NEXA WSA-102 Optical Smoke Alarm for Wireless Connection in Series User Guide

NEXA

Model: WSA-102
OPTICAL SMOKE ALARM FOR
WIRELESS CONNECTION IN SERIES

This instruction leaflet contains important information on how to properly install and maintain the smoke alarm. Read this entire folder before installation and keep the folder for future reference.
Nexa's fire alarm WSA-102 is designed to detect smoke particles and gives an early warning if a fire should occur, (provided proper placement and maintenance).
Main features:

- High sensitivity and stability
- Test and pause function
- LED indication shows normal function
- Low battery signal
- Can be connected in series with up to 6 smoke alarms

Contents

TEKNISK DATA

Strömkälla	DC 2 x 1.5V AA batteri
Batterityp: Gold Peak Group: GP 15A LR6 or Energizer: E91	
Radiofrekvens	MHz
Räckvidd, fri sikt	upp till 20 m
Larmsignal	85 dB (A) vid 3 meter
Driftstemperatur	5 °C – 45°C
Luftfuktighet	10 – 90 %

IMPORTANT

- The radio range may vary depending on the location, the design of the building and the materials used in the building.
- Do not remove or disconnect the batteries to stop false alarms as this will disable the vital function of the smoke alarm. Open windows or ventilate the air around the smoke alarm in order to stop it, and/or press the pause button.
- The smoke alarm is intended for use for use in singlefamily homes. In multiple-occupancy buildings, each

home must be equipped with its own smoke alarms.

- This smoke alarm is not suitable for use in buildings that are not used for residential purposes. The smoke alarm is no substitute for a full alarm system that is required by law or by the fire authorities.
- The smoke alarm detects combustion particles in the air (smoke). It does not react to flames or gas. The smoke alarm is designed to emit an alarm signal if a fire is developing.
- The smoke alarm should be tested every week and replaced every ten years.

POSITIONING THE SMOKE ALARM

For the smoke alarm to provide an early warning, it has to be installed in the location where the fire starts. Therefore, Nexa recommends that you install smoke alarms in each room and on all floors.
Single-level home: To achieve minimum protection, position the alarm in the entrance hall between the living areas (including the kitchen) and the sleeping areas.
Position it as close as possible to the living areas, and make sure the alarm can be heard by anyone in the bedrooms. See Figure 1, for example:
Multi-storey home: To achieve minimum protection, position and alarm in the stairwell (at ground level) and another alarm above the landing on the top floor, as well as an alarm on the ceiling in the basement at the foot of the stairs. This covers the basement level, but not crawl spaces and unfurnished attics. See the example in Figure 2.

Ceiling Installation
Hot smoke rises and spreads, so installing your smoke alarm in a central location on the ceiling is recommended. Avoid areas where air does not circulate, e.g. corners. Also keep it away from objects that may prevent the free flow of air. Position the device at least 30 cm from light fittings or interior fittings that may prevent smoke/heat reaching the detector. Position it at least 1 metre away from the wall. See Figure 3A.

Wall mounting, if ceiling mounting is not possible Avoid installing the device a long way into a corner.
Position the upper edge of the smoke alarm at least 15 cm and no more than 30 cm away from the ceiling. See Figure 3A.
Sloping ceilings
In the case of sloping surfaces or ceilings that move up towards a ridge, the detector must be installed 90 cm from the highest point, measured horizontally, because still air under the ridge may prevent smoke reaching the device. See Figure 3B.

NOTE: There must be an alarm in every room (except the kitchen, bathroom and garage) to provide recommended/ maximum protection. DO NOT POSITION AN ALARM IN THE KITCHEN or BATHROOM as cooking smells or steam may activate the alarm. DO NOT POSITION AN ALARM IN THE GARAGE as there is a risk of it being triggered by exhaust fumes.

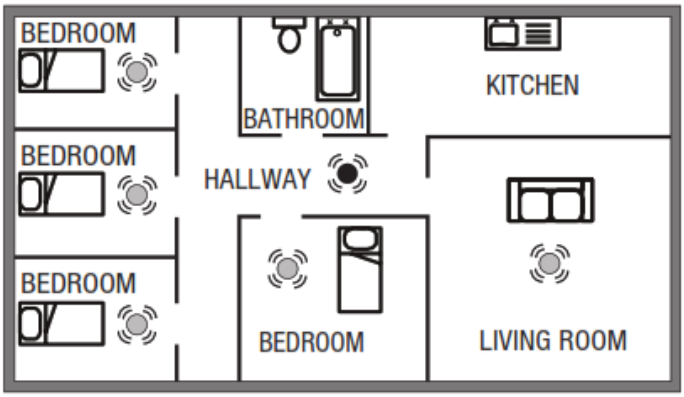


FIGURE 1. Single-level home

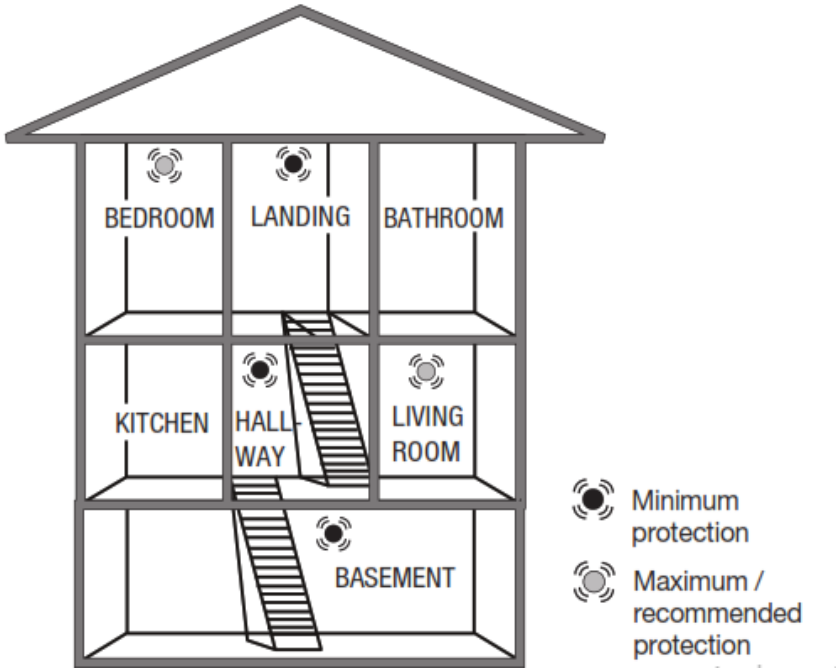
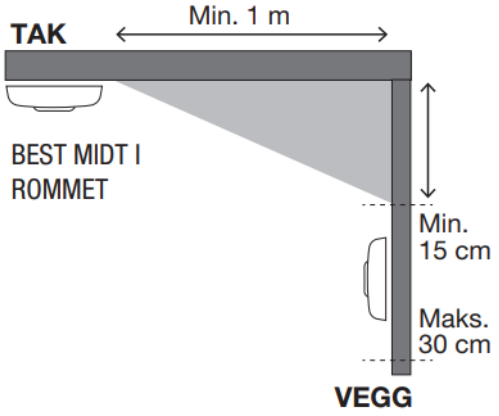
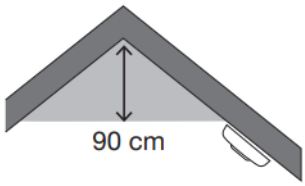


FIGURE 2. Multi-storey home

LOCATION ON CEILING AND WALL





FIGUR 3A *FIGUR 3B*

PROGRAMMING

WSA-102 is equipped with radio transceivers for communication between units. Inorder for this to work, the smoke alarms must be linked togehter. Select one of the alarms as the master unit and mark it with an M on the back so

that you recognize it, even at a later stage. During programming, the master unit listens for radio code from other alarms and connects the units into the system.

1. Insert the batteries in the Master Unit, red LED indicator lights up after 3 seconds with sterady light. The unit is now in programming mode and ready to receive radio code from other alarms. (The master unit returns to normal mode around 30 seconds after pairing is complete or if no pairing was performed during the time period)
2. Insert the batteries into the slave unit to be connected. After 2 seconds, the LED indicator flashes quickly on both devices for 3 seconds to confirm the pairing.
3. Repeat step 2 with all slave units to be connected in the same system (max. 5).
4. To end the programming, press the master unit's test button once, the LED indicator goes out.

DELETE PROGRAMMING

1. Remove the batteries from the smoke alarm
2. Press and hold the test button, insert the batteries, release the button when the red LED indicator lights up
3. Press the test button twice within 3 seconds, the smo alarm beeps briefly once to confirm deletion.
4. After 5 seconds, the red LED indicator lights up, press the test button to exit.

TEST
Test the smoke alarm by pressing the test button for > 5 seconds. The smoke alarm will respond by emitting alarm signal.
TEST INTECONNECTED
Test interconnected smoke alarms by pressing the test button on any smoke alarm for> 10 seconds, connected smoke alarms will respond by emitting alarm signal for 30 seconds, and then return to normal operation.

- Test your alarms both before and after installation so as to be sure that they are working.
- Only test your alarms using the test button. Never use a naked flame as this may destroy the smoke alarm.
- Get into the habit of testing your smoke alarms once a week.

NOTE: A number of factors can interfere with wireless communication.
You should therefore test smoke alarms every week to check that the communication between the units is working properly.

INSTALLATION

1. Remove the mounting plate on the back of the smoke alarm by rotating the mounting plate counterclockwise.
2. Insert 2 x AA / LR6 batteries. Make sure you are using the correct polarity (+/-).
3. Test and programme the smoke alarm – see the sections TESTING and PROGRAMMING.
4. Install the mounting plate in a selected location on the ceiling. Take care when positioning your smoke alarm.
5. Place the smoke alarm on the mounting plate and rotate the smoke alarm clockwise until it clicks into place.
6. Press the test button to check that smoke alarm is working correctly.

OPERATION

During normal operation, the smoke alarm LED flashes every 40 seconds. This means that the battery and the device are working properly. If the detector detects smoke, it will emit a loud, pulsating alarm and the red LED will

illuminate with a pulsating light until the smoke is gone.

STATUS	RED LED	ALARMSIGNAL
Normal	Flashes once every 40 seconds	None
Low battery	Flashes once every 40 seconds	Short audible signal every 40 seconds
Fault notification	Flashes once every 40 seconds	Short audible signal between LED flash
Pause mode	Flashes once every 40 seconds	None

PAUSE FUNCTION

The smoke alarm has a combined button for test and pause function.
The pause function temporarily switches off the smoke detection for 10 minutes and can be activated if an alarm risks being triggered, or has been triggered, due to cooking, steam or the like.
To activate the pause function, press the test / pause button for 5 seconds.
The alarm function will be stopped for 10 minutes, after which the smoke alarm will be reset to normal sensitivity. If necessary, press the test / pause button again to pause the alarm again.
Note that for other smoke alarms in an interconnected systems are not affected by smoke detection.

REPLACE BATTERY

How often the battery needs to be replaced depends on the type of battery. Feel free to change batteries routinely once a year, preferably on a specific date.

1. Turn the smoke alarm counterclockwise to remove from the mounting plate.
2. Remove the old batterie Insert new batteries. Check the correct polarity +/-.
3. Place the smoke alarm against the mounting plate and turn the smoke alarm clockwise until it clicks into place
4. Press the test button to test the smoke alar

ALARM SIGNALS

WSA-102 emits various alarm signals. The alarm that detected smoke emits a different signal than the others, which makes it possible to locate which unit has triggered the alarm.

STATUS	Flashes	ALARMSIGNAL
The smoke alarm detects smoke	RED LED	Repeating: 3 x 0.5s Beeps Pause 1 .5 s
Device that receive signal from unit that have t riggered alarms	No indication	Repeating: 3 x 0.5s Beeps Pause 1 .2 s
Test function	No indication	beeps Pause 1,5 s Then as above

COMMON CAUSES AND HOW TO AVOID FALSE ALARMS

Smoke alarms detect and react to smoke particles in the air. These smoke particles are what cause the smoke alarm to sound. This function means that the smoke alarm may
also react to dust particles, moisture or other particles in the form of pollen, insects, etc. These factors frequently cause false alarms.

FAULT SOURCE	REMEDY
Steam and moisture. A false alarm may be triggered if the smoke alarm is positioned to close to a bathroom, laundry room or other areas where ambient humidity i s high.	Position the smoke alarm at least 2 metres away from t he bathroom, laundry room or other locations where a mbient humidity may be high.
Dust and dirt. The smoke alarm will attract a certain a mount of dust and pollen particles as the air passes fr eely through the detection chamber. This may lead to false alarms. The smoke alarm may also become mor e sensitive on account of this, which may result in un wanted alarms.	Vacuum the smoke alarm regularly, use a plastic nozzl e so as not to damage the electronics. Avoid installing smoke alarms in locations where there is a lot of dust and dirt. Ideally, place a “hood” over the smoke alarm o r remove it entirely while you are carrying out renovatio ns at home.
Draughts, dust and air flows. False alarms may be ca used if the smoke alarm is placed too close to doors, windows, ventilation systems, fans, air ducts, heat pu mps and suchlike. This may cause dust particles to fly up and into the detection chamber.	Do not install smoke alarms in draughty locations or clo se to windows or doors, ventilation, fans, air ducts, hea t pumps and suchlike. Find a better location for your sm oke alarm, further away from draughts and air flows.
Temperature variations may cause condensation in th e detection chamber – if the smoke alarm is placed in a room where windows are opened for ventilation in w inter, for example, or close to exits, balcony doors or o ther locations where conditions switch between hot and cold.	Avoid installing smoke alarms in rooms where the temp erature changes rapidly or close to windows or doors t hat are opened and closed frequently. Move the smoke alarm to a location where the temperature is more consistent and stable.
Adverse location. Positioning the smoke alarm incorre ctly in an unstable indoor environment may lead to fal se alarms due to draughts, close proximity to electrica l devices (EMC) and lighting.	Position smoke alarms at least 5 metres away from fire places, stoves or other heaters. 2 metres away from ve ntilation ducts, heat pumps and air conditioning. 1 metre away from lamps and fluorescent tubes.

SMOKE ALARM WARRANTY

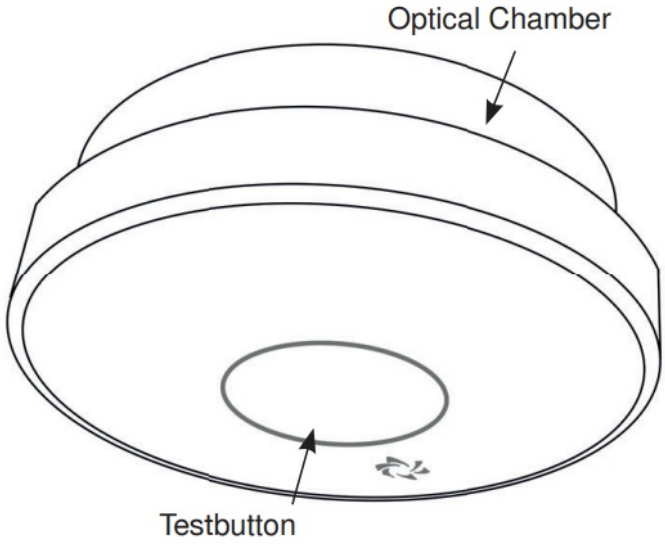
This smoke alarm has a three-year limited warranty against anufacturing faults. (Valid from the date of purchase.) The batteries are not covered by the warranty. The warranty
liability is limited to the value of a corresponding smoke alarm. Defective smoke alarms must be returned to the dealer together with a description of the problem. Compensation of a new smoke alarm of the same or an equivalent type will be given in the event of an approved complaint. A receipt confirming the date of purchase must be shown when submitting a complaint.

MAINTENANCE AND CLEANING

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 optical chamber to remove any dust or dirt.
IMPORTANT: Do not try to open the hatch to clean inside the smoke alarm as this will invalidate your warranty.

RECYCLING

- The device mainly comprises materials that can be recycled.
- Do not dispose of the packaging, device and packaging contents with household waste without following applicable provisions.
- This product must be recycled according to EU Directive 2002/96/EC on waste from electrical and electronic equipment (WEEE).
- For more information, phone your dealer or the local authority responsible for waste disposal.



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Tillverkare:
NEXA Trading AB, Sverige
webbplatswww.nexa.se

Documents / Resources

	NEXA WSA-102 Optical Smoke Alarm for Wireless Connection in Series [pdf] User Guide WSA-102 Optical Smoke Alarm for Wireless Connection in Series, WSA-102, Optical Smoke Alarm for Wireless Connection in Series, Optical Smoke Alarm, Smoke Alarm, Smoke Alarm for Wireless Connection in Series, Wireless Connection in Series Smoke Alarm

References

- NEXA – ett smart och tryggt hem