GT Series

Gas Alarm Operation Manual

Hanwei Electronics Co.,Ltd

Precautions:

To avoid personal safety injury, instrument damage and potential dangerous accident; do not use the product before reading this manual. Unprofessional people do not open the connection cover.

1. Description

GT gas alarm is a kind of wall-mounted household gas alarm designed to detect the concentration of combustible and toxic gases or vapors using high quality air-sensitive component and manufactured with advanced technology. It provides visual and audible signals when the gas concentration reaches the presetting range, and reminds you to take prompt favorable action.

2 Specifications

Model	□GT401 □GT601
Working Power	AC220V±15% / AC110V±15% 50Hz
Power Consumption	≤1.5W
Working Conditions	Temperature: 0℃～55℃ Humidity：＜95%
Response time	≤30s resume automatically
Gas Sampling	Diffuse naturally
Alarm level	GT401：for natural gas 10%LEL
	GT601： for propane 10%LEL
Alarming Method	Visual and audible
Sound level	≥70dB
Weight	＜290g
Dimension	l×b×h,mm:125×85×45
Optional function	□Gas shut off valve □relay output

Note: the power and the alarming level can be specified.

3 Functions and Indications

1	POWER Light (Green)
2	W-UP Light (Yellow)
3	FAULT Light (Yellow)
4	Air vents
5	W-UP Button: press to stop the warm up.
6	TEST Button: press to test alarm function
7	ALARM Light (Red)

4. Installation

4.1 Fix the appliance on the wall at a horizontal distance as 2~4m from the cooker or gas source;

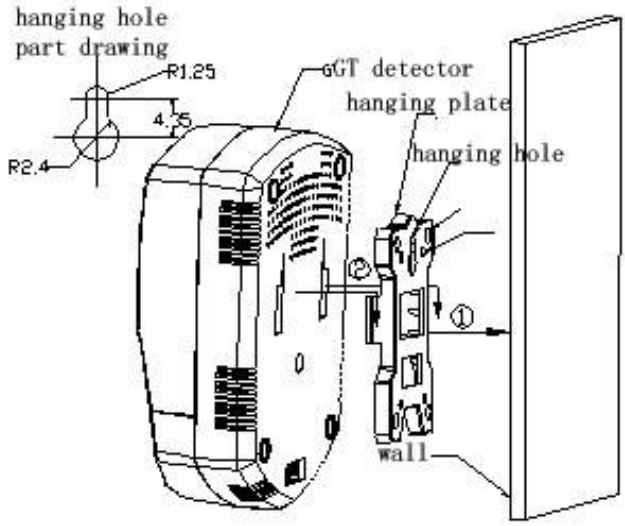
4.2 The vertical location of the appliance should be decided according to the type of gas sort:

- LPG：Fix it within 0.3 meters above the ground;
- Natural Gas：Fix it within 0.3 meters below the Roof
- Such location should be avoided：
  - Near the windows or passage with strong wind,
  - Water fog and drop or such moist place；
  - Easy polluted or high tem environment near Oven,
  - Covered by other things.

4.3 Choosing a proper installation way per conditions above.

Installation 1: Choose a suitable wall or place per the above 4.1, 4.2 requests. Fix the hanging plate onto the wall with M5 or M3 screw through the screw hole (as the following drawing, two optional types φ5 and φ3), then connect the appliance with the hanging plate.

Installation 2: Choose a suitable wall or place per the above 4.1, 4.2 requests. Fix a nail (sizeφ2) into the wall. Hang the appliance on the nail with the hanging hole as the drawing below:



5 Using Instructions:

5.1 GT401/ GT601

5.1.1. Plug in, (If ventilate fan, electro valve or other equipment is need to be connected, please connect corresponding circuit firstly.), then the green POWER light and yellow W-UP light will be on. The appliance assumes non-operating status for three minutes while the sensor warms up. After warm up, the yellow W-UP light will be off automatically and the appliance enters detecting status.

5.1.2. If the gas in the environment rises above the preset alarm level, the appliance will enter alarm status, the red ALARM light will shine and the buzzer will give sound alarming. Meanwhile, the alarm will activate the relay or the valve output; at the same time, please cut off gas supply promptly and open the window. Don't try to switch on or off any electric appliance, including mobile phone and such communications tools. Ask professional person to eliminate the gas leaking malfunction quickly (the alarm with function of gas shut off valve shall output one close pulse signal each 10 seconds)

5.1.3. Once the gas concentration around drop under the preset alarming level, the detector will stop alarming automatically and the ventilating fan will also stop automatically. The detector gets into detecting state again.

5.1.4. If the yellow fault alarm light is on, it shows there is something wrong with the detector and the detector can't detect gas. Then please contact the distributor.

5.1.1 Button operation:

W-UP: press this button to stop the warm up and the detector get into detecting state

immediately.

Test button: The appliance will simulate alarming by pressing test button under detecting status.

6 Troubleshooting Guide

Problems…	Maybe caused by…	Solution
Green POWER light is off	Plug in not correct	Plug in again
	light broken	Contact the distributor
Press test button without alarm sound	Circuit fault	Contact the distributor
Can't detect the gas	The preheat is not finished	Wait until the preheat finish
	Circuit fault	Contact the distributor
The alarm give alarm after the warm up	Too much smoke, alcohol or perfume or other volatility gas in the air.	Move the clean air and test again
	Stored too long	Warm up for more than 2 hours
	Circuit fault	Contact the distributor or factory maintain

7. Notices:

7.1 It's possible that the detectors give alarming in the conditions of long time smoking, drinking, or using perfume, gasoline, paint and other volatile organic compound；

7.2 Please do not use or store the detectors in the corrosive gases(such as Cl_2);

7.3 please do not use some non calibrated gas to test the detectors, If the gas concentration is too high, it will damage the detectors, also is harmful for human's health;

7.4 Clean the dust or dirt on the alarm frequently to keep air vent freely and the lights clear

7.5 The detector needs to be keeping power on for more than 24 hours after a long time delivery of storage.

7.6 Under normal usage, lifetime for Semiconductor sensor is more than 5 years, and more than 3 years for Catalytic sensor.

8 Gas Safety Knowledge

8.1 Sorts of gases

Normal domestic gas：LPG: propane and butane；

Coal Gas：hydrogen and carbon monoxide；

Natural Gas：methane；

All of the normal domestic gases is combustible gas, whose LEL (lowest explode limited) is below 10% of mixture with air.

When the concentration of the leaking gas in air, it will narcotize people's centre nerve, even cause suffocation.

Gas	Basis	Exploding Range	Toxicity
LPG	C_4H_{10}、C_3H_8	1.8%～9.5%	suffocation
Natural Gas	CH_4	5%～15%	suffocation
Coal Gas	H_2、CO	4%～75%	toxicosis

8.2 When the gas burning, it need abundant air, such as 1m^3 need about 30m^3.So the placed with hearth such as kitchen has to be keep ventilate.

8.3 LEL Meaning:

LEL is Lowest Explode Level. That is the lowest concentration of the gas in the air, which will cause exploding when meeting fire.

8.4 Reasons of gas leakage:

- Wrong ignition.
- The fire is put out with winds during the cooking.
- Fire is out during the cooking because of the change of the gas pressure.
- The gas valve is not shut off well.
- Wrong operation to the cooking tools.
- The gas pipe is destroyed.
- Other reasons.

8.5 Solutions of gas leakage:

- Put out the fire.
- Shut off the gas valve.
- Open the windows and doors.
- Check the leakage source.
- Don't try to turn off any electric equipment when alarming continuously. Call the gas company with the outdoor phone.
  Please knock at the door instead of pressing the doorbell when find gas leakage in your neighbors' home.

Declaration

To keep continued product improvement, **Hanwei** reserves the right to change design features without prior notice

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