



# JT-HR100 Household Combustible Gas Detector

## Installation & Operation Manual

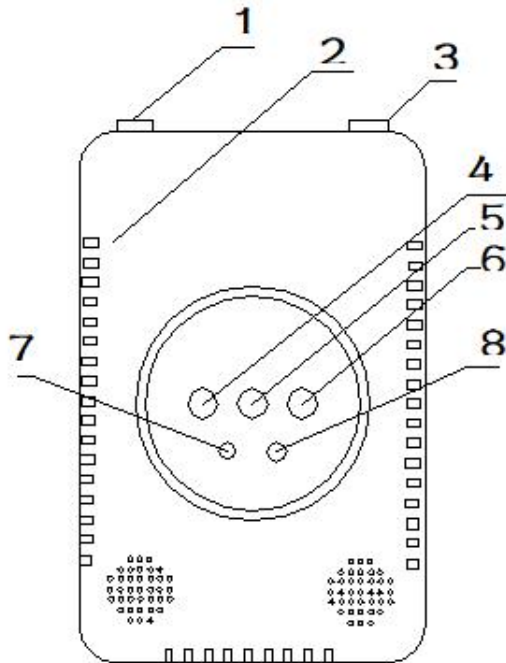
*(Version 2.00, 2025-07-10)*

|  |   |
|--|---|
| 1、 Product Structure Diagram.....          | 3 |
| 2、 Product Description.....                | 3 |
| 3、 Installation Instructions.....          | 4 |
| 4、 Operating Instructions.....             | 4 |
| 5、 Maintenance Instructions.....           | 5 |
| 6、 Output Protocol & Data Description..... | 6 |

**Zhengzhou Huirepu Electronic Technology Co., Ltd.**

Please read this manual carefully before installation and operation.  
Keep this manual properly for future reference.

## 1、 Product Structure Diagram



- 1—AC 220V Power Cable
- 2—Gas Inlet
- 3—Emergency Shut-off Valve Connection Cable
- 4—Power & Operation Indicator (Green)  
Flashing: Preheating  
Steady on: Normal operation
- 5—Fault Indicator (Yellow)  
Steady on: Sensor fault
- 6—Alarm Indicator (Red)  
Flashing: Gas alarm
- 7—Lifetime Indicator  
On: Sensor lifetime expired, replacement required
- 8—Self-test / Valve Control Button  
Short press: Self-test  
Press and hold for 10 seconds: Output one valve-shut signal

## 2、 Product Description

The JT-HR100 product features a core semiconductor sensor that is meticulously designed to offer high stability, long lifespan, strong resistance to interference and poisoning, and ease of installation and use. It is a high-quality product suitable for home gas safety systems.

### Technical Specifications:

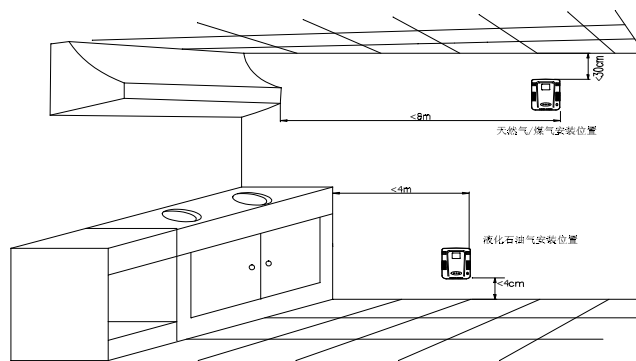
|  |   |
|--|---|
| Detectable Gas: Methane (CH <sub>4</sub> ) | Alarm Set Point: 8% LEL                   |
| Detection Range: 0 – 20% LEL               | Operating Voltage: AC 220V                |
| Humidity Range: < 95% RH                   | Enclosure Protection: IP30                |
| Output Contact Capacity: 60V / 2A          | Control Output: DC 12V, 1A (Pulse Output) |
| Gas Alarm Records: 200                     | Alarm Recovery Records: 200               |
| Fault Records: 100                         | Fault Recovery Records: 100               |
| Power-on Records: 50                       | Power-off Records: 50                     |
| Sensor Failure Record: 1                   | Control Output: DC 12V, 1A (Pulse Output) |

Sensor Lifetime: 5 years of cumulative powered operation Or 2 years of continuous storage without power.

When the sensor lifetime expires, the lifetime indicator will flash.If used for 5 years → Replace the detector immediately

If stored for 2 years without power → Re-calibration required

### 3. Installation Instructions



1) It should be installed 30-60cm from the ceiling and 1.5 meters from kitchen appliances; do not place it directly opposite the exhaust vent;

2) Drive M4 screws into the wall and hang the product onto the screws for secure installation;

- ◆ The alarm should be installed in an easily observable and easily inspected location.
- ◆ The alarm should be installed in a room with gas appliances or where a gas leak may occur; leaks in other rooms may not trigger the alarm.
- ◆ Vibration, dropping, or impact to the alarm during installation is strictly prohibited; otherwise, the alarm will become ineffective.
- ◆ The alarm should not be installed directly facing cooking fumes.
- ◆ The alarm should not be installed in well-ventilated areas or areas with strong airflow.
- ◆ The alarm should not be obstructed by other objects.
- ◆ The alarm should not be installed near vibrating objects such as refrigerators or air conditioners.

## **4. Operating Instructions**

1. Install and secure the alarm according to the installation instructions.
2. Connect the power supply. The green light will flash, indicating the alarm is in a preheating state and cannot perform normal detection.
3. After 3 minutes, the green light will stop flashing and remain constantly lit, indicating the alarm is in normal working condition.
4. If the alarm sounds continuously and the yellow indicator light remains constantly lit, the sensor is malfunctioning.
5. Alarm: When the flammable gas leak reaches a dangerous concentration, the red light will flash, the alarm will emit a "beep-beep-beep" sound, and the control valves in the pipeline will shut off the gas supply.
6. The lifespan indicator light will flash; please replace the alarm when its service life has expired.
7. Button Functions: "Self-Check" and "Valve" Buttons: Press and hold this button; all alarm lights will illuminate and the buzzer will sound. Stop pressing the button; the alarm will automatically return to normal operation. After more than 10 seconds, a valve shut-off function will be activated.

## **5. Maintenance Instructions**

For any malfunction of this product, the user must contact the local distributor or manufacturer directly. Do not attempt to disassemble, repair, or adjust it yourself. Our company will not be liable for any consequences arising from user-initiated repairs.

## **6. Output Protocol & Data Description**

Output parameters: Baud rate 4800, one stop bit, no parity bit

Reported output data format:

Start code + Product status + Concentration data + Lifespan status +  
Real-time time;

Start code: F0 F0 F0 F0

Product status:

0x2F is preheating

0x0B is normal

0x48 is alarm

0Xee is over-range;

Lifespan status is Working lifespan days;

Reported storage lifespan information format:

Start code + Product status + Concentration data + Storage lifespan +

Real-time time;

Storage lifespan is Continuous storage days;