can provide clear beautiful display for a long time regardless of day or night.

4. Automatic cumulative oil machine number and amount: the total accumulation is safe and reliable; no one can change. When the accumulation gets the maximum value, it will be reset to zero.

5. Quantitation and nonquantitation: quantitative refueling ways allowed refueling according to the preset volume or amount value. When go to the quantitative value, machine end automatically.

Nonquantitative refueling ways allowed refueling to the arbitrary volume or amount value. When the oil box is fueling, automatic gun end automatically.

6. Automatic nozzle is to prevent the fuel overflow: whatever refueling ways, as long as the fuel tank full, the nozzle will shut off automatically.

7. unlock the cabinet to set unit price: only the manager who has the key can set up the unit price, ensure the safety of important data is accurate.

8. High reliability: electronic parts have structure to prevent fire and explosion, safety and reliability, the computer controller adopts the high reliability design. It can still normal work when the voltage is serious insufficient and under all adverse conditions. Working temperature: - 30 degree to + 85 degree celsius.

9. Computer control circuit adopts the structure of function module, provides the high reliability and easy maintenance

### **Eight: Common failures and fault treatment**

problem	reason	treatment
No fuel out of the dispenser	1. the motor doesn' t work	Check the switch of motor and the circuit
	2.pump rotates wrong direction with the arrow	Inlet wire of the motor wrong direction
	3.The shortage or empty of oil tank	The oil tank should fill oil.
	4. bottom valve doesn' t work	check bottom valve
	5. the blade of pump get stuck in the slot	open and clean
	6. the blade of pump is broke	change the blade of pump

	7.the pump is used for a long time and the less efficient	change the pump
	8 Too much garbage in the filter	clean or change the filter
	9. Inlet hose is too long, can ' t suction	Cut short the inlet pipe
	10.The motor is work free and can' t suction the oil	Add guiding oil in the pump
	11. The oil inlet connected to the pump suction does not seal	Add gasket and tighten the bolt
the output of oil is decrease	1. the hose of oil tanker not fixed or too long	check the length of hose
	2. too much impurities in the oil, the filter net blocking	clean the filter net and oil tanker
	3. hose blocking	Dredge the hose oil
	4. the blade wear	change the blade
	5. low voltage	change the voltage of the power
measurement error	1.Poor connection on the plane of distribution valve	plane grind
	2.The seal and bush of meter wear	Change the seal and bush
	3.Shaft of meter wear	Change the shaft and bearing
	4.Flow rate is too small, below the specified value	increase the flow rate

	5.The transmission between the meter and pulse is damaged	change the broken parts
	6.Pulse generator is broken.	change