

# smartwares 2 in 1 Combi Carbon Monoxide, Gas Detector **Instruction Manual**

Home » smartwares » smartwares 2 in 1 Combi Carbon Monoxide, Gas Detector Instruction Manual





2 in 1 Combi Carbon Monoxide, Gas Detector **Instruction Manual** 



## **Contents**

- 1 2 in 1 Combi Carbon Monoxide, Gas Detector
- **2 INTRODUCTION**
- **3 DESCRIPTION OF THE PRODUCT**
- **4 PRECAUTIONS AND SAFETY INSTRUCTIONS**
- **5 COMPOSITION OF THE PRODUCT**
- **6 INSTALLATION**
- 7 OPERATION OF THE CO AND GAS

## **DETECTOR**

- **8 GENERAL MAINTENANCE**
- **9 CARBON MONOXIDE**
- 10 Disposal
- 11 MAINTENCE
- 12 SAFETY
- 13 Documents / Resources
- **14 Related Posts**

# 2 in 1 Combi Carbon Monoxide, Gas Detector

2 in 1 combi

Carbon monoxide / GAS detector DECLARATION OF PERFORMANCE

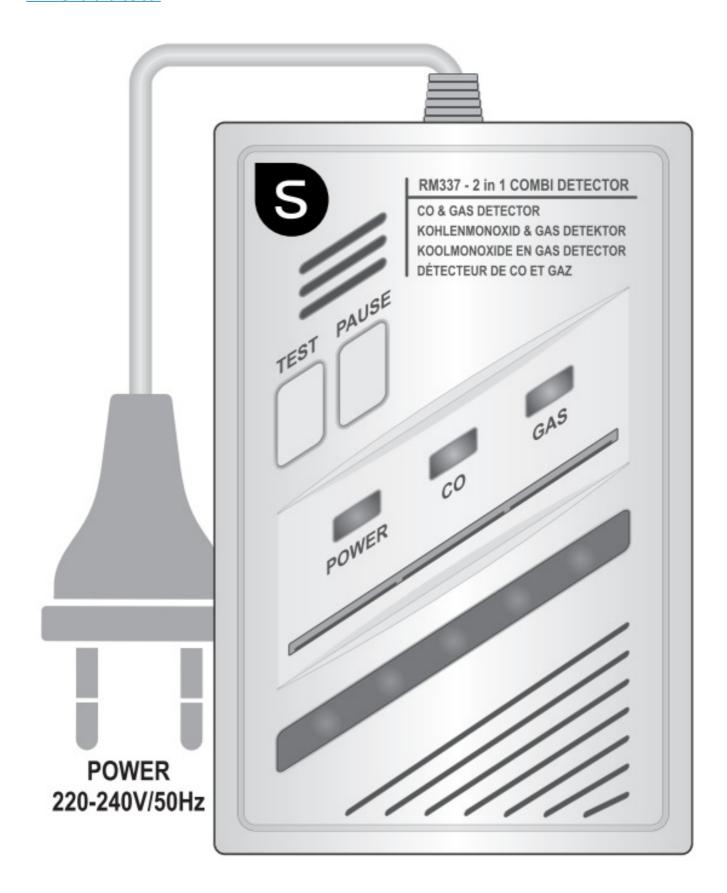
- DoP <u>vivnitsmartwares.eu/dop</u> and follow the instructions.

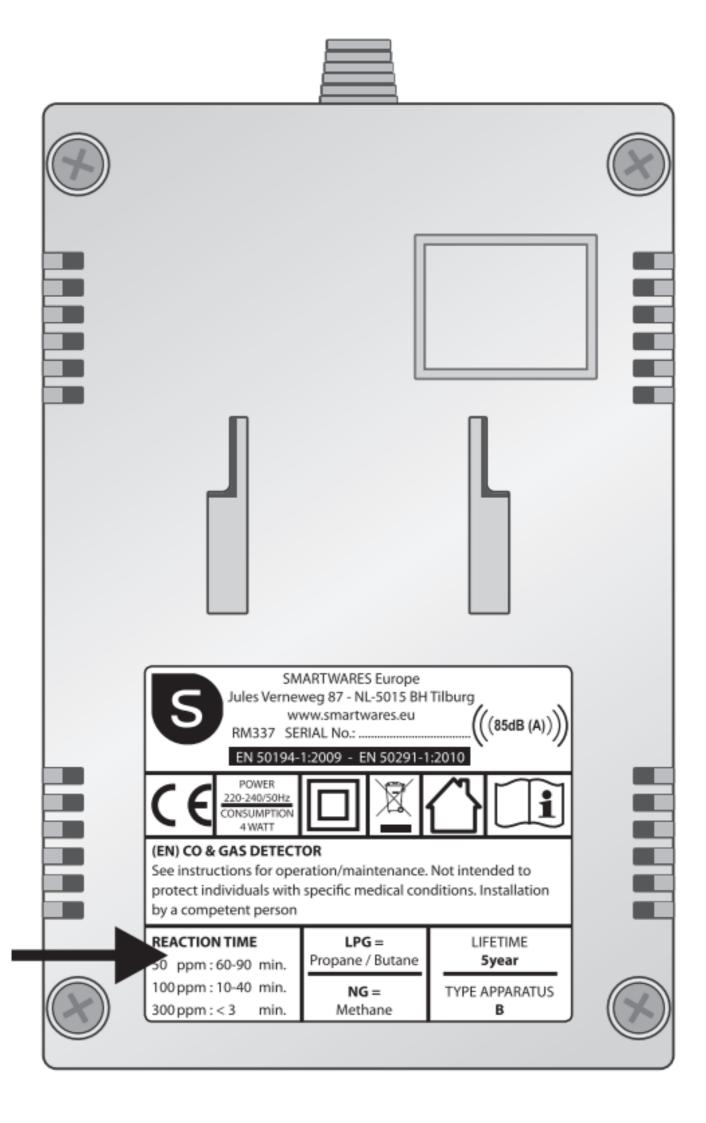


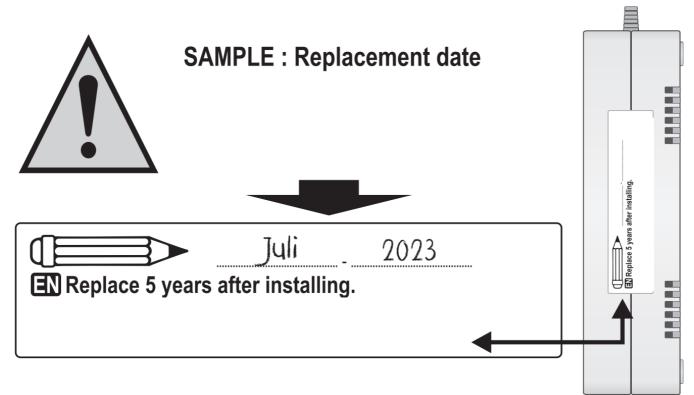
smartwares 'Europe LN: 088 5940501

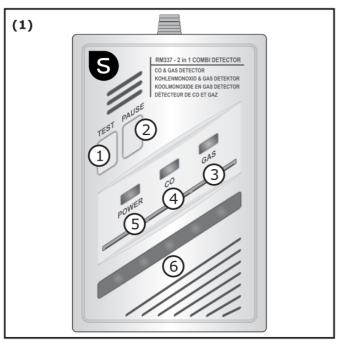
Jules Verneweg 87 5015 BH Tilburg The Netherlands

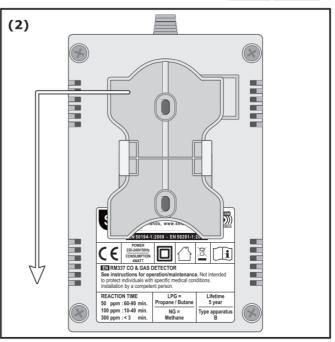
UK: +44 (0) 345 230 1231 www.smartwares.eu

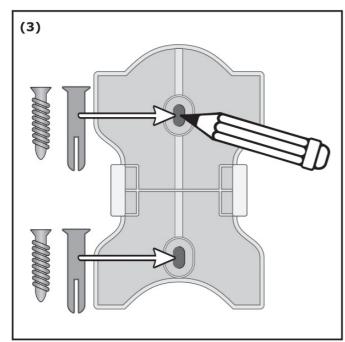


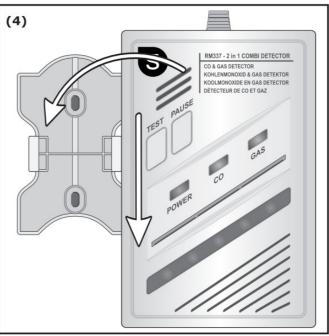


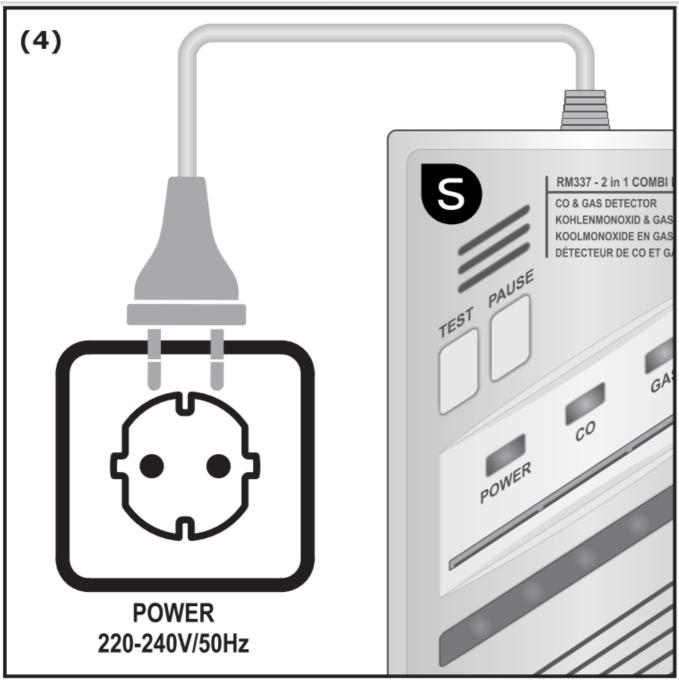












#### INTRODUCTION

Installing an alarm is part of your fire protection, such as fire extinguishers, emergency ladders, and ropes but also your choice in the use of building materials for a renovation. Make sure there is an escape plan and discuss this with your children. If the device does not work correctly, the instructions of the supplier should be consulted. At the local fire department you can get more information about fire prevention.

This manual contains important information. Please, read these instructions carefully before use.

## **DESCRIPTION OF THE PRODUCT**

#### Intended use

The product is meant to detect dangerous CO and GAS concentrations and to remind you of it.

#### Unintended use

Any other use than the intended use described above is considered unintended use.

**WARNING!** The user may cause (severe) injury to himself or seriously damage the product. A warning indicates the possibility of injury to the user or damage to the product, if the user does not perform the procedures carefully. **WARNING!** A note with additional information for the user. A note intended to alert the user of possible problems.

#### PRECAUTIONS AND SAFETY INSTRUCTIONS

WARNING! Test the device weekly. Replace the device when it is not functioning as described in this manual.

**WARNING!** If there is any doubt about the cause of the alarm, by way of precaution assume that there is real danger and follow your emergency plan. Please, do not assume that it is a false alarm.

**WARNING!** Ensure that there are no water/ gas pipes or electrical wires in the wall at the spot where you install the device. When in doubt, use a pipe detector to make sure you are not drilling in a pipe.

WARNING! Never use cleaning agents to clean your device.

WARNING! Do not paint the device. The detection holes can become clogged.

**WARNING!** Install the device out of the reach of children. Under any circumstances children should operate the device.

WARNING! When the power fails the device will not work.

**WARNING!** The device only detects carbon monoxide and combustible gas.

WARNING! The device indicates only the presence of carbon monoxide and combustible gas in the vicinity.

Carbon monoxide and combustible gas could be present in other environments.

WARNING! Avoid spraying with air fresheners, hair spray, deodorant or other aerosols near the device.

WARNING! Ensure that the ventilation holes are not covered.

#### **COMPOSITION OF THE PRODUCT**

Main components (1)

- 1. TEST button
- 2. HUSH button
- 3. GAS LED (red)
- 4. CO LED (red)
- 5. POWER LED (green)
- 6. ALARM LED (red)

LED indicators - Green LED at POWER: The device is connected to the mains

- Red LED at CO: If a dangerous carbon monoxide concentration is detected, the red LED will light and the alarm sounds until the dangerous concentration carbon monoxide is removed.
- Red LED at GAS: If a dangerous carbon monoxide concentration is detected, the red LED will light and the alarm sounds until the dangerous concentration combustible gas is removed.

Red LED at ALARM: The alarm sounds or has recently sound.

#### INSTALLATION

#### **Recommended installation locations**

- Install the device on a central location so that the alarm can be heard in all rooms.
- Install the device at least 1.5 meters from the ground.
- Install the device near a possible power source on the wall. Install the device at least 1.85 metres out of range of combustion devices. Preferably, install the device at eye level, so the LEDs are clearly visible.
- Do not install in dead air spaces such as a peak of vaulted ceilings, or such as a peak of vaulted ceilings, or gabled roofs.
- Do not install the product next to doors or windows.
- Do not install the device near a fan or radiator.
- Do not install the device in a dusty, dirty or greasy environment. Dust and cleaning agents can affect the functioning of the device.
- Do not install the product in humid spaces.
- Do not install the device behind curtains or behind the stove.
- Do not install the device in an inaccessible location because of the existing buttons and for maintenance.

#### **Product installation**

- 1. Slide the mounting plate from the device (2).
- 2. Mark the holes on the wall using the mounting plate.
- 3. Drill 5 mm holes in the wall and insert the supplied plugs in the holes.
- 4. Screw the mounting plate to the wall with the supplied screws (3).
- 5. Slide the device on the mounting plate (4).
- 6. Insert the plug into the wall socket (5), the green LED lights at POWER and you will hear a short beep. For four minutes the device will acclimatize, hereto the red LEDs flash at CO and GAS.

**ATTENTION!** Do not press the TEST button immediately! Wait about 30 seconds.

#### OPERATION OF THE CO AND GAS DETECTOR

#### Testing the device

**ATTENTION!** The green LED must always light; this indicates that the device is switched on. If the green LED is switched off, first check whether the mains plug is inserted into the wall socket and whether there is power at the wall socket. When this is not the problem, the device must be replaced.

- Press and hold the TEST button. The alarm sounds, the red LEDs at CO and GAS fires will light continuously and the red LED flashes at ALARM.

## Switching off the alarm sound

- When the alarm sounds, press the HUSH button to stop the alarm sound. After 5 minutes the device resets itself.

#### What to do if the alarm sounds

- 1. Press the HUSH button.
- 2. Close the gas supply and fuel burning devices where possible.
- 3. Move to fresh air outdoors directly or open all doors/windows to ventilate the space and to disperse the carbon monoxide.
- 4. Evacuate the building, count if everyone is present and call the emergency services.
- 5. Do not go back inside or away from the open door/window until the emergency services have arrived and the carbon monoxide has dispersed.
- 6. Seek medical attention immediately for anyone suffering symptoms of headache, drowsiness, nausea, etc.

7. Do not use the devices until they have been checked by a qualified person and the errors are localized and resolved.

**WARNING!** When the alarm sounds, this means that dangerous concentrations of carbon monoxide are present. Inhaling carbon monoxide can be life threatening.

## **GENERAL MAINTENANCE**

- Check weekly if the alarm and the LEDs are working.
- Clean the device regularly to avoid dust from attaching. This can be done once a month by using a vacuum cleaner with brush or with a damp cloth. Clean the device carefully.
- Do not unscrew the housing of the device; this will void your warranty.
- Avoid damage to the sensor of the device. High concentrations of these substances can damage the sensor, what mostly results in a false alarm: methane, propane, iso-butane, ethylene, ethanol, alcohol, iso-propanol, benzene, toluene, ethyl acetate, hydrogen, hydrogen sulphate, sulphur dioxide. What also can cause damage are cans with aerosol, alcoholic products, paint, solvent, glue, hairspray, aftershave, perfume and some cleaning agents.

#### **CARBON MONOXIDE**

#### What is carbon monoxide

Carbon monoxide is a treacherous poison that escapes when fuels are burned. It is a colourless, odourless and tasteless gas and therefore difficult to detect with the human senses. CO kills hundreds of people each year and injures many more. It combines with the haemoglobin in the blood and reduces the percentage of oxygen that circulates in the body. In high concentrations CO can kill in minutes. CO is produced by incomplete combustion of fuels such as wood, charcoal, coal, oil, paraffin, petrol, natural gas, propane, butane, etc.

## **Examples of sources of CO:**

- Running motor in garage
- Oil and gas heaters
- Wood stoves
- Barbecues
- Wood and gas fireplaces
- Gas appliances
- Portable generators
- Gas or kerosene heater
- Clogged chimneys
- Heating boiler

## Carbon monoxide poisoning symptoms

The following symptoms may be associated with CO poisoning (PPM = Parts Per Million 1/1000.000):

#### **PPM\* Symptoms**

35 :The maximum permissible concentration for continuous exposure over a period of 8 hours according to the OSHA\*\*

150 :Slight headache after 1.5 hours

200 : Slight headache, fatigue, dizziness, nausea after 2-3 hours.

400 :Frontal headaches within 1-2 hours, life threatening after 3 hours

800 :Dizziness, nausea and convulsions within 45 minutes. Unconsciousness within 2 hours. Death in 2-3 hours.

1600 :Headache, dizziness and nausea within 20 minutes. Death within 1 hour.

3200: Headache, dizziness and nausea within 5-10 minutes. Death within 25-30 minutes.

6400 :Headache, dizziness and nausea within 1-2 minutes. Death within 10-15 minutes.

12800 :Death within 1-3 minutes

- \* :Parts per million (CO particles per million oxygen particles)
- \*\* :Occupational Safety & Health Association

#### **DANGEROUS GASES**

The CO and Gas alarm can detect two types of gas, LPG and NG.

**LPG**: stands for Liquefied Petroleum Gas, which is also known as car gas. When LPG mixes with air in a certain proportion, a very explosive mixture can come into existence.

NG: NG stands for Natural Gas. Natural gas can be smelled and is very explosive. Natural gas is also used as an

energy source for cooking, i.e. gas stove.

## Symptoms after inhaling dangerous gases

**LPG**: Propane vapour is lightly intoxicating. This means that the inhalation of high concentrations may cause anaesthesia or unconsciousness. A sustained inhalation of high concentrations may cause asphyxiation.

**NG**: Natural gas is not toxic by inhalation as long as there is sufficient oxygen present. With the release of natural gas suffocation can be caused by reduced oxygen content. You can become unconscious or killed by a lack of oxygen.

# **Technical specifications**

D.,		! 4!
Produc	ct aesc	cription

Name :....:CO and GAS alarm

Model/Type .....: RM337

## **Technical product specifications**

Sensor type: CO and GAS

To detect gas: Carbon monoxide and gas (LPG and NG)

Power Source : AC2201byAC240V/50Hz

Power Consumption : 4 W Alarm volume : 85 dB at 1 meter

Alarm sensitivity: CO in accordance with EN50291

...... GAS <10% LEL

#### **Environmental Conditions**

Ambient Temperature : 0 45°C (storage -20°C ad 50°C)

Humidity: 0 ri 90% relative (storage 0 re 70%)

Smartwares never can be held liable for loss and/or damage of whatever nature, including incidental and/or consequential loss, arising from the fact that the signal from the alarm did not sound during smoke or fire, a gas leak or at a dangerous carbon monoxide concentration.

- \* This product is not designed for use in a recreational vehicle or mobile home.
- \* The alarm should be installed by a competent person. This apparatus is designed to protect individuals from the acute effects of carbon monoxide exposure. It will not fully safeguard individuals with specific medical conditions. If in doubt consult a medical practitioner.

: For indoor use only.

: Read the manual before use, and keep it in a safe place for future use and for product maintenance.

🔲 : Protection class 2 double insulated; does not require earthing.

## **Disposal**

Correct Disposal of This Product (Waste Electrical & Electronic Equipment) (Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

- \* Always throw empty batteries to the battery recycling bin
- \* If the battery is built-in inside the product, open the product and remove the battery.

# **MAINTENCE**

The devices are maintenance-free, so never open them. The guarantee becomes void when you open the appliance. Only clean the outside of the devices with a soft, dry cloth or a brush. Prior to cleaning, remove the

devices from all voltage sources. Do not use any carboxylic cleaning agents or petrol, alcohol or similar. These attack the surfaces of the devices. Besides, the vapors are hazardous to your health and explosive. Do not use any sham edged tools, screw drivers, metal brushes or similar for cleaning. **Warning**; Protect the battery against fire, too much heat and sunshine

#### **SAFETY**

- \* Clean with a clean, dry cloth or brush, use no solvents or abrasives. Avoid dampness on all electrical components.
- \* Keep all parts out of the reach of children.
- \* Avoid a wet, very cold or warm environment; this may damage electronic circuit boards.
- \* Avoid dropping or shocks, this may damage the electronic circuits.
- \* Repairs or opening of this item may only be done by an authorized repairer.
- \* Wireless systems can be interference from cordless phones, microwave ovens and other wireless devices operating in the 2.4GHz range. Keep the system AT LEAST 3m away from the devices during installation and operation.

## **HIGH VOLTAGE**

- \* All electrical connections and connection cables must comply with the appropriate rules and match the operating instructions.
- \* Do not overload electrical outlets or extension cords; this could otherwise result in fire or electric shock.
- \* Never replace damaged power cables yourself! In this case, remove them from the net and take the devices to the store.
- \* The fitting must be correctly installed if it is to operate reliably. These instructions and the user guide must therefore be studied carefully
- \* The electrical supply must be switched off at the outset, preferably by means of a switch in the distribution box, before any installation, maintenance or repair work is undertaken.
- \* Exterior lighting must not be installed during rain.
- \* Take account of the minimal separation distance from other objects and the room required around the fitting.
- \* Install the fitting as indicated in the user guide.
- \* If in any doubt consult a professional, taking local installation requirements into account. Some countries stipulate that lighting may be installed only by registered installers. \* Clamping screws in electrical connections must be adequately tightened. This is particularly the case with 12V low voltage conductors.
- \* Take note of the symbols when connecting wires: N = Neutral L = Phase ® = Earth LS = Live, switched \* When replacing a halogen lamp, wait for it to cool, for a minimum of 5 minutes.

## **LOW VOLTAGE**

\* Keep batteries out of the reach of children. Batteries not swallow. When a cell or battery is swallowed, call a physician immediately.



#### **Documents / Resources**

smartwares 2 in 1 Combi Carbon Monoxide, Gas Detector [pdf] Instruction Manual
2 in 1 Combi Carbon Monoxide Gas Detector, Carbon Monoxide Detector, Gas Detector, Detect or

Manuals+,