

GB WIRELESS SMOKE ALARM FOR INTERCONNECTION SA424WS

Thank you for purchasing our smoke alarm device. We recommend that you spend some time reading this instruction manual in order that you fully understand all the operational features. You will also find some hints and advice to help you resolve any issues. Keep for future reference.

The Housegard smoke alarm device is designed to detect smoke particles. It also has a built-in temperature sensor that sets off an alarm if the temperature exceeds 54-70°C (depending on the speed of the temperature rise detected).

FEATURES

- Optical smoke alarm for wireless connections
- Built-in heat detection
- High sensitivity and stability
- Test and pause function
- LED diode indicates normal operation
- Low battery warning



Combined
TEST and
PAUSE button.

TECHNICAL SPECIFICATIONS

Model No:	SA424WS
Detection type:	Photoelectric chamber
Power source:	DC 2 x 1,5V AA Alkaline battery
Standby current:	<6 uA
Alarm current:	<75 mA
Working frequency:	868 MHz
Frequency band:	868-870 MHz
Effective radiated power:	-2.32 dBm
Transmission distance:	50 m
Alarm sound level:	85 dB /3 m
Operating temperature:	0 °C to 40 °C
Ambient humidity:	10 % - 93 %
Sensitivity:	0,11 - 0,163 dB/m
Temperature sensor:	54-70 °C (EN-54)
Approval:	EN 14604:2005+AC:2008

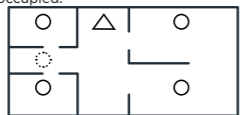
IMPORTANT SAFETY INFORMATION

- The smoke alarm is battery-powered. The smoke alarm will not work without batteries, or if the batteries are dead, removed or not correctly connected. Only use the specified type of battery. DO NOT connect the smoke alarm to any type of detector or equipment other than what is stated in this manual.
- The test button provides a full test of all the smoke alarm's functions. No other test methods are required. Test smoke alarms every week to check that they are working properly.
- Do not remove or disconnect the batteries to stop false alarms, as this will cause the smoke alarm to lose important functionality. Open a window or ventilate the air around the smoke alarm to stop the alarm and/or press the pause button.
- The smoke alarm must be installed in line with all local and national rules and regulations on installation.
- The smoke alarm is intended for use in houses. In apartment blocks, each apartment should be fitted with its own smoke alarm. The smoke alarm is not a replacement for a complete alarm system as required under law or by the fire safety authorities.
- There may be reasons why a person in a household might not hear the alarm (e.g. noise, deep sleep, impaired hearing). If a person in the household has impaired hearing, special alarms should be installed to alert the person via sound, light and vibrations.
- The smoke alarm detects combustion particles in the air (smoke). It does not react to flames or gas. The smoke alarm is designed to give off an audible alarm if a fire is developing.
- No smoke alarms are entirely reliable and they cannot give a 100% guarantee to protect life and property against fire. The smoke alarm is no replacement for insurance. Homeowners and tenants should take out life and home insurance.

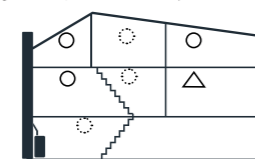
IMPORTANT: The smoke alarm should be tested every week and replaced after 10 years.

POSITIONING THE SMOKE ALARM

- Install a smoke alarm in all separate bedrooms and in rooms commonly occupied.
- In homes with several storeys, a smoke alarm should be installed at the top of every staircase between each storey.
- In the basement, a smoke alarm should be installed on the ceiling at the foot of the stairs.
- In bedrooms where people sleep with closed doors, there should always be a smoke alarm fitted in the bedroom.
- Install a smoke alarm in every room where there is a potential risk of fire.
- Install a smoke alarm at each end of corridors (maximum 6 m between each alarm), if they are longer than 9 metres.
- Install the smoke alarm in the middle of the ceiling.



Single-story residence, apartment



Multi-story residence

KEY:

- Minimal protection
- Recommended/more substantial protection
- Smoke alarms with a pause function are recommended

SMOKE ALARMS SHOULD NOT BE PLACED IN THE FOLLOWING LOCATIONS

- In the kitchen, near the cooker, where smoke from cooking could cause false alarms.
- In areas of high air humidity, such as bathrooms or near dishwashers or washing machines, where steam and moisture could cause false alarms.
- Near fans and ventilation ducts, where air flows may prevent smoke from reaching the smoke alarm.
- On walls
- Near light sources and electrical equipment that emit an electromagnetic field.



- Near a fireplace or stove with an open fire.
- At the top of a V-shaped ceiling, where air pockets could stop the smoke from reaching the smoke alarm.
- In a garage, where exhaust fumes could cause false alarms.
- In dusty and dirty areas, where the dust and dirt could damage the smoke alarm.
- In rooms where the temperature may fall below 0 °C or rise above 40 °C, or in rooms with large temperature variations.

WARNING: Incorrect positioning may lead to reduced reliability and false alarms.

FITTING THE BATTERIES AND TESTING EACH SMOKE ALARM

Twist off the mounting plate on the device and install 2 x AA/ LR6 batteries. Make sure you have the right polarity +/- . Test each smoke alarm device by pressing the test button for around 5 seconds. The smoke alarm device should emit three short audible signals followed by 1.5 seconds pause. Then release the test button. Repeat with all the smoke alarm device 's that are being installed.

WIRELESS FUNCTION DESCRIPTION

Wireless frequency: 868MHz

Wireless distance: Obstructions such as steel reinforcement in concrete could block or impede the wireless signal. It is recommended not to exceed 35 m as the maximum distance between alarms in a network. If clear line of sight the range is > 50 meters.

Note: Make sure the battery is installed well before operating the product.

(A): Multiple Same Alarms Networking

The smoke detectors can be interlinked with each other without using the hub or apps.

- Take one alarm and press the test button continuously for 3 times, The LED will light up and the alarm enter "Pairing Mode".
- Take another alarm, press the test button 3 times in a row, The LED light, alarm enters "pairing Mode", When hearing a high beep -> Networking success.

(B): Connecting the device to the hub and app

- Download the app "Housegard"
- Follow the instructions inside the app in order to register an account.
- Make sure that the hub works properly before you set up a network, make sure to set up a network between hub and devices within recommended distance.
- Connect the hub to your WiFi.
- Set the hub into pairing mode (refer to system guide).
- Quickly press the test button 3 times on the device, The LED will light up and the device enters "pairing mode". The device will add itself in the app. If connection fails, repeat step 5 and 6.

NOTICE: For further instructions look at the system manual.

<https://www.housegard.se/manualer/housegard-note-system.pdf>

Repeat this for each alarm.

(C): Clear code mode on device

Take out the batteries. Press and hold the test button, then install the batteries on the alarm and the LED lights up. Do not release the button until the LED is off. Press the button again when the LED lights up second times. If you hear the sound of "BIP", it indicates that clearing is successful. the alarm will reset and get a new random code.

HOW TO INSTALL YOUR SMOKE ALARM

- Remove the mounting plate on the back of the smoke alarm by twisting it anti-clockwise.
- Install the mounting plate in the chosen position on the ceiling. Take care to position your smoke alarm properly.
- Place the smoke alarm against the mounting plate and twist the smoke alarm clockwise until it clicks into place.
- Press the test button to test the smoke alarm.

OPERATION

During normal operations, the device's LED flashes every 50 seconds. This means that the battery and the unit are working correctly. If the smoke alarm device detects smoke, it will emit a loud, pulsing warning sound and the red LED will emit a pulsing light until all smoke has cleared.

MEANING OF THE DIFFERENT LED AND ALARM SIGNALS

STATUS	RED LED	ALARM SIGNAL	DESCRIPTION
Normal mode	Flashes once every 50 seconds	None	Smoke alarm has power and is working normally.
Change battery/ low battery	Flashes once every 50 seconds.	Short audible signal every 50 seconds. (Can be silenced for 10 hours).	The battery needs replacing. See section on replacing the battery.
Fault warning	Flashes	Short audible signal every 50 seconds between flashes.	Indicates a fault with the smoke alarm. Read the "Troubleshooting"
Pause mode	Flashes every 16 seconds	None	Smoke alarm is in pause mode. See section on pause function.

ALARM SIGNALS

The smoke alarm device emits various alarm signals. The device that has detected smoke or heat emits a different audible signal, which allows you to identify which smoke alarm device has gone off.

Status	LED light	Alarm
Smoke alarm device detects smoke	Flashes once every second	3 audible signals with 1.5s pause followed by 3 audible signals with 4.5s pause. Repeatedly.
Smoke alarm device detects a rise in temperature	Flashes once every second	Two repeated audible signals for 8.5s then pause for 4.5s. Repeatedly.
Wirelessly connected units receive a signal from a device that has gone off	LED flashes every second	2 repeated audible signals, followed by 1.2s pause.

CAUSES AND REMEDIES FOR FALSE ALARMS

Cause of error	Action
Steam and moisture. A false alarm may occur if the smoke alarm is placed too close to a bathroom, laundry room, or other location with high air humidity.	Place the smoke alarm at least 2 metres from any bathroom, laundry room, or other location where high air humidity may occur.
Dust and dirt. Since air passes freely through the detection chamber, the smoke alarm will always attract some dust and pollen particles. This can lead to a false alarm. The smoke alarm may also become more sensitive for this reason, which could cause false alarms. In addition, dirt will collect over time, as the smoke alarm ages, which may result in false alarms.	Regularly vacuum the smoke alarm, using a plastic nozzle to avoid damaging the electronics. Avoid fitting smoke alarms in places with a lot of dust and dirt. You can put a 'hat' over the smoke alarm or remove it entirely while you are carrying out renovation work at home that involves sawing, sanding, etc.
Draughts, dust and air flows. False alarms may be caused by the smoke alarm being placed too close to doors, windows, ventilation systems, fans, air ducts, heat pumps or suchlike. This can lead to dust particles being carried up into the detection chamber.	Do not install smoke alarms in a draughty location, close to windows or doors, ventilation, fans, air ducts, heat pumps or suchlike. Find a better location for the smoke alarm, further away from draughts and air flows.
Temperature variations. Temperature variations may lead to condensation in the detection chamber. This may happen, for example, if the smoke alarm is placed in a room where windows are opened for ventilation in the winter, or close to exits, balcony doors or other places that switch between hot and cold.	Avoid fitting smoke alarms in rooms with rapid temperature changes or close to windows and doors that are frequently opened and closed. Move the smoke alarm to a place with a more even and stable temperature.
Generally unfavourable positions. Incorrect positioning in an unstable indoor environment, a draughty area, close to electronic apparatus (EMC) and lighting may cause a false alarm.	Place smoke alarms at least 5 metres from open fires, stoves or other heating devices; 2 metres from ventilation ducts, heat pumps and air conditioning; 1 metre from light bulbs and fluorescent tubes.

TESTING THE DEVICE

IMPORTANT: Press and hold the testbutton until all devices goes into alarm. All smoke alarm devices will emit the alarm signal within 30 seconds. Interconnected alarms will stop alarming after 1 minute.

- Always test all smoke alarm devices after installation to ensure that they are functioning properly.
- The test button performs a full test of all functions. Never use a naked flame to test the smoke alarm device, since this can destroy the alarm.
- Test your smoke alarm device routinely once a week.
- Always test your smoke alarm devices after a long period of absence from the home and always when you return from a holiday.
- Always stand at arm's length when testing your smoke alarm device to avoid damage to your hearing.

WE RECOMMEND THAT YOU ALWAYS USE EARPLUGS OR OTHER HEARING PROTECTION WHEN PROGRAMMING AND TESTING YOUR SMOKE ALARMS.

FOR YOUR SAFETY! NEVER IGNORE A SMOKE ALARM THAT HAS GONE OFF. WHEN YOU HEAR THE ALARM SIGNAL, YOU MUST GIVE IT YOUR FULL ATTENTION AND ACT ACCORDINGLY.

PAUSE FUNCTION

The smoke alarm will be reset at normal sensitivity once the 10 minute pause is over. If necessary, press the pause button again to put the alarm back on pause. If you have interconnected smoke alarm device 's, you can pause all the connected units by pressing the test/pause button on the unit that is emitting the alarm signal.

CLEANING AND MAINTENANCE

The smoke alarm should be cleaned regularly, and at least twice a year. Clean your smoke alarm by vacuuming externally along the opening to the detection chamber to remove dust and dirt.

IMPORTANT: Do not try to open the cover to clean inside the smoke alarm. This will negate the warranty.

REPLACING THE BATTERY

How often the battery needs replacing depends on the type of battery. It is recommended that you replace batteries routinely once a year, preferably on a particular date. Alternatively, replace the battery when the smoke alarm emits the low battery signal (short audible signal every 50 seconds).

- Twist the smoke alarm anticlockwise to remove it from the mounting plate.
- Take out the old batteries.
- Insert new batteries. Check the correct polarity +/-.
- Place the smoke alarm against the mounting plate and twist the smoke alarm clockwise until it clicks into place.
- Press the test button to test the smoke alarm.

TYPE OF BATTERY

Voltage:	DC 1,5V
Type:	AA Alkaline
Battery life:	Approx. 12 months
Recommended batteries:	Gold Peak 15A, Energizer E91

TROUBLESHOOTING

Problem	Action
The smoke alarm gives off no signal when tested.	1. Take down the smoke detector and check that the batteries are fitted correctly. 2. Check that the batteries still have some charge.
The smoke alarm flashes and emits a short audible signal every 50 seconds.	1. This indicates low battery charge. 2. Replace the batteries.
The smoke alarm goes off when there is no smoke, or when cooking, etc	1. Clean the smoke alarm. See also section on false alarms. 2. Change the location of the smoke alarm. See section on false alarms.

WARRANTY

This smoke alarm comes with a 5-year limited warranty against manufacturing defects. (Valid from date of purchase.) The batteries are not covered by the warranty. Liability under the warranty is limited to the value of an equivalent smoke alarm. Defective smoke alarms should be returned to the retailer, along with a description of the problem. If the claim is approved, the faulty goods will be replaced with a new smoke alarm of the same or an equivalent type. Any claim must be accompanied by a receipt confirming the date of purchase.

EC DECLARATION OF CONFORMITY

Sunmatic The Safety Company AB
Argongatan 2B
SE-43153 Mölndal

Hereby declare under our sole responsibility that the product:

Housegard model smoke alarm SA424WS

To which this declaration relates is in conformity with the following standards and/or other normative documents:
EN 14604:2005+AC:2008
EN 50130-4:2011

Technical file held by: Sunmatic The Safety Company AB

Gothenburg 2019-08-15

Frank Willy Ottesen
Technical Manager

Sunmatic The Safety Company AB hereby declares that Housegard model SA422WS complies with the essential requirements and other relevant provisions of RE-Directive 2014/53/EU. The Declaration of Conformity is available upon request from info@gpbmnordic.se.

LIMITATIONS OF RADIO COMMUNICATIONS

This product use a category 3 radio receiver, which is used in cases where loss of communication cannot cause critical situations, and that it can be avoided by following the instructions in the user manual.

Radio communication can be disturbed by other systems, especially near the 4G mobile system operating in neighboring frequencies. SA422WS radio communication systems are very reliable and are tested to high standards. However, due to their low transmitting power and limited range (required by regulatory bodies) there are some limitations to be considered:

•Radio transmitter equipment, such as the wireless smoke alarm, should be tested regularly (at least weekly). This is to determine whether there are sources of interference preventing communication. The radio paths may be disrupted by moving furniture or renovations, and so regular testing protects against these and other faults.

•Receivers may be blocked by radio signals occurring on or near their operating frequencies, regardless of the house coding.

The wireless smoke alarm SA422WS has been tested to EN300 220-1 V2.4.1 in accordance with the requirements of EN300 220-2 V2.4.1. It is designed to provide reasonable protection against harmful interference in residential installations. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference to radio and television reception.

However, there is no guarantee that interference will not occur in a particular installation. Interference from the Smoke Alarm system can be identified by temporarily turning the whole system off. Refer to the instructions supplied with the other products used for information on these. The user is encouraged to eliminate the interference by one or more of the following measures:

- Relocate the unit.
- Increase the distance between the wireless smoke alarm and the device being affected.

If necessary consult the supplier or an experienced radio/television technician.

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Sunmatic The Safety Company AB
DOP: 621027-CPR-0419
EN 14604:2005+AC:2008
RE-DIRECTIVE 2014/53/EU
Cert: 0359-CPR-00835