

Natural Gas Alarm

User's Manual



1.Introduction

1.1 Overview

Natural Gas Alarm (hereinafter referred to as the Device) is designed to continuously monitor methane concentration. Adopting a catalytic-type gas sensor, advanced electrical technology, MCU, a built-in high-volume buzzer, it responds quickly and becomes highly sensitive with stable performance and low false alarm. Once the surrounding methane concentration reaches the alarm value, it will promptly send out visual and audible alarm signal to remind the user to take immediate measures. Application scenarios include homes, restaurants, hotels and other places that require methane detection.

1.2 Structure

Panel

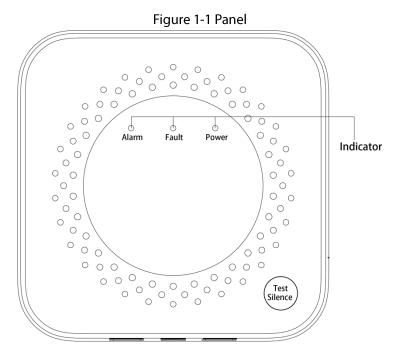


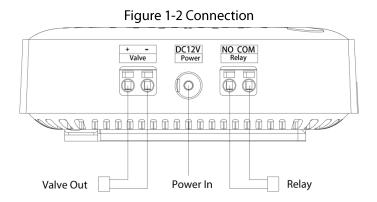
Table 1-1 Status introduction

Status	Introduction	
Power on	All indicators are constantly on for 3 seconds.	
Warm-up	During warm-up period: Power indicator flashes 3 minutes.	
	After warm-up period: After 3 minutes, all indicators are constantly on	
	for 3 seconds, and buzzer beeps.	
Standby	Power light is constantly on.	
Fault	Malfunctioned sensor: Fault indicator is constantly on, the buzzer	
	beeps continuously.	
	• End of life: Once the maximum lifetime (5 years) of sensor is reached,	
	the Fault indicator flashes and the buzzer beeps.	

Alarm

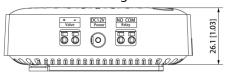
The alarm threshold is set to 10%LEL. When methane concentration reaches this threshold, the Alarm indicator is constantly on with the alarm sound.

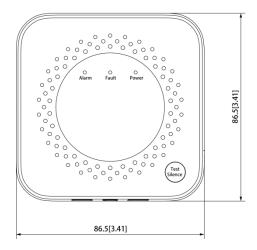
Connection

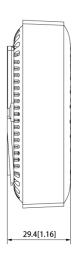


1.3 Dimensions

Figure 1-3 Dimensions (mm[inch])







2. Technical Information

Specification	Introduction		
Model	DHI-HY-GA40A		
Detection Gas	Methane (CH ₄)		
Alarm Threshold	10% LEL		
Response Time	≤30 s		
Supply Voltage	DC12V		
Power Consumption	≤0.8W		
Output	1 valve output, 1 relay output		
Operating Temperature	-10°C to +55°C (+14°F to +131°F)		
Relative Humidity	≤95% RH (non condensing)		
Warm-up Period	180 s		
Alarm Method	Visual and audible alarm		
Alarm Sound Level	70dB (A) at 1m (3.28 feet)		
Silence	Support		
Dimensions	86.6 mm × 86.6 mm × 29.2 mm (3.41" × 3.41" × 1.15")		
Installation	Wall mount		

3. Device Installation

3.1 Packing List

Check the package according to the following checklist. If you find device damage or any loss, contact the after-sales service.

Figure 3-1 Package checklist

Self-tapping Screw
Expansion Bolt

Screw Kit

Positioning Map

Power Adapter

Mounting Plate

User's Manual

Table 3-1Checklist

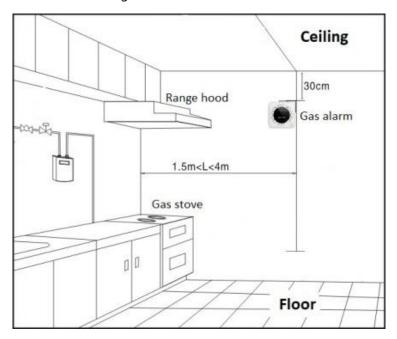
Name	Quantity
Gas Alarm	1
Positioning Map	1
Self-tapping Screw	2
Expansion Bolt	2
Power Adapter	1
Mounting Plate	1
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3.2 Installation Position

This Alarm is intended for use in ordinary indoor locations of family living units.

- The alarm should be at a horizontal distance of between 1.5 m (4.92 ft) and 4 m (13.12 ft) from the burning appliance or valve.
- It should be installed at least 0.3 m (0.98 ft) from ceiling. Avoid the installation in the corners, cabinets and other places where the air is not easy to circulate, or in the places where it is easy to be directly smoked by oil fume.

Figure 3-2 Installation Position

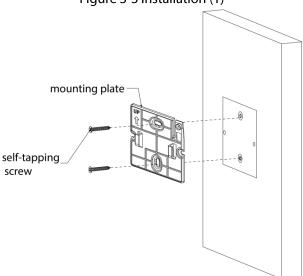


3.3 Installation Steps

Follow below steps to install the device properly.

- <u>Step 1</u> Choose suitable place to install positioning map.
- Step 2 Drill holes (Φ5 mm [0.20"]) on the wall as the positioning map shows, and then align the screw holes on the wall with the expansion bolts.
- <u>Step 3</u> Fix the mounting plate with self-tapping screws.

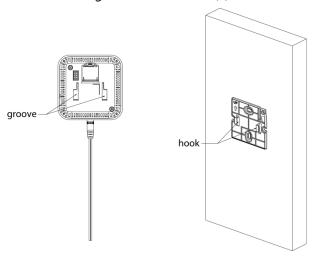
Figure 3-3 Installation (1)



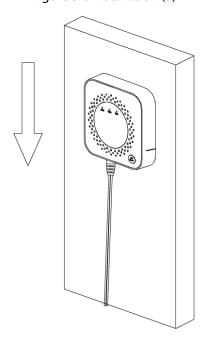
Step 4 Install the Device.

1) Put the hook on the mounting plate into the groove of the device.

Figure 3-4 Installation (2)



2) Put the device into the plate from top to bottom. Figure 3-5 Installation (3)



4.Test

After the installation of the Device or regular maintenance, a test must be carried out to confirm that the Device is operating properly.

During the testing process, the defective Device should be addressed according to "Frequently asked questions" and "Maintenance", and then tested again. If it fails to complete the test successfully, please send the Device to the manufacturer for repair.

Power on

After powering on, all indicator lights turn on for 3 seconds, the Device enters in warm-up status, and the Power indicator flashes. After 3 minutes, all indicators are constantly on 3 seconds and buzzer beeps.

Device self-test

- Press the **Test/Silence** button, all indicator lights flash and buzzer beeps.
- Press and hold the **Test/Silence** button, all indicator lights flash and buzzer beeps. The valve starts to output after 5 seconds. Release the **Test/Silence** button, the alarm sound ends, the indicator lights return to normal working status, and the check is completed.

Alarm test

The alarm concentration value is set to 10% LEL. When the methane concentration reaches this threshold, the Alarm light flashes and the Device sends sound signal. When the concentration is lower than the predetermined value, the Device returns to its normal working state.

5.Emergency Actions

When the indoor methane concentration reaches the predetermined threshold, the Device sends out alarm signal. Please carefully review the following guidance to take proper action in the event of an alarm.

- Keep calm and ventilate the property by opening doors and windows.
- Stop using all fuel-burning appliances, and do not turn on or off lights until the room has been checked by an expert.
- Evacuate the property leaving the doors and windows open.
- Stay away from the leakage place. Call the Fire Department as soon as possible from outside.
- Don't re-enter the property until the alarm has stopped and the leakage source is handled.



WARNING

- The maximum lifetime of sensor is 5 years. Please replace the device within 5 years after the day
 of installation.
- The apparatus should be installed by a competent person. It is designed to protect individuals
 from the acute effects of methane exposure and it will not fully safeguard individuals with
 specific medical conditions. If in doubt, consult a medical practitioner.

6.Frequently Asked Questions

Problem	Analysis	Solutions
Green Power indicator light does not flash	Poor connection of power cable	Check the connection of power cable
	Indicator light is broken	Contact the supplier for advice
Press Test/Silence button, there is no alarm	Circuit breaker	Contact the supplier
No response to detected methane	Circuit breaker	Contact the supplier
	Warm-up is not completed	Keep preheating sensor
The device continuously emits a sharp, high-pitched sound	There is a large amount of volatile substances such as alcohol, perfume, petrol or paint present	Move the device to clean air (outside) and let it "operate" for 2 hours to allow the gases to escape from the device
3 1	Circuit breaker	Contact the supplier

7. Maintenance

To keep your device in good working condition, please follow these requirements.

- Simulate fire alarm test: once half a year (recommended).
 Under normal working conditions, press the **Test/Silence** button to ensure that the Device can work normally. If there is a malfunction, please repair it in time. After cleaning, please install the Device and test again.
- Clean the shell: at least once per year (recommended).
 Keep the Device free of dust or inserts by gently vacuuming the shell with a soft brush attachment when required. Avoid cleaning solutions on the Device to prevent the possibility of contaminating the sensor.

8.Disposal



Waste electrical products should not be disposed of your other household waste. Please dispose in an environmentally friendly manner, and strictly follow the local regulations regarding the disposal or recycling of the electrical device.



Do not burn or dispose of in fire.

9.Warranty and Contact

If you need after-sales service, please contact your local dealer or retailer.

Western EU Importer: Dahua Europe B.V.

Address: Louis Braillelaan 80, 2719 EK Zoetermeer The Netherlands Email address for service purposes: support.benelux@dahuatech.com

CEE & Nordic Importer: Dahua Technology Poland Sp. z o .o.

Address: ul. Salsy 2, 02-823 Warszawa

Email address for service purposes: dh.cen@dahuatech.com

UK Importer: Dahua Technology UK Ltd.

Address: 3rd Floor, Quantum House, 60 Norden Road, Maidenhead, SL6 4AY

Email address for service purposes: support.uk@dahuatech.com

10. Documents

The full text of the EU declarations of conformity and EU declarations of performance is available at the following internet address: https://www.wisualarm.com/en/ServiceSupport/DownloadCenter

For more information, please scan the QR code below or visit https://www.wisualarm.com/en/Products/ALL.



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