JL269LED

Portable gas leak detector

Operation manual

Please read this manual carefully before operation

Ver: HWWM161229CG

Safety Information

Before using the device, please read this manual carefully and follow the operation requirements as below:

- Please don't use the defective detector. Before using, please check if there is crack or spare parts' missing. If there is, please contact the seller.
- It's suggested to do the "Impact Test" by following 4.2 before using this device every day to check if the detector works well.
- Only spare parts which are specified for JL269 or permitted by the seller are allowed to be used.
- Only the charger which is specified with JL269 is allowed to be used to charge the device. It's forbidden to charge the device in dangerous environment.
- Please don't expose the device into the exceeding-range gas for long time. Otherwise, it will seriously affect the performance or even damage the device.
- If exposed to the environment consisting of leaded compound, sulfur-compound, organic phosphorus compound or silicon, the gas sensor will be poisoned. Please don't use the device in the above environment.
- Please don't expose the device to the environment which consists of H2S, hydrocarbons gas or high corrosive gas for long time. Otherwise, it will restrain the response of the gas sensor and reduce the sensitivity. If the device has to be used in the above environment, please carry out the Impact Test before using it.
- Please don't expose the device to the environment which has electric shock, strong magnetic field or serious continuous mechanic shocking.
- There is a NI-MH battery inside the device. Please don't place the useless battery together with the rubbish. The useless batteries should

be discarded by qualified withdrawers.

- Please change the rechargeable batteries if they have been used for 2 years or charged for 300 times.
- It's forbidden to disassemble, adjust or repair the device without permission.
- Please avoid the device falling down from high place or serious shocking.
- Any other operation beyond this manual, please contact the seller.

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1. Brief introduction

JL269 gas detector has a fast and stable performance and wide detecting range. It can be used to detect methane, propane, natural gas, LPG, and hydrogen gas, It will help you to find out the gas leakage sources easily.

Main function & features

Fast response, short warm-up time
Multi-level indicator lights
Long flexible gooseneck probe
Low voltage alert function
Automatic shut-off after under-voltage
Automatic zero point adjustment

2. Main technical Specifications

Target gas	Sensor type	Detecting range
CH_4	semiconductor	0～30000ppm（0～60%LEL；0～3.0%VOL）
C_3H_8	semiconductor	0～20000ppm（0～95%LEL；0～2.0%VOL）
H_2	semiconductor	0～10000ppm（0～25%LEL；0～1.0%VOL）

Sampling method: Natural diffusion
Response Time: ≤5s
Sensitivity: Better than 50ppm
Working condition: Temperature -10℃～55℃；
Humidity≤93%RH(no dews)
Storage condition: Temperature -30℃～60℃；
Humidity≤93%RH(no dews)
Indicator method: Multi stage lights indicate concentration, with variable tunes and rhythms indication.
Power Source: 3.7V/2200mAh Lithium battery
Charging time: 4 to 7 hours

Working Time: >8h(working continuously in normal working status)
Sensor Life: 2 years
Dimensions: 180mm×72mm×36mm
Weight: About 300g

3. Structure and Functions

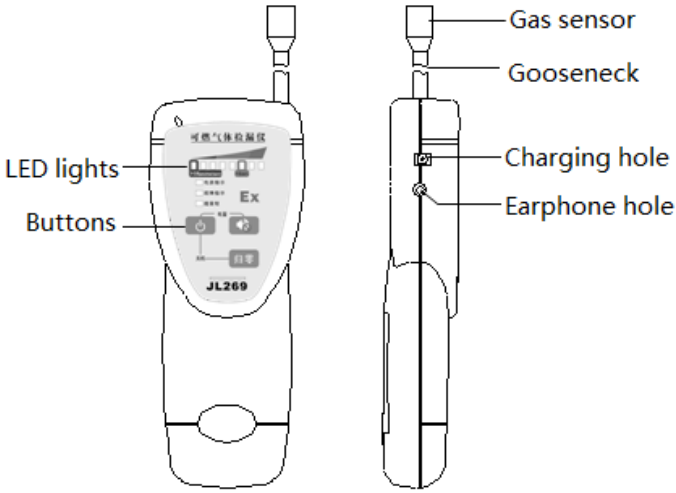

Fig. 1 JL269 Appearance

4. Operation

4.1 Power on

Press and hold "⏻" for more than 2 seconds, the detector will power on and enters into self-testing status. All LED lights will be lighted on and then off alternately. At the same time, the buzzer and sensor start self-test. After self-test, the sensor will proceed zero translation within 5 seconds, and then the detector enters into detecting status. If sensor fault

or zero translation doesn't finish within 5 seconds, please keep waiting. Check " ▭ OL" light. After it turns off, zero translation finishes and the detector will enter into detecting status.

4.2 Impact Test

It is suggested to do Impact Test before using every day, so as to make sure the detector work normally.

Test method:

After turning on the detector, put it into the gas with certain known level or standard gas. If the display, alarm signal and buttons work normally, then it can be carried out for detecting. If no response to the gas or " ▭ Fault" light is on, please contact the seller for solving the problem.

4.3 Detecting

Put the sensor (which is at the front end of flexible test bar) into the gas environment. The quantity of LED lights and sound frequency will show the gas concentration. With gas concentration increasing, first more and more green LED lights will be turned on and the buzzer frequency increases. When the concentration exceeds the green LED's range, yellow LED lights will be turned on, and then red LED lights. At the same time, the sound frequency interval will turn higher. If the concentration reaches the highest of the detection range, the " ▭ OL" LED will light.

4.4 Battery voltage check

In detecting status, by pressing both ⏻ and 🔇 buttons, the user can check how much voltage left in the battery. LED lights flash. The voltage left is equal to the quantity of the LED lights. Press both ⏻ and 🔇 buttons again, the detector will return to the detecting status.

Moreover, the user can also check the voltage by the color of " ▭ Power" light.

Color	Voltage
Green	Enough
Yellow	Not enough
Red	Low voltage, need charge

4.5 Open / close audible alarm

In detecting status, the initial setting of audible alarm is on. The more gas leaks, the higher the audible alarm frequency will be. If the detecting spot is too noisy, operator can use the earphone purchased by himself.

Press button can open or close the audible alarm function.

4.6 Set present level as reference basis

The gas concentration of the detection field is in gradient distribution. In order to find the gas leakage source precisely, during detecting, the user can set the present level as reference basis by pressing button.

4.7 Turn off the detector

Press both and buttons, the detector will be turned off.

5. Calibration

In order to assure the accuracy, it's suggested to re-calibrate the detector once every 6 months.

Calibration procedure:

Hold both and buttons to turn on the detector and the detector will enters into calibration warm-up period. LED lights flash in turns showing the warm-up period which will be about 3 minutes.

After warm-up finish, one green LED light will be lighted on, which means the detector enters into zero calibration status. If the detector is in clean air, press button to save the zero point information. Then, " Power" light is in green color and 3 green LED lights flash. Zero

calibration is done.

After zero calibration, one yellow LED will be lighted on which means the detector enters into the calibration status of the second point. Put the detector into the standard gas (level equals to the second point) and keep it steady for about 30 seconds. Then press to save the second point information. " Power" light will be lighted on in yellow color, 3 green LED and 3 yellow LED are lighted on and then flashing, which means the calibration of second point is done. If there are more than two calibration points, the operating method is same with the second point calibration. After all points' calibration finish, " Power" light will be lighted in green color and then turns off. The detector will turns off then.

Note:

There are more than two calibration points. Please carry out calibration in order, first zero point calibration and then the second point, the third point.

During calibration, if the sensor responses abnormally, the " Fault" light and " OL" light will be lighted on. Please note it.

6. Charging

Please charge the battery after the detector is turned off. The color of " Power" light on the charger will show the voltage level of the battery. The charging will last for 4 to 7 hours. When " Power" light doesn't flash and it is in green color, the charging is done. Please disconnect the charger from the power source.

Charging Attention

- It's forbidden to charge the detector in dangerous area. Otherwise, it will damage the detector or cause fire & explosion.
- During charging, it's normal that the area around the battery will be heated.

- After the detector turns off automatically, please charge the battery within 12 hours, so as to avoid that the battery cannot work due to too voltage too much low.
- If the detector won't be used for a long time, please take out the batteries and put it in dry environment.
- During replacing the batteries, make sure they are with the same capacity. If use alkaline batteries, please don't charge them.

7. Sensor using and replacement

In normal working status, the sensor life is 2 years. When the sensor is overdue or defective, please contact the seller for correct replacement instruction.

8. Troubleshooting Guidance

Fault	Possible reason	Solution
Cannot be turned on or auto turn off	Too low voltage	Charge it in time or replace the battery
No response to gas	Warm-up or zero calibration doesn't finish	Wait till it finishes
	Sensor fault	Replace the sensor
" ▭ OL" is on	Too high concentration	Make zero calibration in the clean air or re-calibrate the detector