# EN 1D39A Photoelectric smoke detector



Thank you for purchasing our combined smoke and carbon monoxide detector. Please read this manual carefully and heed the safety warnings and instructions before installing, using or repairing the device. This will ensure not only the protection of persons, but also the long life of the equipment.

### **TECHNICAL PARAMETERS**

Meets standards	EN 14604:2005/AC:2008	
Weets standards	EN 50291-1:2018	
Type of device	B - visual and audible alarm	
Power	2x 1.5V AA batteries	
Smoke sensor	Photoelectric	
Smoke sensor sensitivity	0.25 db/m	
Silencing the smoke alarm	Approximately 10 minutes	
CO (Carbon monoxide) sensor	Electrochemical	
CO sensor sensitivity	Complies with EN50291-1:2018 50PPM Between 60 and 90 minutes 100PPM between 10 and 40 minutes 300PPM less than 3 minutes	
Lifetime of the device	Approximately 10 years	
Standby current	<50μA (average)	
Current in case of alarm	<70mA (average)	
Conditions of operation	-10°C~+50°C, <95%RH non-condensing	
Storage conditions	-10°C~+50°C, <95%RH without condensation	
Alarm volume	≥85 dB at 3m	
Place of installation	ceiling or wall	
Detection range	max. 40m2 room	
Size	Φ105*39mm	
Weight	Approximately 180g	

#### Note:

The device is designed for smoke and carbon monoxide detection only. It is not designed to detect other gases!

# **NOTICE**

- This combination smoke and carbon monoxide detector has been designed to detect both smoke and carbon monoxide from any combustion source in a residential environment. It is not intended for use in recreational vehicles (RVs) or boats.
- This combination smoke and carbon monoxide detector has been designed for indoor use only. Do not expose it to rain or moisture. Handle the device with care and avoid major shocks. Do not open or modify/repair the device as this could cause it to malfunction or cause injury to you. If you have dropped the device and it does not work, replace the device.
- This combination smoke and carbon monoxide detector is designed to detect carbon monoxide gas from ANY combustion source. It is NOT designed to detect any other gas!
- This combined smoke and carbon monoxide detector does not protect against the risk of smoke or carbon monoxide poisoning if the battery runs out.
- The installation of this equipment is not a substitute for the proper installation, use and maintenance of fuel burning appliances, nor is it a substitute for ventilation and exhaust systems.
- The equipment should be installed by a competent person who understands the risks of misuse.
- The device is not designed to warn people with hearing impairment.
- The TEST/SILENCE button tests the functions of the device. Do not use any other test method. Test the device weekly to ensure proper operation.
- If you are sure that the alarm has been misjudged, open the windows and wait for the alarm to go off or silence the alarm with the button.
- Observe all local electrical and building codes during installation.
- This device is intended for indoor use only. In multi-family buildings, each individual dwelling unit should have its own smoke alarm device. Do not install in non-residential buildings. A device is not a substitute for a complete security alarm system.

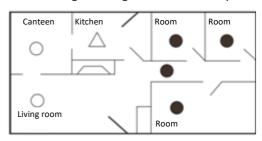
- Install a detector in every room and on every floor of the house. Smoke may not reach the detector for many reasons:

  For example, if a fire starts in a remote part of the house, on another floor, in a chimney, in a wall, on the roof or on the other side of a closed door, the smoke may not reach the equipment in time to warn household members. This device will not immediately detect a fire or CO hazard except in the area or room in which it is installed.
- If there is a risk that a member of the household may not be able to hear or respond to the alarm for any reason, use other special smoke/CO detection measures.
- The device triggers an alarm if it detects smoke or the presence of burning particles or dangerous levels of CO in the air. The device does NOT emit heat, flame or other gas.
  - The device is designed to give audible warning of an incipient fire. Many fires are fast burning, explosive or intentional, others are caused by negligence or safety hazards. In these cases, smoke may not trigger the device alarm FAST enough to ensure safe escape of persons.
- This device has its limitations. The device is not guaranteed to protect the property and health of persons. Users should always consider whether the protection they use is sufficient. In addition, it is possible that the equipment may fail at any time. For this reason, the equipment should be tested at least once every week and replaced every 10 years.
- The device must be installed on the bracket provided. When choosing the installation location, make sure that the alarm can be heard from all sleeping areas. If you are installing only one device in the house, install it near the bedrooms, not in the basement or in a room with a combustion appliance.

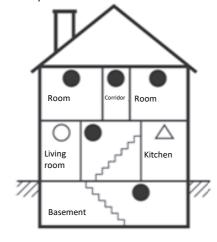
#### LOCATION

Strict adherence to the installation and placement instructions is essential for the correct functionality of the device!

Installation design for single and multi-storey houses.



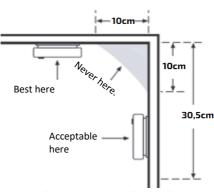
•	Detector installation required	
0	Optional detector installation	
Δ	$\triangle$ Optional installation of detectors for increased protection	



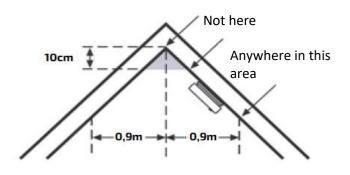
- For maximum protection, we recommend installing the unit on each floor of a multi-storey house, as well as in every bedroom, hallway, living loft and basement, etc. Install the unit at both ends of a corridor or large room if the corridor or room is longer than 10 m. If you have only one detector, install it in the hallway outside the master bedroom or in the master bedroom. Check that the alarm can be heard in all bedrooms.
- As carbon monoxide gas is lighter than air, select a suitable position for installation, i.e. 1.5 2.5 m above the floor. Ensure that the device is visible (at eye level) so that the red and green indicator lights can be seen.
- Place the device at least 3m away from the combustion device.
- When mounting the device on the ceiling, place it at least 10 cm from the side wall.
- When mounting the device on a wall, use an internal wall with the top edge of the alarm at least 10 cm and no more than 30.5 cm below the ceiling.
- Install the device on sloping, pointed or round ceilings at the highest point or within 0.9 m of it (measured horizontally).
- Smoke, heat and fumes rise towards the ceiling and spread horizontally. By mounting in the middle of the room, the sensor is closest to all points in the room.

#### Locations unsuitable for installation:

- Places where smoke is permanently present.
- Close to appliances or places where regular combustion takes place (kitchens, near stoves, hot water heaters). Install in places about 3 m away from these devices.
- Locations with humidity greater than 95%, or temperatures below -10°C or above 55°C.
- Locations with high levels of dust, water vapour or oil vapour.
- Locations with high wind speeds (5m/s or more), or near windows, fans, heating vents, etc.
- Near fluorescent lamps. Electronic "noise" can cause unwanted alarms.
- Do not place the detector in the vicinity of: direct air flow from ventilation vents, exhaust fans, doors, windows, steam sources, oil steam, etc.
- Do not spray aerosols near the equipment.
- In extremely dusty, dirty or insect-infested areas.
- In the garage. Combustion products are present when the car is started.
- Where the detector can be covered (e.g. by furniture, curtains)
- Place out of reach of children. Never allow children to handle the device.



Wall and ceiling installation illustration



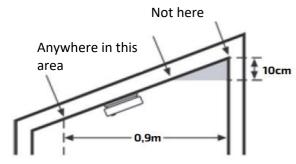


Illustration of suitable and unsuitable installation on different ceilings

#### **NOTES:**

Sharps or impact during shipping or installation can easily affect or malfunction the detector.

- 1. This device is a carbon monoxide and smoke detector that cannot detect flammable gas (e.g. liquefied petroleum gas, natural gas, methane, etc.).
- 2. Regular maintenance: clean the surface once a month.
- 3. Do not use detergents to clean the detector these may cause damage.
- 4. Do not spray any sprays such as air fresheners, hair sprays, etc. on the device.
- 5. This product is designed to reduce the possibility of hazards, but cannot eliminate them completely.

# **INSTALLATION**

- 1. Insert 2x 1.5V AA batteries into the detector.
- Drill two holes (Ø 5mm) in the ceiling (according to the location of the holes on the bracket).
- 3. Insert dowels into the holes.
- 4. Screw in the bracket (do not tighten the screws too tightly).
- 5. Rotate (clockwise) to attach the detector to the bracket.
- 6. Test the device using the test button

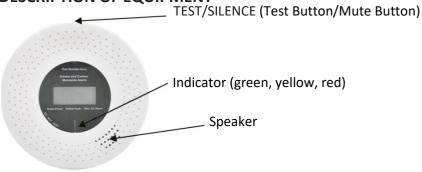
# Remark:

After installation, it is possible that the alarm will analyze the environment for a few minutes and make a sound, then switch to normal operating mode. Then test the device.

#### Remark:

**To disassemble** the detector, rotate the detector (counterclockwise) to separate it from the mounting pad.

# **DESCRIPTION OF EQUIPMENT**



#### Indicator

It is used for light indication of various conditions:

- **Green indicator**: Used to indicate the power status of the device. The green indicator flashes every 40 seconds.
- Yellow indicator: Used to indicate a fault or warning condition of the device's low battery.
- **Red indicator**: Alarm for high smoke level, Alarm for high CO level.

# **Test/Mute button (TEST/SILENCE)**

The button is used to test the alarm (press and hold) or to silence an active alarm (press).

#### Speaker

Used for audible warning in case of smoke alarm, CO alarm.

# First start-up and operation:

- When the battery is connected, the three colour indicators (green/yellow/red) light up briefly and the device confirms start-up with an audible signal and starts counting down from 90s, then goes into normal operation mode.
- When the detector is switched on, 90 seconds before the detection starts, the green LED flashes every 2 seconds, this is the preheat state. After these 90 seconds the green LED flashes every 40 seconds, indicating the detector is operating correctly.
- **Normal operation**: The green indicator flashes every 40 seconds.
- Failure: When a fault is indicated, the device will beep twice every 40 seconds, flash yellow and display "Err" on the LCD. This
  indicates that the device is in a sensor fault condition and is no longer detecting or alerting.
   NOTE: If a detector error occurs, disassemble the device and contact your dealer or importer.
- **Low battery**: If the device beeps once every 40 seconds and flashes yellow, the battery is low. Replace the battery as soon as possible.

**Note:** If a low battery indication occurs, the device is still capable of triggering a smoke alarm or CO alarm signal for at least 4 minutes or 30 days of low battery warning signal operation.

- Smoke alarm: If the device detects a dangerous amount of smoke, it will sound an alarm.

The alarm (4 beeps, 1 second silence and a simultaneous red light signal of 4 flashes, 1 second pause) will sound repeatedly until the dangerous amount of smoke disappears or you manually silence it with the button.

If you silence the device with the button during the alarm, the audible signaling will pause for approximately 10 minutes, the light signaling (red) will continue to flash.

#### Note

The device is designed to minimize false alarm evaluation. A false alarm may occur if the appliance is placed near a cooking, grilling or frying area. To minimize these false alarms, prevent them by using, for example, a hood while cooking.

Only use the mute button when you are sure that there is no danger and the alarm has been triggered due to a misjudgement of the situation.

- **CO alarm**: If the device detects a dangerous amount of CO, it will trigger an alarm.

The alarm (4 beeps, 2 seconds of silence and a simultaneous light signal of 4 flashes, 2 seconds of pause) will sound repeatedly until the dangerous amount of CO disappears or you manually silence it with the button.

If the device is muted with the button during an alarm, the sound signaling will be suspended for about 10 minutes, the light signaling (red) will continue to flash.

CO detection sensitivity setting:

In accordance with EN 50291-1:2018

50PPM between 60 and 90 minutes 100PPM between 10 and 40 minutes

300PPM less than 3 minutes

NOTE: If the detected CO concentration exceeds 20 PPM and does not exceed the concentration set to alarm, the LCD will display the real-time concentration value and the CO, PPM symbol, the device will not alarm.

NOTE: When both smoke and carbon monoxide are present, the device will alternately display CO and SMOKE (change after 1 second)

# - Device testing

To test the device, press the TEST/SILENCE button, you should hear the alarm beeps and the corresponding ALARM (red) indicator flash.

Test the device at least 1 weekly, if the device is not working properly it must be replaced immediately.

#### Note:

If at any time the device does not work, replace it immediately.

#### Note:

Do not use open fire/flame to test equipment, damage to equipment or ignition of combustible materials could occur.

#### Remark:

Due to the loudness (85 decibels) of the alarm, always stand at least 50cm away from the device when testing.

### End of life warning for equipment

The lifetime of the equipment is 10 years. If the device reaches the end of its life, the device will beep 3 times, the yellow indicator will flash 3 times and the display will show "End". This will repeat every 50 seconds. At this point, the device no longer detects and warns of risks, immediate replacement is required.

# **PROBLEM SOLVING**

Never repair the equipment. In the event of a malfunction, claim the warranty. If the device is no longer under warranty, replace it

Problem:	Solution:
The device does not make a sound when the TEST/SILENCE button is pressed.	<ol> <li>The device is switched off.</li> <li>The device is in "Silent Smoke Alarm" or "Silent Low Battery Alarm" or "Fault Warning" mode. Make sure the device is in "Normal Operation" mode and then test the device.</li> <li>Clean the device.</li> <li>You can return the device to the dealer if there are still malfunctions during the warranty period.</li> <li>If the instrument is out of warranty, replace it with another new instrument.</li> </ol>
The device will beep once and the FAULT (yellow) indicator will flash once every 40 seconds.	LOW BATTERY SIGNAL. The battery is in a low voltage state, replace it.
The device will beep twice and the FAULT (yellow) indicator will flash twice in 40 seconds.	FAULT SIGNAL. Clean the device  1. If the device is under warranty, return it to the dealer for replacement.  2. If the device is out of warranty, replace it with a new device.
The device emits unwanted sound signals when residents are cooking, showering, etc.	<ol> <li>Press the TEST/SILENCE button to pause the alarm.</li> <li>Wait until the area is clear of smoke or vapour</li> </ol>

### **GENERAL INFORMATION**

To keep the equipment in good condition, follow these instructions:

- 1. Once a week, check that the device beeps and that the indicators are working by switching on the TEST/SILENCE button.
- 2. Once a month, remove the unit from the ceiling and clean the alarm cover and vents with a soft brush to remove dust and dirt.
- 3. Never use detergents or other solvents to clean the unit.
- 4. Do not spray air fresheners, hairsprays or other aerosols near the device.
- 5. Do not paint the device. Paint will seal the vents and interfere with the sensor's ability to detect CO. Never attempt to disassemble or clean the inside of the unit. Doing so will void the warranty and compromise the proper operation of the unit.
- 6. After cleaning, place the equipment back in its proper location as soon as possible to ensure continued protection against fire and carbon monoxide poisoning.
- 7. When household cleaners or similar contaminants are used, the area should be ventilated.

# Warning:

The following substances may affect the sensor and cause false actions: methane, propane, isobutene, isopropanol, ethylene, benzene, toluene, ethyl acetate, hydrogen sulfide, sulfur dioxide, alcohol-based products, paints, thinners, solvents, adhesives, hairsprays, aftershave, perfumes, and some cleaning products. In this case, the equipment may not work properly, use extra caution.

## **BATTERIES**

- This device is powered by 2 alkaline 1.5V AA (LR6) batteries. Once activated, the battery will power the device for 3 years under normal operating conditions - depending on the type of battery used.

Note: Continuous exposure to high or low humidity may shorten battery life.

- This device is equipped with a function that automatically activates the alarm when the batteries are installed.
- Always change the batteries carefully to avoid damage to the batteries and subsequent injury.
- Dispose of the batteries in a suitable place.

The product is covered by a CE Declaration of Performance in accordance with EU Regulation 305/2011. The Declaration of Performance number 2531-CPR-CSP11346 is available on request from the manufacturer: info@solight.cz or downloadable from www.solight.cz.

Manufacturer: ShenZhen Jikaida Technology Co., Ltd Add: 201, Buiding 7, ChuangYe Industrial Park, ShaPuWei Community, Songgang Street, Bao'an District, ShenZhen, China

Importer: Solight holding s.r.o, Na Brně 1972, Hradec Králové.

