

1. Description

EGD series gas alarm is a kind of wall-mounted household gas alarm designed to detect the concentration of combustible and toxic gas or vapors using high quality air-sensitive component and manufactured with advanced technology. It provides visual and audio signals when the gas concentration reaches the presetting alarm range, and reminds you taking prompt favorable action. You may start up other link equipments, open windows or shut off gas supply to avoid fire, explosion, suffocation, or other malignant accidents.

2. Specifications

Model	EGD200			
Working Voltage	AC220V±15% 50 Hz	AC110V±15% 50 Hz	12V DC	24V DC
Power Consumption	≤3W			
Environment	Temperature : 0°C ~55°C Humidity : <95%			
Response time	≤30s Resume automatically			
Gas Sampling	diffuse naturally			
	EGD200 : For Natural Gas 10%LEL			
Alarming Method	visual and audio			
Sound Level	≥70dB			
Weight	300g			
Dimension	lxbxh, mm: 135x82x41			
Optional Function	<input type="checkbox"/> gas shut off valve	<input type="checkbox"/> relay output		

Note: The working voltage and the alarming level can be specified.

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3. Functions and Wire Connection

3.1.1 Functions and indications

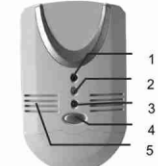


Fig. 1

1	ALARM Light (Red)
2	FAULT Light (Yellow)
3	POWER Light (Green)
4	TEST Button: Press to test alarm function
5	Air vents

3.1.2 Terminals

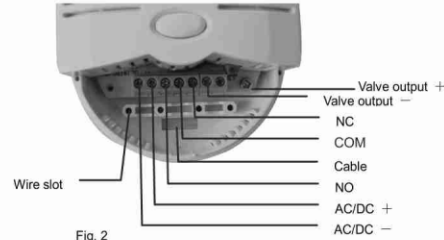


Fig. 2

4. Installation

- Fix the appliance on the wall at a horizontal distance as 2~4m from the cooker or gas source;
- The vertical location of the appliance should be decided according to the gas type:

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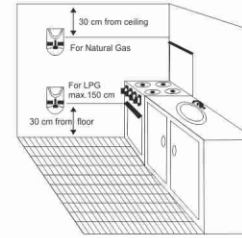
- ◆ LPG: Fix it 30 cm above the floor;
- ◆ Natural Gas: Fix it 30 cm below the ceiling;
- ◆ Such location should be avoided:

- 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.

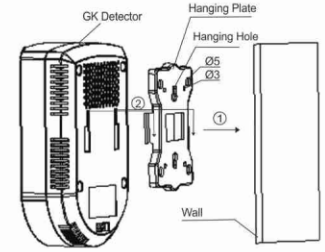
4.3 Choosing a proper installation way per conditions above.

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 ϕ 5 and ϕ 3), 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 (size ϕ 2) into the wall. Hang the appliance on the nail with the hanging hole as the drawing below:



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5. Operation Instructions:

5.1. Plug in. (If ventilate fan, solenoid valve or other equipment which is need to be connected, please connect corresponding circuit firstly.), then the green POWER light will be power on. The appliance assumes non-operating status for 3 minutes while the sensor warms up. After warm up, the yellow W-UP light will be power of automatically and the appliance enters detecting status.

5.2. 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. Please cut off the gas supply promptly and open the window. Do not try to turn on/off any electric appliance, including mobile phone and other communication 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).

5.3. Once the gas concentration around goes down under the preset alarming level, the detector will stop alarming automatically and the

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ventilating fan will stop automatically. The detector gets into detecting state again.

5.4. If the yellow fault alarm light is power on, it shows there is something wrong with the detector and the detector can not detect any target gas. Then please contact the distributor.

5.5. Button operation:

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

6. Notices:

- 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;
- Please do not use or store the detectors in the corrosive gases (such as Cl₂);
- 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;
- Clean the dust or dirt on the alarm frequently to keep air vent freely and the lights clear
- The detector needs to be keeping power on for more than 24 hours after a long time delivery of storage.

7. Gas Safety Knowledge

7.1 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.

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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 ₃ H ₈ C ₄ H ₁₀	1.8 % ~ 9.5 %	suffocation
Natural Gas	CH ₄	5 % ~ 15 %	suffocation
Coal Gas	H ₂ CO	4 % ~ 75 %	toxicosis

7.2 When the gas burning, it need abundant air, such as 1m³ need about 30m³. So the placed with hearth such as kitchen has to be keep ventilate.

7.3 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.

7.4 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.
- 7.5 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.

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**ELEKS ELEKTRİK - ELEKTRONİK
SİSTEMLER SAN. VE TİC. LTD. ŞTİ.**

HEAD OFFICE:

BAHÇELERARASI SOKAK, YILMAZLAR APT. NO:25/7
34744 BOSTANCI, İSTANBUL / TÜRKİYE

PHONE : +90 216 463 47 28

FAX : +90 216 463 47 31

eleks@eleksyangin.com
www.eleksyangin.com



**EGD Series
Gas Alarm Operation Manual**

ELEKS Elektrik -Elektronik Sistemler Sanayi ve Tic. Ltd. Şti.