

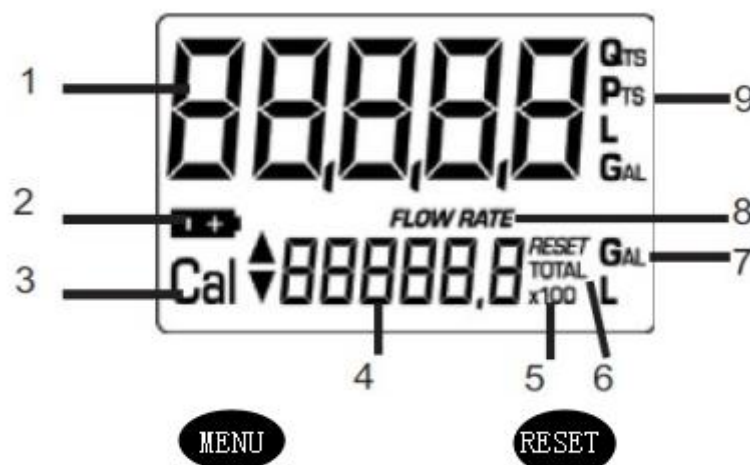
ATO K24 Manual New CPU Board

Introduction

The control panel of K24 Flow meter adopts the concept of modular design, with features of complete function, simple construction, easy operation, etc, which is widely used in petroleum, chemistry, medicine, traffic, food and commercial industry.

1. Technical Data

Medium	Diesel, Adblue, Kerosene, Chemical, Gasoline
Inlet & outlet	1"
accuracy	$\pm 1\%$
repeatability	$\pm 0.5\%$
Max pressure	20BAR
voltage	3V
Life time	1 years
Flow range	10-100L/MIN
Partial total	0.00-9999.9
Total	0.00-999999.9
unit	L, GAL, PTS, QTS
Clean partial total	RESET



1. Partial total 2. battery 3. calibrate 4. Total : Reset TOTAL 5. Total X100 ,
6. reset total 7. unit 8. flow rate 9. unit : L, GAL, PTS, QTS

2 .Unit Set.

Under the state of standby or current charging display, press the button of MENU and RESET at the same time for 3 seconds. Enter the setting of unit conversion and press the RESET button, choose the measurement unit in turn according to the order of LTR to GAL to PT to QT to LTR, meanwhile the accumulated charging quantity will be displayed based on the conversion of the current measurement unit conversion. Then press the MENU button for 3 seconds to quit the unit conversion setting.

3. Clear shift Total

Long press RESET, LCD displays full screen, wait a few seconds, stop pressing RESET. The flow meter is ready to clear shift total.

3. check the Total

Long Press the button MENU and RESET at the same time ,the LCD will show the total and the Coefficient .

4 .Example of Coefficient Adjustment

1	press MENU for 3 seconds, The flow meter shows USER.	2	Press RESET to set the coefficient adjust the position of each number
3	Press the RESET button to change the number	4	After all the setting ,press the button MENU for 3 seconds
5	For example, the factory Coefficient is 1000 , it means accuracy ,for example if not accuracy ,Filling 100L but the out oil is 101 liters,,U need change the Coefficient to 1005.Coefficient increase 5 ,it will less 1liter ,decrease 5 it will more 1 liter.		

5 .Maintenance and Preservation

This flow meter needs the battery with life span of at least 9, 000 hours (1 year) as the power supply. The short battery life will lead to the battery leakage during working and result in the damage of the flow meter. The standby life of this flow meter is designed as 2 years. Battery replacement every one year is recommended. In case the LCD display becomes dim or the no light occurs, it is time to replace the battery. We recommend the users to check the Battery electrode to clear the rusting in case. Take out the battery if the flow meter is not used for a long time.

Metering type



Moment metering type



Moment interface display FLOWRATE
Total accumulate interface display TOTAL

Accuracy ratio test



CALIBRATE key simply called "C" key
DISPLAY key simply called "D" key

1. Check the coefficient (press down the C key and D key at the same time) The initial coefficient of 1" metering meter is 10000
The initial coefficient of 1" metering moment meter is 1000
The initial coefficient of 1.5" metering meter is 02200
The initial coefficient of 1.5" metering moment meter is 1850
If your checked coefficient are not in accordance with the above, can 5s press down the C key and enter into coefficient setting for adjustment

2-1. The metering meter test the liquid

The coefficient of 1" metering meter is 10000
For example the meter displayed 98 when actually tested 100L liquid
Then you need press down the C key 5s, enter into coefficient setting for adjustment
Adjust the coefficient to 09800

The 11700 coefficient linked with displayed litre value

Coefficient come to smaller then displayed litre value come to bigger

Coefficient come to bigger then displayed litre value come to smaller

Waiting 10s after adjusted well then automatically withdraw. Can test again to make ensure the accuracy ratio.

2-2. The moment metering meter test the liquid

The coefficient of 1" moment metering meter is 1000
For example the meter displayed 98 when actually tested 100L liquid
Then you need press down the C key 5s, enter into coefficient setting for adjustment
Adjust the coefficient to 1020

The 1000 coefficient linked with displayed litre value

Coefficient come to bigger then displayed litre value come to bigger

Coefficient come to smaller then displayed litre value come to smaller

Waiting 10s after adjusted well then automatically withdraw. Can test again to make ensure the accuracy ratio.

Remark: the coefficient adjust method of 1.5" meter's moment metering meter please reference 1" meter's moment metering meter. After the accuracy ratio adjusted well, to prevent long time (example one month) use caused the meter has error, please fix time check the accuracy ratio of meter, make ensure the display are correct.

Test before use

CALIBRATE key simply called "C" key
DISPLAY key simply called "D" key

Reset single time metering

One time press the D key Metering type and moment metering type commonly used

Check the total accumulate

Metering type press C key, display the total accumulate within 5s, will enter into coefficient setting when exceed 5s One time press the C key when moment metering type under the "Initial interface display", enter into total accumulate display (TOTAL), if need return "Initial interface display" then one time press C key again

Reset total accumulate

Metering type press D key 5s, display the total accumulate and flashing, one time press D key can reset the total accumulate Moment metering type press D key 5s can reset the total accumulate

Check the coefficient

Press down C and D key at the same time for metering type, display the coefficient within 5s, will enter into metering unit setting when exceed 5s Press down C and D key at the same time for moment metering type

Metering unit set ★ ★ ★

Metering type can change the metering unit, the moment metering type can't be changed The default metering unit when leave the factory is LTR (litre), press down the C and D key at the same time exceed 5s then will enter into metering unit setting Can shifting among LTR (litre), GAL (gallon), PT (pint) and QT (quart "used oversea") Press down the C key 3s then can save and withdraw the metering unit set, if not process any operation, it will automatically save and withdraw the metering unit set after 8s.

Reply the common problems ★ ★ ★ ★

Asking: how to make the meter metering more accuracy and keep the accuracy? Reply: the method is that need process the "Accuracy ratio test" before first time use, and keep one time test every month, shifting use among the different liquids, also need process "Accuracy ratio test" again avoid too big error. Ask: flowrate meter not metering, display screen not displaying, how to do? Reply: the flowrate meter not metering maybe caused by that inner vane of the meter passageway has foreign matters, clean it then OK, need renewal the computer panel if not caused by the foreign matters. The display screen not display maybe the reason is battery no power, renewal the new #7 battery then OK, if not caused by the battery then need renewal the computer panel.

Guarantee after sales

1. Product quality guarantee is 6 months;
2. Because manually damaged or outer force damaged are not belong to the quality guarantee range.
3. If use the corrosive liquid to process metering and caused non-accurate metering or damages, these all are not in the quality guarantee range;
4. This product not waterproof, the inner meter not working caused by the enter water not in the quality guarantee range.

