



Digital Meters Instruction Manual



WARNING:

Read carefully and understand all INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury. Save these instructions in a safe place and on hand so that they can be read when required. Keep these instructions to assist in future servicing.



GENERAL SAFETY REGULATIONS



WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors that cannot be built into this product, but must be supplied by the operator.

1. Keep the work area clean and dry. Damp or wet work areas can result in injury.
2. Keep children away from work area. Do not allow children to handle this product.
3. Use the right tool for the job. Do not attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this equipment was designed. It will do the job better and more safely at the capacity for which it was intended. Do not modify this equipment, and do not use this equipment for a purpose for which it Was not intended.
4. Check for damaged parts. Before using this product, carefully check that it will operate properly and perform its intended function. Check for damaged parts and any other conditions that may affect the operation of this product. Replace damaged or worn parts immediately.
5. Do not overreach. Keep proper footing and balance at all times to prevent tripping, falling, back injury, etc.
6. DO NOT use the equipment when tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating this equipment may result in serious personal injury

TECHNICAL DETAILS

Item No.	Europe				America			
	15210601	15210603	15211001	15211003	15210602	15210604	15211002	15211004
Flow Rate	6~80L/min.		10~100L/min.		2~21gpm		3~26gpm	
Operating Pressure (Max)	50bar		30bar		725psi		435psi	
Operating Temperature	-10°C ~ +50°C				14°F ~ 122°F			
Accuracy	±0.5%							
Fluid Type	Oil		Diesel & kerosene		Oil		Diesel & kerosene	
Screen	5-Digit present total (0.01 ~ 999.99)							
	5-Digit non-resettable total (1 ~ 99999)							
	Unit (Liter, Gallon, Pint, Quart)							
Inlet and Outlet	3/4" BSP	1"BSP	3/4" BSP	1"BSP	3/4" NPT	1"NPT	3/4" NPT	1"NPT
Weight	0.8 Kg				1.8 lbs			
Power Supply	1×3V (1×CR2)							

The digital meter designed by accurate measuring chamber and oval gears inside. Aluminum body, LCD screen make it easy, portable & reliable to install.

The meter can be used for measuring several different fluids, such as oil, diesel & kerosene.

SAFETY PRECAUTIONS

- Never install them where inflammable!
- Keep the fluid pure is very important.
- Make sure that no air pressure shocks or particles can damage the meter.

INSTALLATION

The digital meter installed by thread joint in the pipeline. It is suggested to install a filter at the inlet to keep the fluid pure. That will prolong the life of the meter. Installation size please refer to Fig.1.

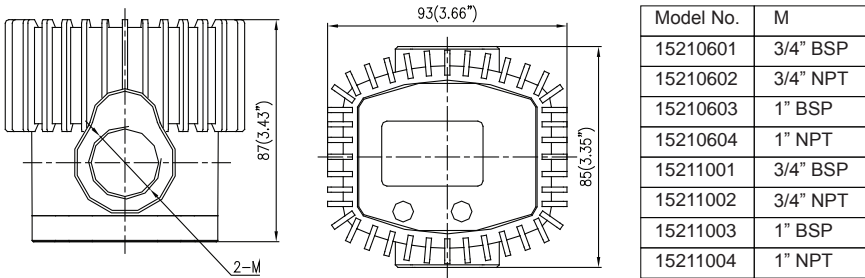
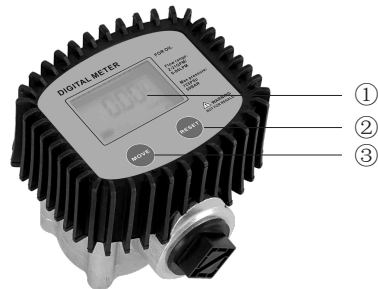


Fig.1

OPERATION FUNCTION BUTTON INTRODUCTION

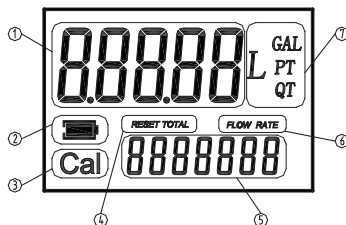
- ① LCD display
- ② "MOVE" button
- ③ "RESET" button



LCD DISPLAY

KEY

- ① Partial register (5 figures with moving comma from 0.1 to 99999)
Indicating the volume dispensed since the reset button was last pressed.
- ② Indication of battery charge
- ③ Indication of calibration mode
- ④ Indication of resetting present total to Zero
- ⑤ Total register
- ⑥ Indication of flow rate mode
- ⑦ Indication of unit of measurement of partial: L= Litres
GAL = Gallons
PT = Pints
QT = Quarts



USER BUTTONS

The turbine digital meter features two buttons (MOVE and RESET) which individually perform two main functions and together, other secondary functions.

The main functions performed are:

For the reset key, resetting the partial Register and reset table total (reset total)

For the move key, entering instrument calibration mode.

Used together, the two keys permit entering configuration mode,

BATTERY REPLACEMENT

When replacing the battery, please open the cover, remove the plug and replace the battery.

DAILY USE

BUTTON USAGE, CALIBRATION AND MEASUREMENT UNIT CHANGE

• Reset the present total (See Fig. 4)

- 1) When the meter is on standby, press the RESET key.
- 2) The display shows all the segments.
- 3) The meter resets the present total already.

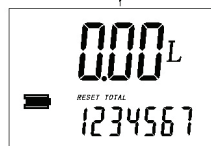
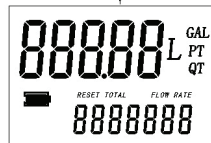


Fig. 4

• Show current correction factor and general total (See Fig. 5)

Press MOVE and RESET together and hold for two seconds.

Value "1.4000" is the correction factor which can be reset;

"1234567" is the general total which cannot be reset.



Fig. 5

• **Measurement unit change (See Fig. 6)**

Press MOVE and RESET together and hold for five seconds.

Zone 7 on the display is the current unit. Press RESET to chose a different measurement unit and then press MOVE to confirm.

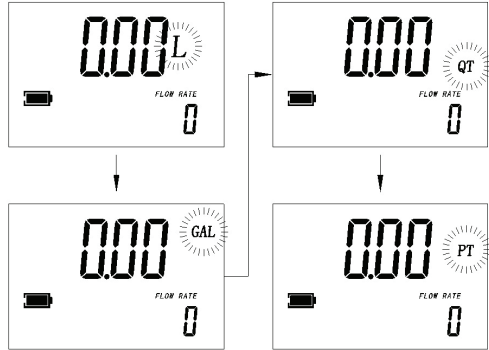


Fig. 6

• **Reset The Resettable Total (See Fig. 7)**

When the meter is on standby, press the RESET key for 2 seconds to reset the present total first.

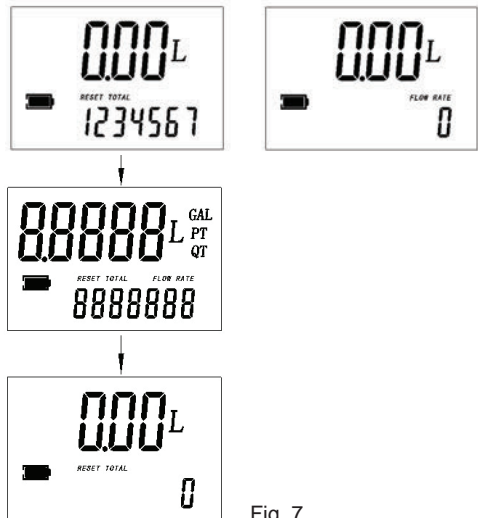


Fig. 7

PROCEDURE FOR ENTER THE CORRECTION FACTOR DIRECTLY

Carefully follow the procedure indicated below.

FORMULA

Proper correction factor = current correction factor × (actual value / display value)






Example:

Actual value 20.75







Display value 18.96

Current correction factor 1.000

Proper correction factor 1.000 × (20.75 / 18.96) = 1.000 × 1.094 = 1.094

1	Wait for the meter to go to standby.	
2	Reset the resettable total.	
3	Press the MOVE key. Keep it pressed until similar with the image showed (the digit flash in ① zone), it means the meter is in correction factor modification mode.	
4	Press the RESET key to choose the right digit from 0 to 9. Press the MOVE key to start the next digit. So the digit of correction factor can be changed one by one.	
5	Make sure the correction factor is right, press the MOVE key. Keep it pressed until quit calibration mode, the factor is saved. The meter goes to standby again.	

MODIFY THE CORRECTION FACTOR IN FIELD
PLEASE CAREFULLY FOLLOW THE PROCEDURE INDICATED BELOW.

1	Wait for the meter to go to standby.	
2	Reset the resettable total.	
3	Start dispensing into a measuring glass. Stop dispensing when over 5 Litres of volume is reached, read out the actual value. The volume that is displayed on the LCD is the Display Value, not the Actual Value which may be slightly higher. For example, in the figure on the right, the Display Value is 18.96 while the Actual Value is 20.75.	
4	Press the MOVE key. Keep it pressed until showed as the right fig., the digit flash in ① zone, Press the RESET key to choose the right digit from 0 to 9. Press the MOVE key to go to the next digit so that the Actual Value can be input.	 
5	Make sure the correction factor is right and then press the MOVE key. Keep it pressed until calibration is finished and the factor is save. The meter will then return to standby.	

MAINTENANCE

Battery replacement

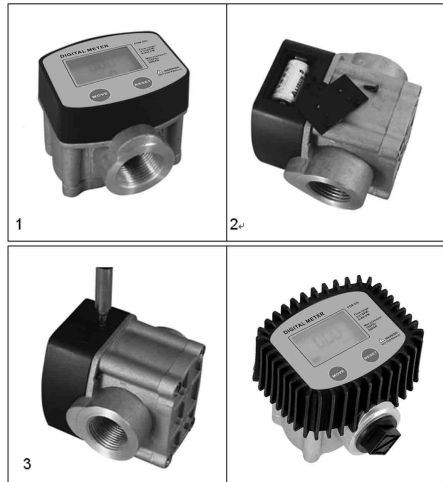
- When the battery signal is flashing on the LCD (see Fig. 8), it means the meter is in low battery. In this condition, the meter continues to work correctly, but the flashing icon warns the user that it is advisable to change the battery.



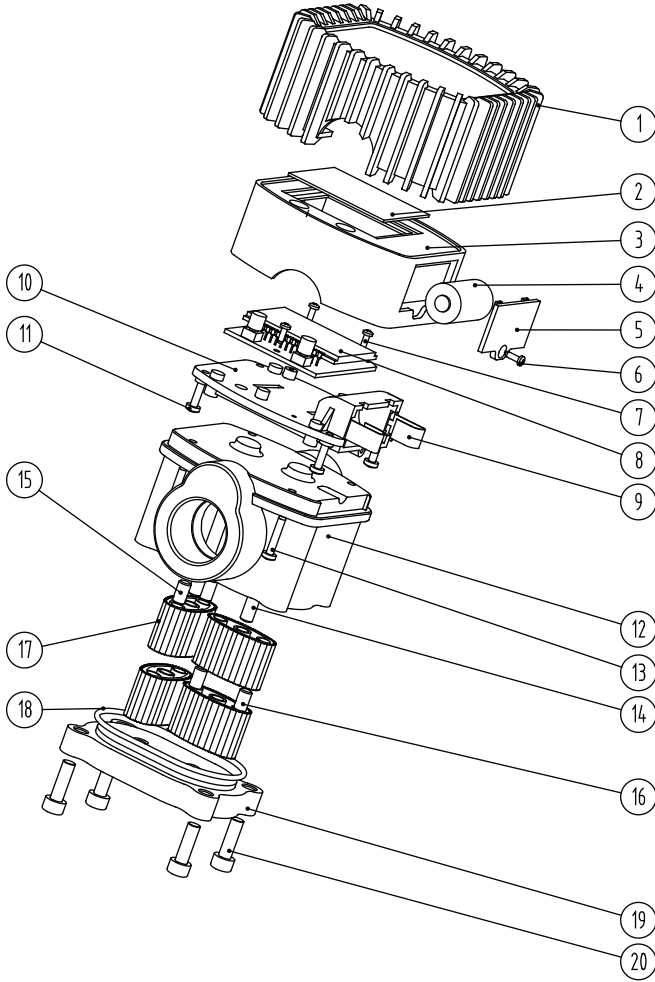
Fig. 8

- Remove the Rubber protection, screw off the screw on the battery cover, then open the battery box to change the battery.
After that, install the battery cover, tighten the screw, fix on the rubber protection to finish the battery change.

- Battery type: 1×CR2(3V)



EXPLODED AND PARTS LIST



Part No.	Description	Q'ty	Part No.	Description	Q'ty
1	Rubber Protection	1	11	Self tapping screw	4
2	Protection board for LCD Display	1	12	Meter Body	1
3	Meter Cover	1	13	Self tapping screw	4
4	Battery	1	14	Shaft	2
5	Battery Cover	1	15	Magnet	2
6	Self tapping screw	1	16	Pin	2
7	Self tapping screw	3	17	Oval Gear	4
8	Electrical board	1	18	O ring	1
9	Spring slice for battery	2	19	Bottom plate	1
10	Fix board	1	20	Hexagon Screw	4



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