alhua | WISUALARM

User's Manual

EN Carbon Monoxide Alarm
DE Kohlenmonoxidmelder
ES Alarma de monóxido de carbon
FR Détecteur de monoxyde de carbone
NL Koolmonoxidemelder
PL Czujnik tlenku węgla
IT Rilevatore di monossido di carbonio

ZHEJIANG HUAXIAO TECHNOLOGY CO., LTD. V1.0.0

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1 Information on carbon monoxide

What is carbon monoxide (CO)

Carbon monoxide is an odourless, tasteless, highly toxic and flammable gas produced by the incomplete combustion of carbon-based fuels. Prolonged exposure to a carbon monoxide-rich environment leads to serious tissue damage or even death.

What are the symptoms of carbon monoxide poisoning?

- Mild exposure (about 100–200 ppm): mild headache, nausea, vomiting, fatigue (often described as "flu-like" symptoms).
- Medium exposure (about 400 ppm): violent throbbing headache, drowsiness, confusion, fast heartbeat.
- Extreme exposure (about 800 ppm): unconsciousness, convulsions, cardiorespiratory failure, death.

Parts per Million (PPM)	Effects on Adults
100	Mild headache, nausea, vomiting, fatigue (often described as "flu-like" symptoms).
200	Dizziness and headache within 2–3 hours.
400	Nausea, frontal headache, drowsiness, confusion and rapid heart rate. Risk to life after over 3 hours of exposure.
800	Severe headaches, convulsions, vital organ failures. Death possible within 2–3 hours.

Where does carbon monoxide come from?

Carbon monoxide is caused by poor or incomplete combustion.

- A furnace, boiler, cooker, pellet stove, fireplace, wood stove, charcoal grill can be sources of carbon monoxide, especially if they are not working properly or if they are located in a poorly ventilated room.
- Vehicle exhaust gases in enclosed spaces (garage) can also become carbon monoxide hazards.
- With the use of paraffin heaters or charcoal grills/bbqs indoors or running a car in a garage, carbon monoxide levels can get so high that it can cause death.

How do I know if carbon monoxide is present?

Poisoning is measured in a range called parts per million (ppm). This CO Alarm monitors the level of carbon monoxide (CO) in the air. If the CO concentration is too high, the detector sounds a loud alarm. When the alarm sounds, warn all household members, go outside immediately and call 112.

How do I protect myself and my family from carbon monoxide poisoning?

- Install one or more carbon monoxide detectors in your home.
- Have your home's heating system, boiler and other gas, oil or coal appliances checked every year by a competent person or company.
- Make sure that your combustion appliances and engines are well ventilated.
- Have your chimney checked and cleaned every year.
- Use gas appliances as recommended. Never use a gas cooker or oven to heat indoor areas.

What should I do if the carbon monoxide detector goes off?

When the carbon monoxide concentration reaches a dangerous level, the carbon monoxide detector emits a loud alarm signal (85dB) and the Alarm LED flashes rapidly.

- Inform all household members of the danger.
- Go outside immediately and call 112.
- Do not re-enter the premises until the alarm has been stopped and the source of the leak has been dealt with by an expert.

⚠ CAUTION

Unlike a smoke detector, a carbon monoxide detector does not easily give false alarms. If the CO Alarm goes off, take it seriously and assume that there is an excessive concentration of CO somewhere.

2 Important precautions and warnings

This manual will help you to use the detector correctly. Read this manual carefully before using the detector. Keep this manual for future reference.

Instructions for use

⚠ WARNING

- Never ignore an alarm. Failure to respond may result in serious injury or death.
- Do not attempt to open or disassemble the detector. There is a risk of electric shock or malfunction if the detector is tampered with.

⚠ CAUTION

- Transport, use and store the detector under the permitted humidity and temperature conditions.
- Prevent liquids from splashing or dripping on the detector. Prevent liquid from entering the detector by ensuring that no objects containing liquid are placed on top of it.
- This CO Alarm is designed to detect only the presence of CO; it cannot detect smoke, gas, heat or flames.
- This device is not intended for use by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the detector by a person responsible for their safety.
- Vapours or gases, e.g. in cleaning liquids, polishes, paints, cooking processes, etc., can affect the detector's reliability in the short or long term.

Installation instructions

⚠ WARNING

If you do not install and operate this detector properly, it will not function properly and will not react adequately to carbon monoxide hazards. See Section 5 for proper installation.

⚠ CAUTION

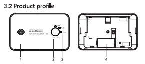
- Before installation, read Section 5 on the correct installation location of the CO Alarm.
- Do not expose the detector to direct sunlight or heat sources.
- The detector must be installed by a competent person.

3 Product

3.1 Product information

This Carbon Monoxide Alarm responds quickly with high sensitivity, stable performance and low false alarms when there is too much Carbon Monoxide in the air. This detector is able to measure carbon monoxide levels as low as 30 ppm using the high quality sensor. As soon as the ambient carbon monoxide concentration reaches the alarm value, the detector sounds a loud 85dB alarm and the alarm LED flashes rapidly. This detector is certified in accordance with the latest European standard EN 50291-1:2018/AC:2021 for carbon monoxide detectors.

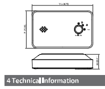
3.2 Product profile



No.	Section	Description
1	Buzzer	Alarm sound: 85dB (A) at 3 meters.
2	Test/Silence button	Check normal operation: press the Test/Silence button; the detector now beeps 3 times and all LED lights will flash 3 times. Stop the alarm sound: Press the Test/Silence button and the device will temporarily stop the alarm sound (45 seconds).
3	Indicator	Standby: Power LED flashes once per minute. Alarm: Alarm LED flashes red. Fault: Fault LED is flashing yellow.
4	Battery compartment	Replaceable CR123A battery.

3.3 Dimensions

Figure 3-1 Dimensions (mm [inch])



4 Technical Information

Parameter	Introduction
Detection gas	Carbon monoxide (CO)
Alarm triggered at the specific CO concentration within the time periods listed	50 ppm: 60–90 min; 100 ppm: 10–40 min; 300 ppm: < 3 min
Operating voltage	3 V direct current (DC)
Guard current	≤ 20 μA
Alarm current	≤ 10 mA
Operating temperature	–10 °C to +55 °C
Relative humidity	≤ 95% RH (non-condensing)
Alarm method	Visual and audible alarm
Alarm volume	≥ 85 dB (A) at 3 m
Muting	Support
Dimensions	116.4 mm × 71.7 mm × 28.3 mm
Installation	Mounting plate for wall
LED light	Red: Alarm; Yellow: Fault; Green: Standby (1x per minute)
Sensor lifetime	10 years
Battery life	10 years
Duration silence	45 sec
Certificates	EN 50291-1:2018/AC:2021

5 Installing the detector

5.1 Package content

Check the contents of the package against the list below. If the detector is damaged or a part is missing, please contact the supplier.

Table 5-1 Checklist

Name	Number
Carbon monoxide detector	1
Drilling template	1
Set of screws/plugs	1
Battery	1
User Manual	1

5.2 Installation position

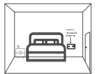
In which room should the detector be installed?

Preferably install a carbon monoxide detector in every room with a combustion appliance. For added safety, also install detectors in living rooms and bedrooms. Make sure you can always hear the detector when it sounds the alarm.

Where in the room should the detector be installed?

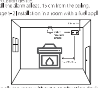
- Install in a bedroom **without a combustion device**.
  - ◇ Install the alarm at the occupants' breathing height.
  - ◇ Never install the alarm on or near the floor. Carbon monoxide mixes with air and will therefore rarely travel to the floor.

Image 5-1 Installation in a bedroom without a fuel appliance



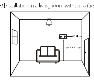
- Install in a living room **with a combustion device** (stove, boiler, fireplace, gas fire).
  - ◇ Install the alarm above the combustion device. Carbon monoxide rises to the surface due to the hot gases from the combustion device.
  - ◇ Install the alarm at least 15 cm from the ceiling.

Image 5-2 Installation in a room with a fuel appliance



- Install in a living room **without a combustion device**.
  - ◇ Install the alarm on a wall about 1.5 meters to 1.6 meters above the floor.
  - ◇ Never install the alarm on or near the floor. Carbon monoxide mixes with air and will rarely travel to the floor.

Image 5-3 Installation in a living room without a fuel appliance



Do not install a CO detector here

- Dusty, dirty, greasy or damp areas.
- In poorly ventilated kitchens, garages, boiler rooms, confined spaces (e.g. in a cupboard or behind a curtain) where smoke or fumes circulate under normal working conditions.
- Near stoves, cookers and other hot and easily contaminated places.
- Against or near the floor.
- Directly above the source of heat and steam.
- In direct sunlight.
- Near obstructed areas (e.g. by furniture).
- Next to a door or window, exhaust fan, air vent or other similar ventilation openings.
- In rooms where the temperature may drop below –10 °C or rise above 55 °C.

5.3 First use

Carefully remove the plastic tab from the battery.

Step 1 Select a suitable location for placing the drilling template.

Step 2 Mount the detector with screws or a magnetic mounting kit (not included).

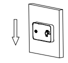
- Screw

1) Drill screw holes (5 mm) according to the drilling template on the mounting surface and then insert the dowels into the holes.

Figure 5-4 Installation (1)

2) Attach the detector to the mounting surface.

Figure 5-5 Installation (2)



Step 3 After installation, test the detector by pressing the **Test/Silence** button. Check that the LED lights and buzzer and are working properly as described in chapter 3.2.

6 Device Status

LED status	Alarm sound	Unit status	Solutions
All LED lights flash 3 times	The buzzer beeps 3 times	Self-test	No
The Power LED blinks green once per minute	No	The detector switches on and works normally	No
The Alarm LED flashes red once per second	The buzzer beeps 1 time per second	A carbon monoxide leak has been discovered	Inform all household members, go outside immediately and call 112
The Fault LED flashes yellow once a minute	Buzzer beeps 1 time per minute	Battery low	Replace the battery immediately
The Fault LED flashes yellow 2 times per minute	The buzzer beeps 2 times per minute	Failure	See chapter 9 Frequently asked questions
The Fault LED flashes yellow 3 times a minute	The buzzer beeps 3 times per minute	End of life	The maximum service life has been reached. Replace the device immediately

7 Testing and maintenance

7.1 Testing

After installing or maintaining the detector, always perform a test to check that it is working properly. See section 3.2. If the detector fails the test, contact the supplier.

Self-test device

Press the **Test/Silence** button; the 3 LED lights will now flash rapidly and the buzzer will beep 3 times.

Empty battery

When the battery voltage drops below a certain threshold, the Power indicator flashes and the buzzer beeps every minute until the battery is empty. Replace the battery immediately with an approved type. After replacing the battery, retest the detector.

7.2 Maintenance

- Clean the detector at least once a year by cleaning the housing. Use a soft cloth or the soft brush of a hoover for this purpose. Avoid applying cleaning agents to the detector to avoid possible contamination of the sensor.
- Test the detector every week (recommended). Under normal operating conditions, press the **Test/Silence** button once to ensure that the buzzer and LED lights operate normally. If a malfunction occurs, please correct it in time.

8 Battery Replacement

When the detector gives a low battery warning, replace the battery immediately. Test the detector every time you replace the battery. When replacing the battery, pay close attention to the positive and negative polarity markings (+ and –).

NOTE

Recommended battery: CR123A

⚠ WARNING

The sensor of this carbon monoxide detector has a service life of 10 years. After this, the detector is unreliable. So always replace the detector after 10 years.

Figure 9-1 Replacing the battery

9 Frequently asked questions

Problem	Analysis	Solutions
The green Power LED does not blink once per minute	The battery is not installed	Insert battery or pull out plastic insulator tab
	The LED is broken	Contact the supplier for advice
Press the **Test/Silence** button, there is no alarm	Circuit breaker	Contact the supplier
No response to detected carbon monoxide	Circuit breaker	Contact the supplier
The detector 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 detector to fresh air (outside) and let it "open air" for 2 hours to allow the smell to escape from the detector.
	Circuit breaker	

10 Disposal

Waste electrical products must not be disposed of with other household waste. Please dispose of the electrical appliance in an environmentally-friendly manner and in strict accordance with local regulations on the disposal or recycling of electrical appliances.

⚠ WARNING

Do not burn or throw into fire.

11 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: partner@wisualarm.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

Germany Importer: Dahua Technology GmbH
Address: Niederkasseler Lohweg 185, 40547 Düsseldorf
Email address for service purpose: support.de@dahuatech.com

12 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/A...

Installeer hier géén CO melder

- Stoffige, vuile, vettige of vochtige gebieden.
- In slecht geventileerde keukens, garages, stookruimten, afgesloten ruimten (bijvoorbeeld in een kast of achter een gordijn) waar rook of dampen circuleren onder normale werkomstandigheden.
- Nabij kachels, kooktoestellen en andere hete en gemakkelijk te verontreinigen plaatsen.
- Tegen of nabij de vloer.
- Direct boven de bron van warmte en stoom.
- In direct zonlicht.
- Nabij belemmerde gebieden (bijvoorbeeld door meubilair).
- Naast een deur of raam, afzuigventilator, luchtrooster of andere soortgelijke ventilatieopeningen.
- In ruimten waar de temperatuur onder −10 °C kan dalen of boven 55 °C kan komen.

5.3 Eerste gebruik

Verwijder voorzichtig het plasticlipje van de batterij.

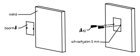
Stap 1 Kies een geschikte plaats voor het plaatsen van de boormal.

Stap 2 Bevestig de melder met schroeven of een magnetische montageset (niet meegeleverd).

- Schroeven

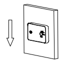
1) Boor schroefgaten (5 mm) volgens de boormal op het montagevlak en steek vervolgens de pluggen in de gaten.

Afbeelding 5-3 Installatie (1)



2) Bevestig de melder op het montagevlak.

Afbeelding 5-4 Installatie (2)



Stap 3 Na de installatie test u de melder door op de knop **Testen /Dempen** (Test/Silence) te drukken. Controleer of de LED lampjes en de zoemer goed werken zoals beschreven in hoofdstuk 3.2.

6 Werking

11 Garantie

Heeft u nog extra service nodig, neem dan contact op met uw lokale dealer of verkoper.

Westelijke EU-importeur: Dahua Europe B.V.

1 Informacje na temat tlenku węgla

Czym jest tlenek węgla (CO)

Tlenek węgla (czad) jest bezwonnym, bezsmakowym, silnie trującym i bezwonnym gazem powstającym w wyniku niepełnego spalania paliw zawierających węgiel.