



DIGITEN DFC15 Liquid Flow Controller Instruction Manual

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Liquid Flow Controller
Model: DFC15'

This liquid flow controller (DFC15) is used to measure and control the flow of liquid, DFC15 can control solenoid valve on/off when the flow reaches to setting value, It is suitable for hall effect flow sensor, large LCD screen can display the flow rate, volume, and the temperature of the liquid, DFC15 have wide applications for swimming pool, Water Dispenser, coffee machine, drip irrigation system, water meter, etc,

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FEATURES

Quantitative control

Controller will turn off the solenoid valve automatically when flow reaches to a certain amount you set

Monitor flow rate

Display the REAL-TIME volume of liquid per minute

Work with all hall effect flow sensor

It can work various different flow sensors by changing the K parameter

Water meter function

DFC15 can be used to measure the volume of water

Adjustable accuracy

Calibrate the accuracy by changing the K parameter

Temperature monitor

Measure and display liquid temperature

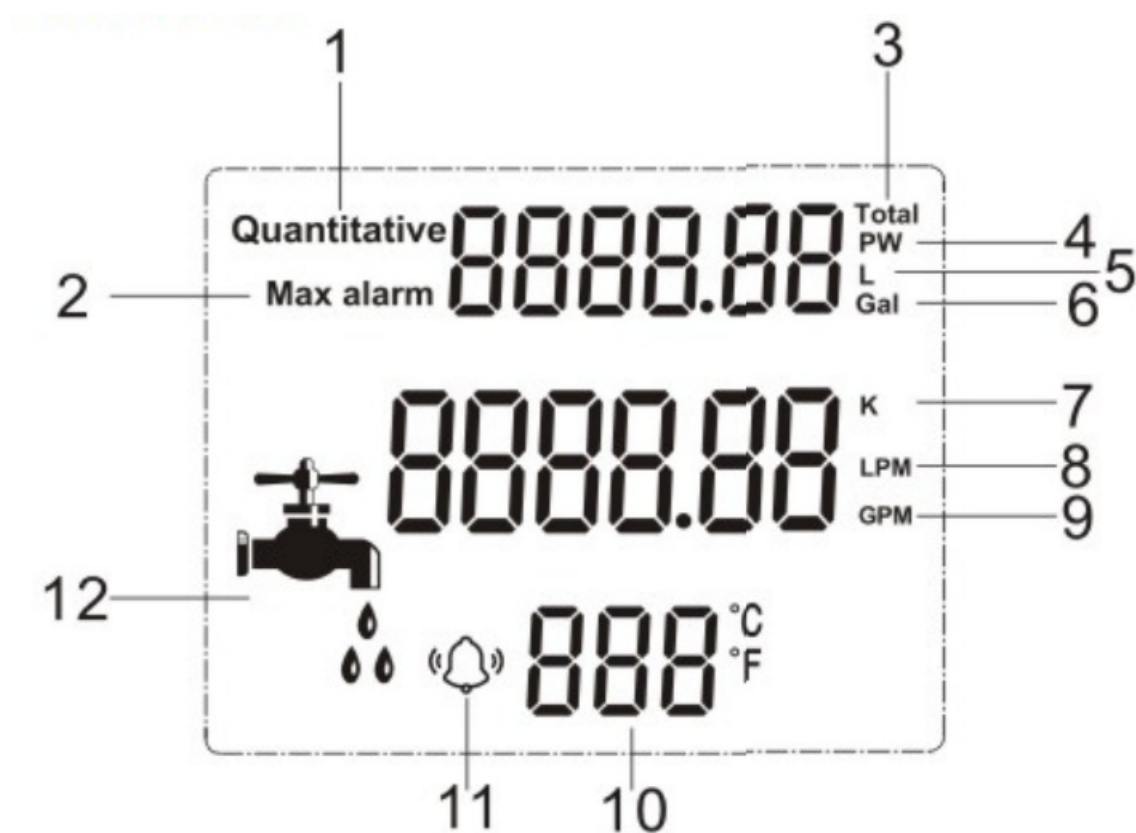
Easy-to-Read Front-Panel Liquid Crystal Display

Displays the flow total volume, flow rated and sensed temperature clearly; custom icons on the display indicate the controller working status at a glance

TECHNICAL SPECIFICATIONS

Controller Power Requirement	12VDC
Power Adapter	Input 100-240VAC, Output: 12VDC, max 2A
Adapter lead length	1m
Measuring Accuracy	±1%
Output for Solenoid valve	12VDC, max 2A
Temperature Sensor	0-125 L' /32-257T NTC3950, Accuracy: ±1°C/±1°F thread: M8
Max Total Volume	999999 G/L
Quantitative Range	0-9999.99G/L
Flow Rate Range	0-9999.99/LPM(GPM)
Cable Length	1m
Dimensions	88mmx126mmx30mm
Weight	200g
Operation Environment	Temperature: 0-50 C/32-122 F Relative Humidity: <85%


SCREEN INSTRUCTION



1. Quantitative A certain setting amount
2. Max alarm: Alarm of total volume
3. Total Current total volume
4. PW:Password (default 1234)

5. L Liter
6. Gal Gallon
7. K K parameter
8. LPM: Liters per minute
9. GPM Gallons per minute
10. Liquid temperature
11. Alarm icon
12. Faucet icon

KEY FUNCTION INSTRUCTION

Menu	Press MENU to switch the query: quantitative setting value, total flow value and K parameter press MENU key after setting to store the setting value and exit setting mode
SET	Long press SET to enter the parameter setting mode , short press the SET button in setting mode, change the next digit
CLEAR	Long press to clear the corresponding value
	Increase or decrease the number
RUN/STOP	Turn on/off the solenoid valve

FUNCTION INSTRUCTION

Quantitative control

The controller will turn off the solenoid valve automatically when reaches the quantitative value you set. Press the RUN/STOP button again, the controller will repeat the same job.

Max alarm function

1. When the total amount reaches the setting value(Max alarm), the controller will alarm and the alarm icon will flash. Press any button to end the alarm sound. Alarm will be closed until change the max alarm value it is higher than total amount
2. Change max alarm value to zero, controller will never alarm forever.

Total: Display total volume, range; 0-999999

PW: Password, K value protection password, user need to enter the password when setting K parameter.

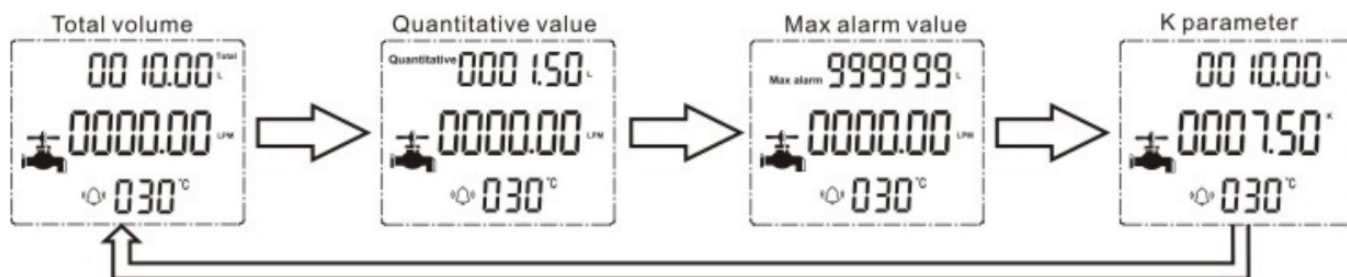
L/Gal: Volume unit Liter/gallon K:K parameter, Different flow meter with different K values LPM/ GPM:

LPM: Liters per minute, GPM: Gallons per minute liquid temperature (Fahrenheit or Celsius degree), the temperature of the liquid can be measured

Faucet: In the RUN mode, LCD display animated water dropping under the faucet.

VIEW SETTING VALUES

Short press MENU button, it can display the values in order below;



SETTING INSTRUCTION

Please press RUN/STOP switch to the STOP status before setting,

Note: It will exit setting mode when no operation more than 30s.

Setting quantitative value

Short press MENU button until LCD display Quantitative as the picture below



1. Long press SET button until it beeps and quantitative value flash
2. Press ▲ or ▼ to change the number.
3. Press SET button change the number to your desired value
4. Press MENU button to save and exit.

Setting max alarm value

Short press MENU button and until it display Max alarm



1. Long press SET button until max alarm value flash
2. Press ▲ or ▼ to change the number.

3. Press SET button change next number to your desired value
4. Press MENU button to save and exit

Setting K parameter

Short press MENU button until it display K parameter as the picture below

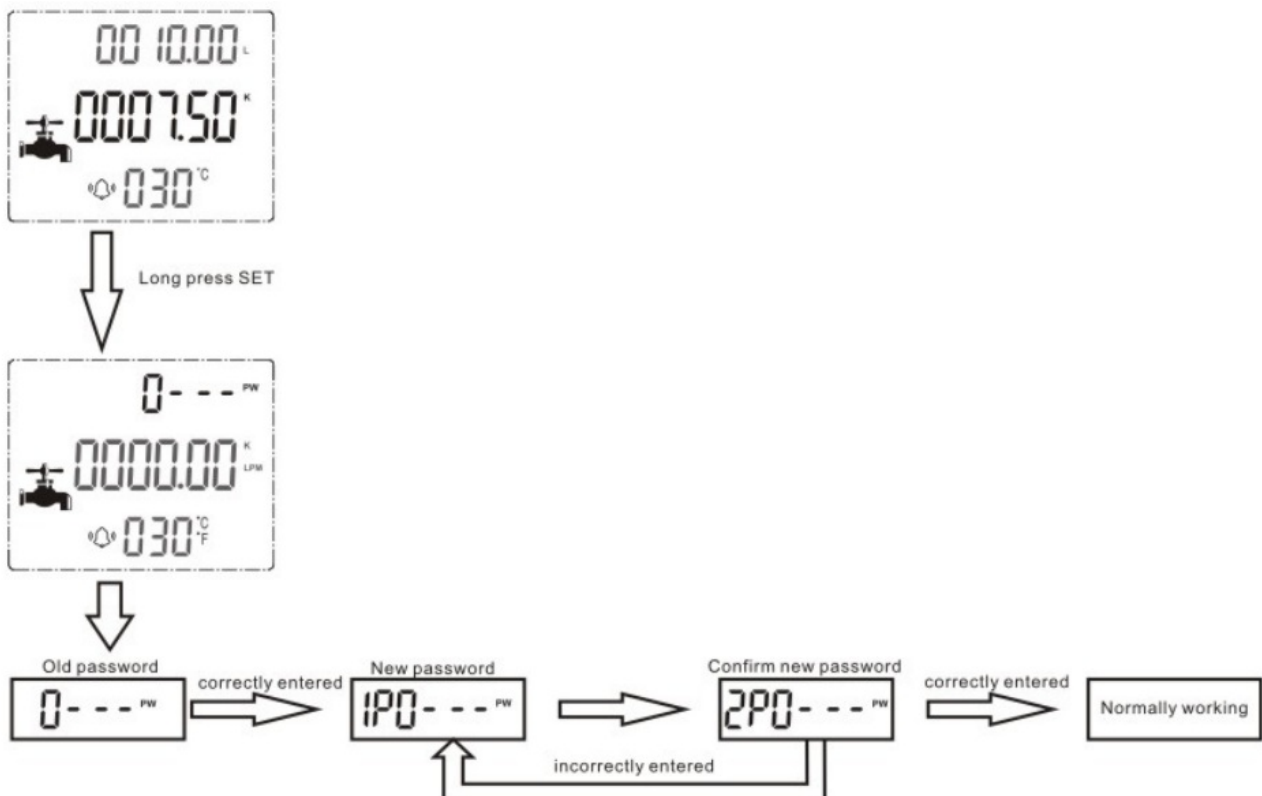


1. Long press SET button until LCD display 0---
2. Input 4-digit password (default password is 1234), After four-digit password is correctly entered, controller will switch to modifiable K value. otherwise you can't set the K parameter.
3. Press ▲ or ▼ to change the number
4. Press SET button change next number to your desired value
5. Press MENU button to save and exit

Note: Please ask manufactory for the flow sensor K value . And you can adjust the K value until you satisfy the measuring accuracy.

How to change password

Short press MENU button and until it display K parameter as the picture below



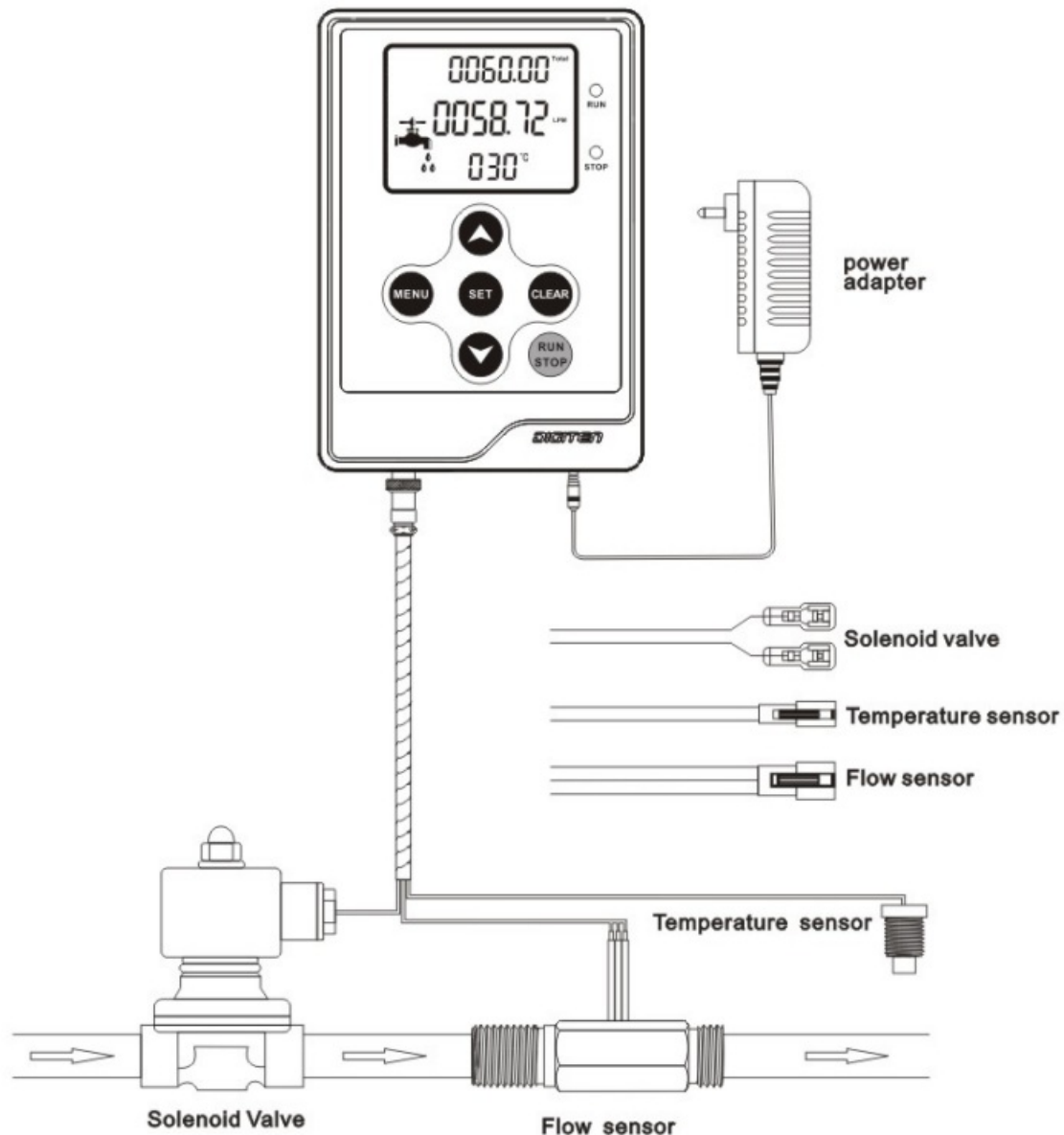
1. Long press CLEAR button it beeps and until password flash 0--- ,

- Input current 4-digit password (default password is 1234), After four-digit password is correctly entered, controller will allow you to change the

1P0- --™, Enter new password

2P0- --™, Confirm new password

- Press A or to change the number
- Once controller password has been changed, LCD will return to default display



Note: If you forget current password, you can restore factory setting, if so, all setting values will be restored to factory setting.

How to restore factory setting

Keep pressing RUN/STOP button until connect the power to this device, controller will restore factory setting

How to change volume unit

To convert to gallon unit, press the ▲ and ▼ buttons simultaneously Press them again to return to Liter unit.

Change temperature unit

To convert to Fahrenheit unit, press the MENU and ▲ buttons simultaneously. Press them again to return to Celsius unit.

Water meter function

Changing quantitative value to zero, this controller can be used as water meter.

CLEAR VALUE

Press MENU button to switch to the desired display, long press CLEAR button about 3s until it beeps.

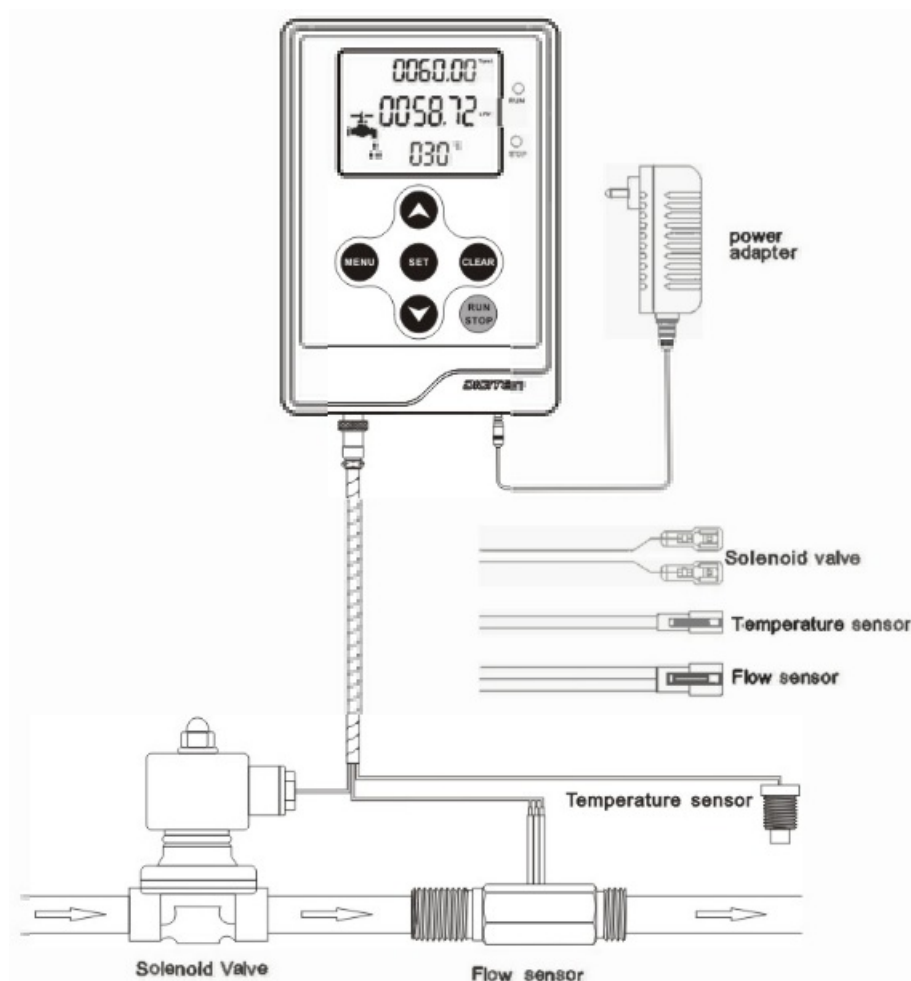
Only Total volume, Quantitative value and Max alarm value can be cleared by pressing CLEAR button

Clear Total volume value



1. Short press MENU button until it display Total as the picture.
2. Long press CLEAR button about 3s until the total volume is cleared.

INSTALLATION INSTRUCTION



1. Ensure the solenoid valve and flow sensor direction is the same with water flow
2. Please ignore positive pole and negative pole of the solenoid valve.

3. Avoid the water into the controller
4. Please use teflon on the thread when requirement, ensure don't leak.
5. The wires can be extended up to 10m.

Note: This controller work with the solenoid valve up to 5A. but this kit come with 2A power adapter, if drive a large solenoid valve, please use suitable power adapter.

HOW TO WORK

1. Set K parameter, quantitative value, Max alarm value, and properly install the flow sensor and solenoid valve.
2. Press the RUN/STOP button, the controller works, Total will continuously display the current flow volume, and current flow rate, and the faucet will start animated display
3. When the flow reaches the quantitative setting value, the controller turn off the solenoid valve automatically, and the total value stop, faucet animation will be stop dropping, flow rate back to zero.
4. Press the RUN/STOP button again and the controller will repeat the same job.

TROUBLESHOOTING

If the controller does not function properly, verify that the unit is wired, configured, and set properly. If the problem persists, use the following procedures to determine the cause of the problem.

Measuring inaccuracy

Generally the accuracy of controller depends on the flow sensor

- a. If the measurement accuracy is inaccurate, consult the flow sensor factory for an accurate K value.
- b. By constantly adjusting the K value to achieve the corresponding accuracy, at the same time due to the different liquid media pressure, need to adjust the K value
- c. The smaller the diameter of the flow meter, the higher accurate the accuracy

Power adapter very hot or burned

This controller can work with load up to 5A, please confirm if the adapter meet the solenoid valve power. If the solenoid valve power is more than the adapter, the adapter will become very hot and even burned

Run mode failure

LCD display animated water drop, but total volume and flow rate don't change properly.

Please restore the controller to factory setting

Water releasing problem

The green RUN led is on when press RUN/STOP. But water can't be released

1. Make sure the solenoid valve is fine. Disconnect the solenoid valve to controller, use a 12VDC power to connect to this solenoid valve, if hear the sound of coil triggering, it indicated the solenoid valve works fine and see next step. otherwise, please exchange a new solenoid valve
2. Use a reliable multi-meter, to measure the voltage of the 2 wires for the solenoid valve. Press RUN/STOP to run the controller. If the voltage reading is 12vDC, it indicated the controller works fine, otherwise see next step.
3. Ensure the power adapter is 12VDC, and output current meet the solenoid valve requirement.

If the problem persists after trying the troubleshooting steps. Please send your questions to our customer service:

service@digit-en.com

WARRANTY

The DIGITEN products are guaranteed to the original owner for one year against defects in workmanship and materials. Please contact us service@digit-en.com

www.digit-en.com


WARNING

This device isn't waterproof, please don't install in water, and avoid being caught in rain.

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www.digit-en.com
service@digit-en.com

Documents / Resources

	DIGITEN DFC15 Liquid Flow Controller [pdf] Instruction Manual DFC15 Liquid Flow Controller, DFC15, Liquid Flow Controller, Flow Controller, Controller
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References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)