MD-2002R Wireless Gas Detector Manual

1.Introduction

MD-2002R is a gas detector for indoor use, stable and easy to install. when detecting any gas leak, It can give sound and strobe alarm without delay. It is applied to those place with inflammable gas, such as house, hotel, apartment.

2.Perimeter

Gas Detected: natural gas, LPG

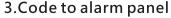
Alarm density: 8% LEL(factory default for natural gas)

Deviation: ±3% LEL
Power supply: 12V DC
Receiving frequency:433MHz
Static Working current: ≤100mA

Alarm Current (without manipulator):≤250mA Manipulator(valve)'s working current: ≤300mA Manipulator(valve) power supply: 12V DC.

The valve is on when power on, value is off when alarm

With LCD display, able to detect the density in real time. User can set a alarm density among $3\sim13\%$



- 1. Auto coding:
- A. Keep the distance between alarm panel and MD-2002R less than 3meters. Set the mobile APP to "Add device" mode and click "Start".
- B. The detector will enter work mode. Then trigger the sensor by release natural gas within 3meters distance around the detector. MD-2002R will send out wireless signal.

On mobile APP, it will automatically learn the code of MD-2002R, then click save to save setting.

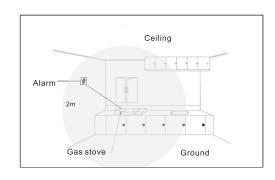
2. Manually coding: Set the APP in manual code mode, then enter the 9-digit wireless code and save.

4.Function

When power on, the detector enter into working status. Once it detects the gas density is higher than preset density of alarm, it will alarm continuously until the density is decreased lower than preset value.

5.Installation

- ①Wall mount, generally install 2m or less away from gas source.
- ②Use the screws in package to fix.
- ③Note:
- a. Do not install too close to gas stove in case of flame roasting.
- b. Do not install in areas of big smoke in case of false alarm or gas inlet blocking, which may decrease the sensitivity.
- c. Do not install in areas of much water vapour, such as in bathroom, beside window&door&exhaust fan.



6.Control Key introduction

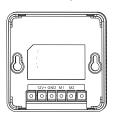


Key	Operation	Function	Remark
K1	Press more than 3s	Alarm concentration settings, short press K1/K2 key to add and subtract	12 levels in total, max sensitivity (level 3), min sensitivity (level 13), factory default(level 8)
K1	Press more than 3s	Save alarm density	When alarm density selected, keep pressing 3s, there will be voice prompt, and later exit
K2	Press 1s and let go	ON/OFF value manually	When value is off, press this key, turn it on. vice versa
K1+K2	Press 3s and let go	Alarm test manually	When triggered, there are test voice prompt, sending alarm When triggered, there are test voice prompt, sending alarm signal out, value will be turn off.
K1+K2	Press more than 8s	Restore to factory default	Keep press 3s, system restore, value turn on.



7. Wiring and Valve power supply

1Wiring



②Manual test mode



③Set alarm density



- 1. When alarm, the value will be turn off, the voltage between M1 and M2 is +11.4V, it will last 15s, after that, no voltage.
- 2. When test alarm, the vale will be turn off, the voltage between M1 and M2 is +11.4V, it will last 15s, after that, no voltage.
- 3. When turn on value manually: the voltage between M1 and M2 is -11.4V,it will last 15s, after that, no voltage.
- 4. When turn off value manually: the voltage between M1 and M2 is +11.4V, it will last 15s, after that, no voltage.

8. LED and Voice

LED back-lights	Always On	
	Power on	Welcome to use the combustible gas leak detector
	Alarm	Combustible gas leakage is detected. Please check
	Test	The upcoming alarm test, please do not panic
Voice	Faulty	System self-inspection failed, please check
voice	Valve on	The valve will open
	Valve off	The valve will close
	Set gas density	Please set the gas alarm levels
	Save gas density	Your Settings have been saved
	"E00"	
LCD display	"E01"	Gas detector faulty
	LES	starting to test manually
LED indication	Red	When power on, flash, means starting to work

9.Test

After installation, the user can test with a lighter. Please do not ignite, but release gas 5cm away from the gas inlet of detector. When the detector is triggered, there is on/off signal output, which can be input of alarm panels.

The gas density levels of alarm are based on CJ3057-1996 standard. When the gas density in the air is lower than the value of alarm, it will automatically stop the alarm, return to monitoring the status.

Remark: Don't test gas too frequently, it will reduce the sensitivity of gas sensor inside.

10.Note

A. The connection of wiring and power supply must be correct. Once AC off, the production wont work any more.

B.Regular maintenance must be required according to manual. The life of the detector is not permanent, so please test once every six months. If any failure, please repair or replace as soon as possible.

C. This product can reduce the happening of the accident, but it can't be 100% sure. For your safety, in addition to the correct use of this product, the user should also be vigilant in our daily life.

11.Gas Leak Management

When the gas density reach or exceed to preset alarm value, the detector will alarm continuously. In this case, users should do:

- 1. Turn off the value of gas pipe immediately.
- 2. Open window immediately to make indoor air circulation.
- 3. Put out all fire immediately, avoid to use any of goods which may make spark, such as lighter, matchstick.
- 4. Avoid to switch all kinds of electrical appliances.
- 5. Check the reason of the gas leaking, and promptly notify relevant departments and related professionals to deal with.

12. Routing maintenance

After long time use, the gas inlet may be covered with oil stain, which effect the sensitivity of gas sensor. we recommend user clean the gas inlet with a brush. The brush can mix with a small amount of cleanser, but do not let cleaning fluid go inside, it can destroy the detector. After cleaning, user can do test to the dete.