

ZHEJIANG MAIDE MACHINE CO., LTD

Main technical specification:

- ☆ Working condition:
 - 1.Working voltage: AC 220V ±20%, 频率: (50 ±1)Hz
 - 2.Working temperature: $-20^{\circ}C \sim +55^{\circ}C$
 - 3.Working humidity: ≤95%
- ☆ Single totalizing count range: 0~9999.99
- ☆ General totalizing count range: 0~999999.00
- \Rightarrow The flow range is 50~ 500L when the system matched with the M50 flow meter
- \Rightarrow The flow range is 100~ 1000L when the system matched with the M80 flow meter
- ☆ Measurement precision: $\leq 0.1\%$

REGISTER FIELD

It can display 6 digits at best, can setup the decimal. It mostly displays the refueling volume, currency, currently flow rate and so on data.

PRESET FIELD

It can display 6 digits at best. When preset to refuel, it counts down preset value.

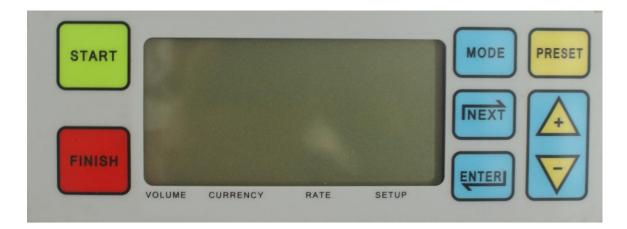
When change the parameter under the setup mode, it display the input parameter.

TOTALIZER FIELD

It can display 8 digits at best. It displays the general totalizing value

DESCRIPTOR FIELD

It can display the information made up of 14 digits letters at the same time most. It mostly displays the prompt character.



The function of key-press

START key- Press the START key to start the refueling.

FINISH key- Press the FINISH key to finish the refueling. After finish the refueling, press this key again to clear away the last refueling record, and enter into the pre-dispenser state. Press this key again, it can switch between the last refueling record and pre-refueling state.

MODE key- Press the MODE key can switch between with four modes.

PRESET key- Press the PRESET key under the volume mode and the currency mode, it can enter into the setup the preset value in corresponding preset refueling.

NEXT KEY- When it displays the menu, press the NEXT key can enter into the corresponding item. When setup the parameter, press the NEXT key can make the setup to backward shift.

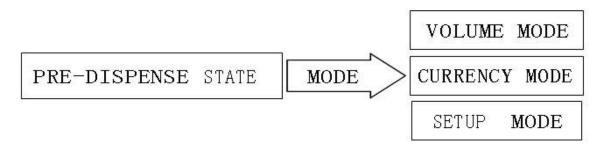
ENTER key- Press the ENTER key to confirm the parameter, and can return to the up previous menu

System state

This system has three states, they are Pre-Dispense state, Dispenser state and Finish state.

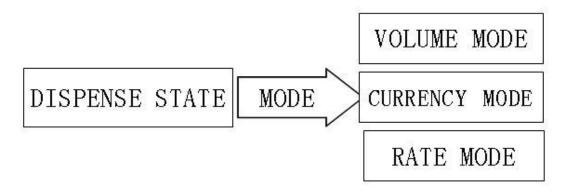
PRE-DISPENSE STATE

The default state of boot-strap, wait for the refueling start or enter into setup mode to change the parameter.



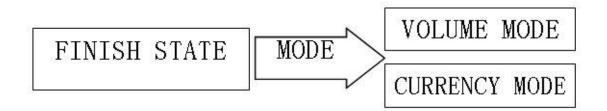
DISPENSE STATE

Under the pre-dispense state, press START key, after start the refueling, then it enter into the dispense state. It displays the main refueling information in the main display field, for example volume, currency, rate and so on.



FINISH STATE:

Under the dispense state, press FINISH key, then it will enter into FINISH STATE. It displays the last refueling information on the display screen. Press FINISH key to enter the pre-dispenser state.



System mode

This system has four modes, there are Volume Mode, Currency Mode, Rate Mode and Setup Mode. Press the MODE key cam switch between with four modes.

Volume mode

Under any state, press MODE key to switch the mode, it can enter into the Volume mode. It is the default mode for boot-strap. Under the pre-dispenser mode, enter to the Volume mode, it can setup the preset refueling volume. In the dispense, the display screen displays the currently volume.

Currency Mode

Under any state, press MODE key to switch the mode, it all can enter into the Currency mode. Under the pre-dispenser mode, enter to the Currency mode, it can setup the preset refueling Currency. In the dispense, enter to the Currency mode, the display screen displays the currently currency.

RATE MODE

In the dispense, press MODE key to switch the mode, it can enter into the RATE MODE. It will display the currently actual rate value. It can control the rate in the stated range by this function. It cannot enter the RATE MODE under the pre-dispense state and dispense state.

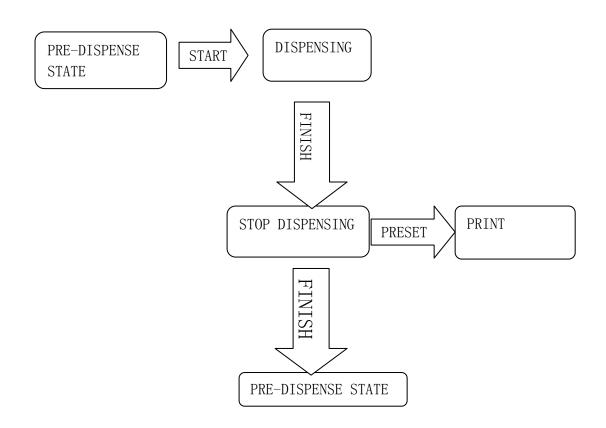
SETUP MODE

In the Pre-dispense state, press MODE key to switch the mode, it can enter into the SETUP MODE. Under the SETUP MODE, it can setup many parameters, such as unit price, pulse equivalent, flow compensate and so on. Under the setup mode, press FINISH key can exit the setup mode.

Fueling without preset under the rate of flow

PRE-DISPENSE STATE

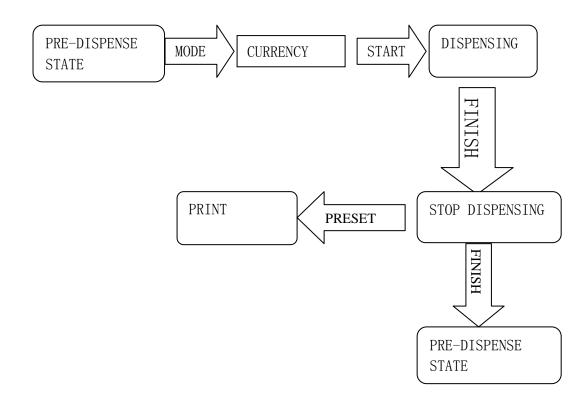
- 1. Press START key to start fueling.
- 2. press FINISH key to stop fueling.
- 3. press ENTER key to print the bill.
- 4. Press FINISH key, go back to the pre-dispense state.



Fueling without preset under the currency mode

After begin the fueling without preset, press PRESET key enter into preset fueling setup, after setup the preset value, it will change to preset refueling automatically. Under the pre-dispense state, press MODE button to enter CURRENCY mode.

- 1. Press START key to start fueling.
- 2. press FINISH key to stop fueling.
- 3. press ENTER key to print the bill.
- 4. Press FINISH key, go back to the pre-dispense state.

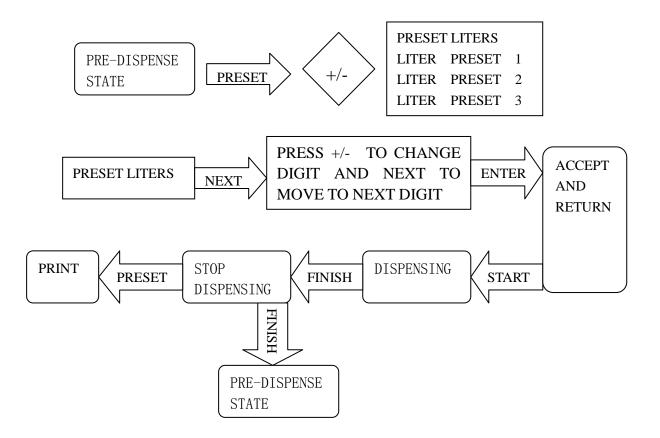


Under the pre-dispense state:

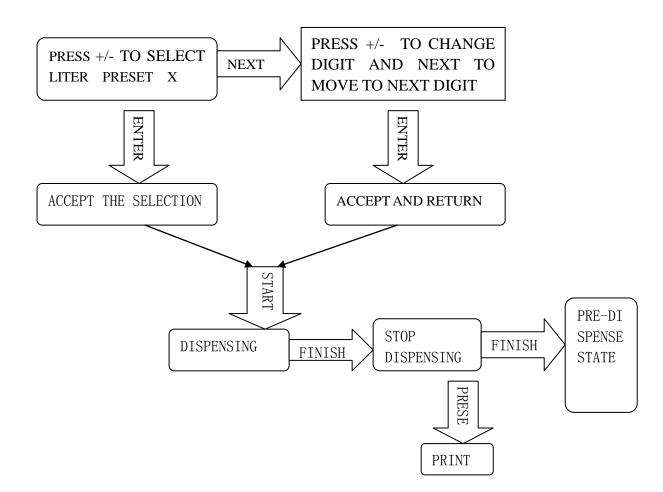
1. under the pre-dispense state and the rate of flow mode, press PRESET key. 2. press +/- key to switch the menu.

- 3. when it displays the PRESET LITERS, press NEXT key to enter.
- 4. press +/- key to change the number 0-9, press NEXT key, the setup item shift to the next item, then input the preset fueling liter.
- 5. press ENTER key.

- 6. press START key to start the fueling.
- 7. after finish the fueling, press PRESET key to finish the fueling.
- 8. press ENTER key to print the bill.
- 9. Press FINISH key, go back to the pre-dispense state.

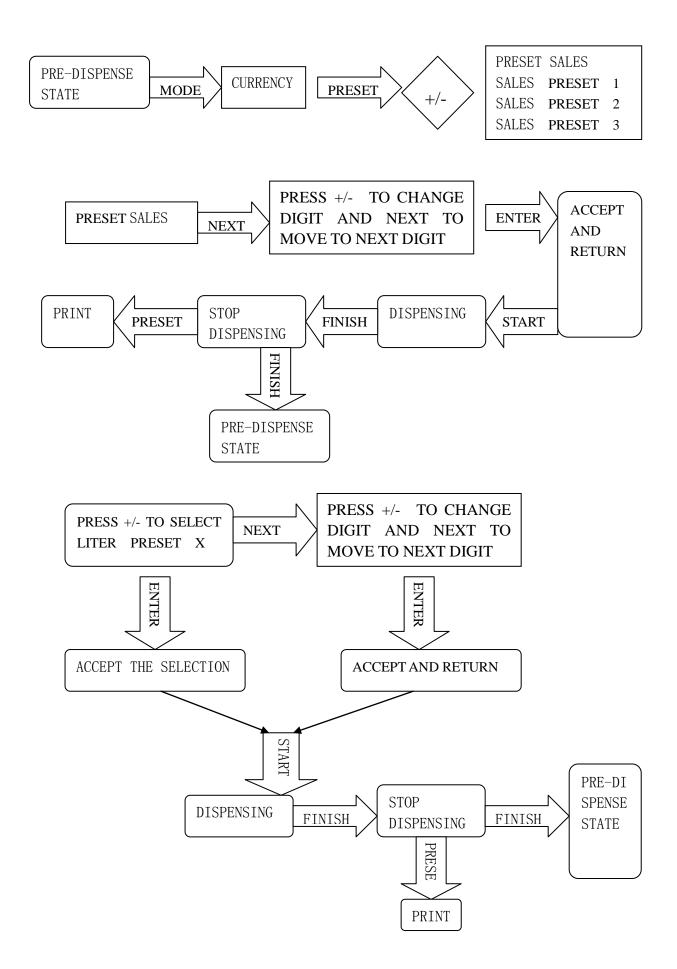


- 1. when it displays the LITER PRESET X, press NEXT key to amend.
- 2. press +/- key to change the number 0-9, press NEXT key, the setup item shift to the next item, then input the preset fueling liter.
- 3. press ENTER key.
- 4. press START key to start the fueling.
- 5. after finish the fueling, press FINISH key to finish the fueling.
- 6. press PRESET key to print the bill and go back to the pre-dispense state.
- 7. press FINISH key, go back to the pre-dispense state.
- 1. when it displays the LITER PRESET X, press ENTER key to confirm to use this shortcut preset liter.
- 2. press START key to start the fueling.
- 3. after finish the fueling, press FINISH key to finish the fueling.
- 4. press PRESET key to print the bill and go back to the pre-dispense state.
- 5. press FINISH key, go back to the pre-dispense state.



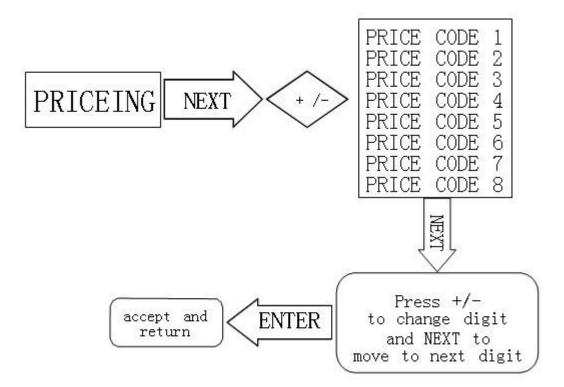
Fueling with preset under the currency mode

- 1. under the pre-dispense state and the currency mode, press PRESET key.
- 2. press +/- key to switch the menu.
- 3. when it displays the PRESET SALES, press NEXT key to enter.
- 4. press +/- key to change the number 0-9, press NEXT key, the setup item shift to the next item, then input the preset fueling amount.
- 5. press ENTER key.
- 6. press START key to start the fueling.
- 7. after finish the fueling, press FINISH key to finish the fueling.
- 8. press PRESET key to print the bill and go back to the pre-dispense state.
- 9. press FINISH key, go back to the pre-dispense state.



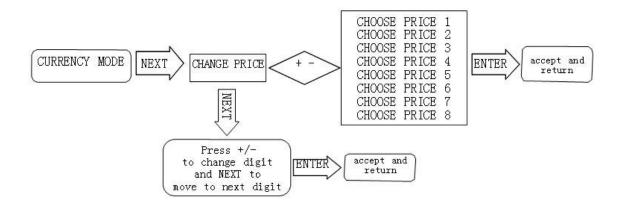
Unit price setup

- 1. under the pre-dispense state, press MODE key to enter the setup mode.
- 2. press +/- key to switch the menu.
- 3. when it displays the PRICEING, press NEXT key to enter.
- 4. press +/- key to switch the menu, it can switch under the PRICE CODE 1---8.
- 5. when it displays the PRICE CODE X, press NEXT key to enter.
- 6. press +/- key to change the number 0-9, press NEXT key, the setup item shift to the next item, then input the corresponding new unit price.
- 7. press ENTER key to confirm, then exit.



Choose the unit price

- 1. under the pre-dispense state and currency mode, press NEXT key to enter.
- 2. it will display CHANGE PRICE, press +/- key to switch the menu choose price 1-8.
- 3. when it displays the required price, press ENTER key to confirm.
- 4. when it displays the CHANGE PRICE, press NEXT key to enter.
- 5. press +/- key to change the number 0-9, press NEXT key, the setup item shift to the next item, then input the required unit price.
- 6. press ENTER key to confirm and then exit.

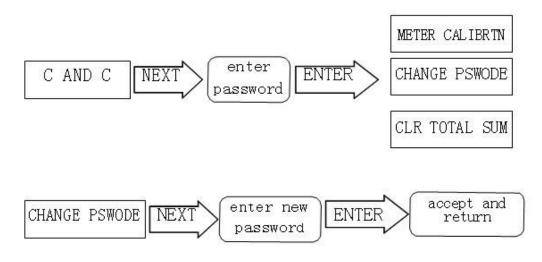


Password and change password

- 1. under the pre-dispense state, press MODE key to enter into SETUP mode.
- 2. press +/- key to switch the menu.
- 3. when it displays C AND C, press NEXT key to confirm.
- 4. when it displays ENTER PASSWODE, press +/- key to change the number 0-9, press NEXT key, the setup item shift to the next item, input the 6 digits password. (The initial password is 000000).
- 5. press ENTER key to confirm, then enter into next menu.
- 6. if the input password was wrong, it displays the INCORRECT CODE, press NEXT key, enter into password setup again.

Change password

- 1. when it displays CHANGE PSWODE, press NEXT key.
- 2. when it displays NEW PASSWODE, press +/- key to change the number 0-9, press NEXT key, the setup item shift to the next item, input the 6 digits new password.
- 3. press ENTER key to confirm, the new password is going into effect, and then back to menu.

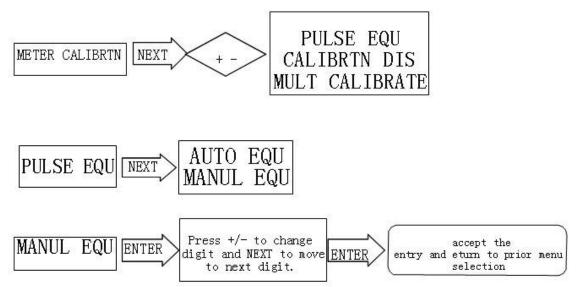


Instrument calibration

Set the pulse equivalent and flow subsection compensate (can set subsection area and compensate coefficient), it can use with the different flow meter by through modify the pulse equivalent value. Through the subsection compensate setup, it can improve the measure precision. The flow rate for flow meter is 0-maximum, it can use 8 representative calibration point for flow rate to divide 8 segments, this is subsection compensate. (the maximum rate of flow meter is R8).

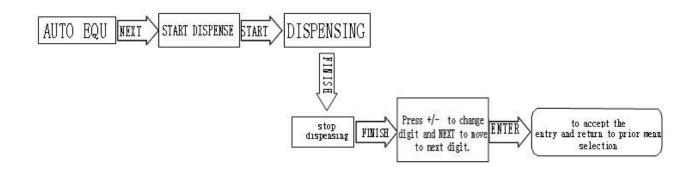
1. Setup the pulse equivalent by manual

- 1. when it displays METER CALIBRIN, press NEXT key to enter.
- 2. press +/- key to switch the menu.
- 3. when it displays PULSE EQU, press NEXT key to enter.
- 4. press +/- key to switch the menu.
- 5. when it displays MANUL EQU, press NEXT key to enter.
- 6. press +/- key to change the number 0-9, press NEXT key, the setup item shift to the next item, input the pulse equivalent.
- 7. press ENTER key to confirm, then exit.



2. Setup the pulse equivalent by automatic

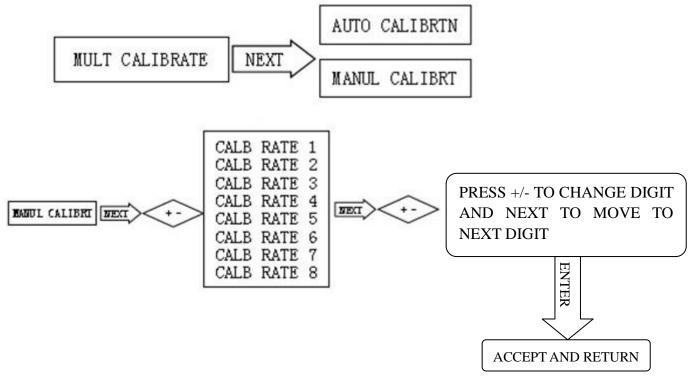
- 1. when it displays AUTO EQU, press NEXT key to enter.
- 2. when it displays START DISPENSE, press START key, then start dispenser the oil to the measurement barrel.
- 3. when add to the sufficient calibration, press FINISH key to stop dispense.
- 4. press FINISH key again.
- 5. press +/- key to change the number 0-9, press NEXT key, the setup item shift to the next item, input the precision liter which in the measurement barrel.
- 6. press ENTER key to confirm, the pulse equivalent will come automatically.
- 7. press ENTER key, return to the back off menu.

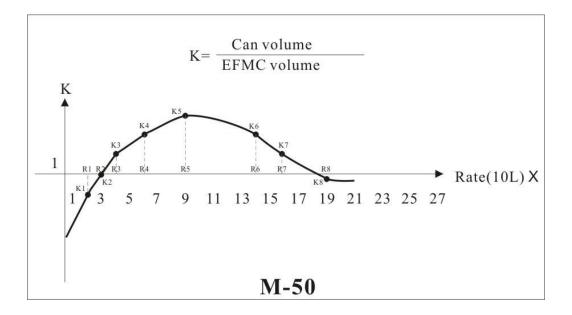


3. Choose whether to use the flow compensate

- 1. when it displays MULT CALIBRIN, press NEXT key to enter.
- 2. press +/- key to switch the menu.
- 3. when it displays MANAL CALIBRT, press NEXT key to enter.
- 4. press +/- key to switch the menu.
- 5. when it displays CALB RATE X, press NEXT key to enter.
- 6. press +/- key to switch the menu.
- 7. when it displays FLOW RATE, press NEXT key to enter.
- 8. press +/- key to change the number 0-9, press NEXT key, the setup item shift to the next item, input the flow rate value for this calibration.
- 9. press ENTER key to confirm, then return to the back off menu.

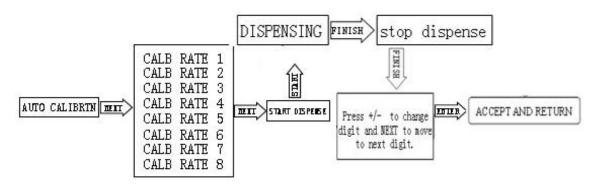
Use the same method to setup the CALB RATE 1 ---CALB RATE 8.





4. Setup the subsection compensate by automatic

- 1. when it displays AUTO CALIBRIN, press NEXT key to enter.
- 2. press +/- key to switch the menu.
- 3. when it displays CALB RATE X, press NEXT key to enter.
- 4. when it displays START DISPENSE, press START key, then start dispenser the oil to the measurement barrel. Control the flow rate in the range of correspond segment.
- 5. when the oil liter reach to the sufficient calibration, close the manual valve, it will stop to come out the oil, then press FINISH key.
- 6. press FINISH key again.
- 7. press +/- key to change the number 0-9, press NEXT key, the setup item shift to the next item, input the precision liter which in the measurement barrel.
- 8. press ENTER key to confirm, it will autogeneration the flow rate for this calibration point and the compensate coeffcient K under this flow rate, then return to the back off menu.



Clear the general totalizing

When the general totalizing value was close to the full value, it should to clear the general totalizing value.

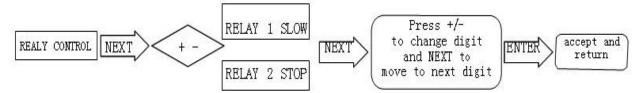
Under the C AND C, input the password, after enter in, press +/- key to switch the menu.

Under the CLR TOTAL SUM, press NEXT key, then press enter for a moment until the general totalizing value was cleared.

Setup the solenoid turn off value

It can through setup solenoid turn off value for big and small valve, to achieve the exact preset dispense. Turn off the big valve achieves that control the maximal flow rate to the smaller flow, it can achieves the buffer before solenoid turn off. Turn off the small valve, achieves the flow value to zero, this is more fixed overshoot value, so this value can be set for the turn off value of small valve.

- 1. under the pre-dispense mode, press MODE key enter to SETUP mode.
- 2. press +/- key to switch the menu.
- 3. when it displays REALY CONTROL, press NEXT key to enter.
- 4. press +/- key to switch the menu.
- 5. when it displays RELAY 1 SHOW, press NEXT key to enter.
- 6. press +/- key to change the number 0-9, press NEXT key, the setup item shift to the next item, setup the turn off value of big valve.
- 7. press ENTER key to confirm, then return to the back off menu.
- 8. when it displays RELAY 2 STOP, press NEXT key to enter.
- 9. press +/- key to change the number 0-9, press NEXT key, the setup item shift to the next item, setup the turn off value of small valve.
- 10. press ENTER key to confirm, then return to the back off menu.

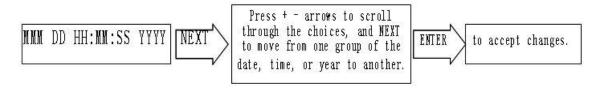


Setup the time/date

- 1. under the pre-dispense mode, press MODE key enter to SETUP mode.
- 2. press +/- key to switch the menu.
- 3. when it displays currently time MM DD HH:MM:SS YYYY, press NEXT key to enter.
- 4. press +/- key to inspect the every time value in turn, press NEXT key, the

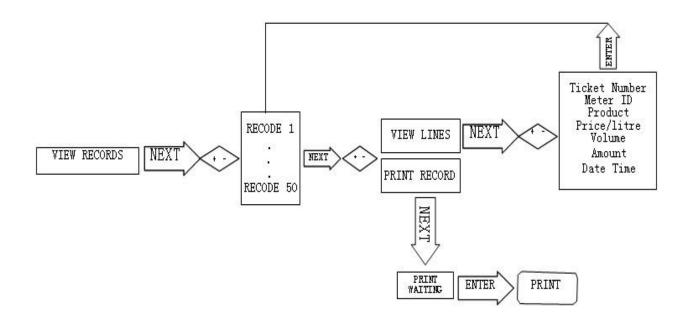
setup item shift to the next item, input the new time.

5. press ENTER key to confirm, then return to the back off menu.

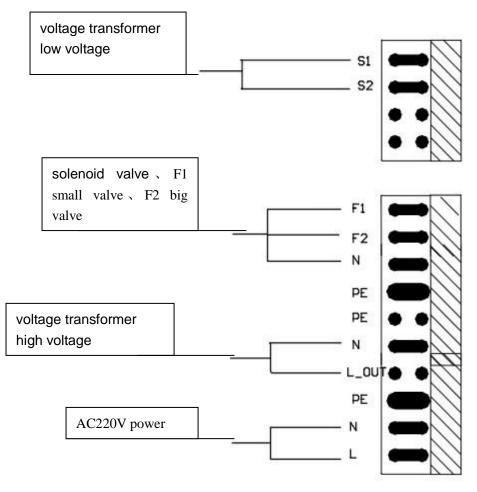


VIEW RECORDS

- 1. under the pre-dispense mode, press MODE key enter to SETUP mode.
- 2. press +/- key to switch the menu.
- 3. when it displays VIEW RECORDS, press NEXT key to enter.
- 4. press +/- key to switch the menu recode 1-50..
- 5. under the corresponding RECORD X, press NEXT key to enter.
- 6. press +/- key to switch the menu.
- 7. when it displays VIEW LINES, press NEXT key to enter.
- 8. press +/- key, it will displays the every item information for the record.
- 9. press ENTER key to confirm, then return to the back off menu.
- 10. when it displays PRINT RECORD, press NEXT key to enter in print waiting.
- 11. press ENTER key to print.

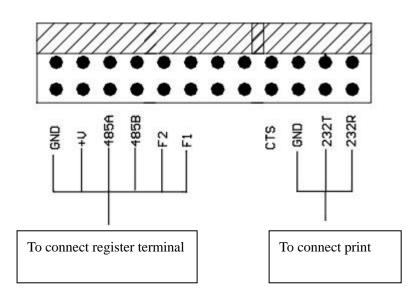


1. Power Connection Terminal



PE earth terminal

2. Power control Connection Terminal



3. Register Connection Terminal

