

NEXA



Model: FS-558/RF

OPTICAL SMOKE ALARM FOR WIRELESS CONNECTION IN SERIES

This instruction folder contains important information on correct installation and maintenance of your smoke alarm. Read through the whole folder before installing it, and keep the folder for future reference.

Nexa's FS-558/RF smoke alarm is designed to detect smoke particles. It has a built-in temperature sensor to provide an early warning in the event of a fire (as long as it is positioned and maintained correctly).

Primary features:

- Built-in temperature warning device
- High levels of sensitivity and stability
- Test and pause functions
- LED shows normal function
- Signal on low battery voltage
- Can be connected in series with up to 12 smoke alarms

TECHNICAL DATA

Power source	DC 2 x 1.5V AA battery
Battery:	Gold Peak Group: GP 15A LR6 or Energizer: E91
Radio frequency	433 MHz
Range, clear line of sight	up to 20 m
Alarm signal	85 dB (A) at 3 metres
Operating temperature	5°C – 45°C
Ambient humidity	10 – 90 %
Temperature sensors	54-70 °C (EN-54)

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 single-family 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.

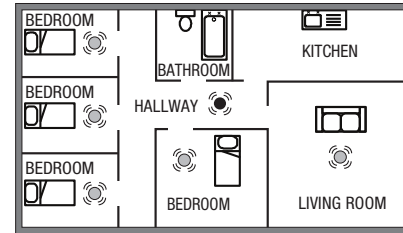


FIGURE 1. Single-level home

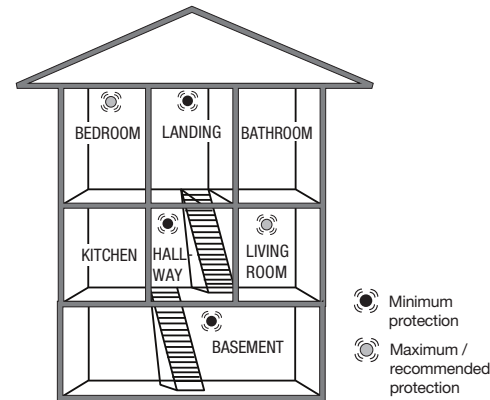


FIGURE 2. Multi-storey home

LOCATION ON CEILING AND WALL

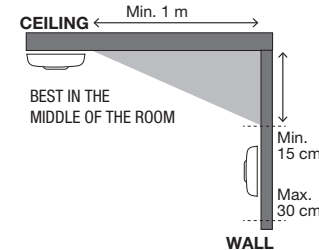


FIGURE 3A

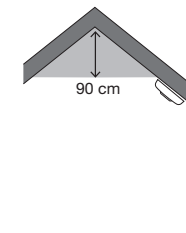


FIGURE 3B

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.

TESTING

Test your smoke alarms by pressing the test button. Your smoke alarm will respond by emitting an alarm signal.

- 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.

Testing interlinked alarms: It takes up to 30 seconds for all interlinked alarms to respond/emit an alarm. HOLD DOWN THE TEST BUTTON until all smoke alarms have emitted an alarm.

PROGRAMMING

The FS-558 / RF is equipped with RF transmitter and receiver to communicate with each other. For this to work, the fire alarms must be connected by programming.

Select one of the smoke alarms as the master unit and mark it with an M for ease of recognition. During programming, the master device sends out radio code to the other smoke alarms to interconnect them.

1. Press the master unit test button for about 15 seconds until the LED indicator lights up with a solid light. The master unit is now in programming mode and ready to hand out radio code the other smoke alarms. The master unit stays in programming mode for about 30 seconds before returning to normal mode.
2. With the master unit in programming mode, press and hold the slave unit's test button until the LED indicator is solidly lit (1-3 seconds), release the button, and then press it again. Both the master unit and slave unit LED indicators will now blink quickly for 2 seconds. This shows that the two are interconnected.
3. Repeat step 2 with all slave units to be connected to the same system.
4. Quit programming by pressing the test button on the master unit so that the LED indicator goes out.

DELETING PROGRAMMING (resetting)

1. Press and hold the test button on the device to be reset for about 20 seconds until the LED indicator starts flashing quickly, then release the button. The LED indicator is now lit solidly.
2. When the LED indicator is lit solidly, press the test button twice. Upon successful reset, the fire alarm sounds with a short beep.
3. Repeat steps 1 and 2 with all devices to be reset.

NOTE: Several factors may cause wireless communication to interfere. Therefore, you should test fire detectors every week to check that the communication between the devices is working properly.

OPERATION

When operating normally, the smoke alarm's LED flashes every 40 seconds. This means that the battery and device are working correctly. If the alarm detects smoke, it will emit a loud, pulsing alarm and the red LED will flash until the smoke has gone.

STATUS	RED LED	ALARM SIGNAL
Normal mode	Flashes once every 40 seconds	None
Replace batteries/ low battery voltage	Flashes once every 40 seconds	Short audible signal every 40 seconds
Fault notification	None	Short audible signal every 40 seconds
Pause mode	Flashes once every 8 seconds	None

PAUSE FUNCTION

The smoke alarm has a combined button for the test and pause functions. You can use the pause function to stop the alarm signal if the alarm is triggered due to a false alarm. The pause function is activated by holding down the test/pause button while the device is emitting an alarm. The alarm will be stopped for 10 minutes. The smoke alarm is reset to normal sensitivity after the end of the 10-minute pause period. If necessary, press the pause button again to pause the alarm again. If you have smoke alarms connected in series, you can pause all interlinked devices by pressing the test and pause button on the device that triggered the alarm.

REPLACING THE BATTERIES

How often the batteries need to be replaced is dependent on the battery type. Where possible, get into the habit of replacing the batteries once a year, ideally on a specific date.

1. Rotate the smoke alarm counterclockwise to remove it from the mounting plate.
2. Remove the old batteries.
3. Insert new batteries. Check that the polarity is correct, +/-.
4. Place the smoke alarm on the mounting plate and rotate the smoke alarm clockwise until it clicks into place.
5. Press the test button to test the smoke alarm.

ALARM SIGNALS

The FS-558/RF emits various alarm signals. The alarm that detected smoke or heat emits a different audible signal so that you can identify which alarm triggered the alert.

STATUS	RED LED	ALARM SIGNAL
The smoke alarm detects smoke	Flashes	Repeating: 3 long audible signals – pause
The smoke alarm detects a temperature increase	Flashes	Repeating: 3 short audible signals – pause
Devices connected wirelessly and receiving signal from triggered alarm	Flashes	Repeating: 2 short audible signals – pause

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 too close to a bathroom, laundry room or other areas where ambient humidity is high.	Position the smoke alarm at least 2 metres away from the bathroom, laundry room or other locations where ambient humidity may be high.
Dust and dirt. The smoke alarm will attract a certain amount of dust and pollen particles as the air passes freely through the detection chamber. This may lead to false alarms. The smoke alarm may also become more sensitive on account of this, which may result in unwanted alarms.	Vacuum the smoke alarm regularly, use a plastic nozzle 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 or remove it entirely while you are carrying out renovations at home.
Draughts, dust and air flows. False alarms may be caused if the smoke alarm is placed too close to doors, windows, ventilation systems, fans, air ducts, heat pumps and suchlike. This may cause dust particles to fly up and into the detection chamber.	Do not install smoke alarms in draughty locations or close to windows or doors, ventilation, fans, air ducts, heat pumps and suchlike. Find a better location for your smoke alarm, further away from draughts and air flows.
Temperature variations may cause condensation in the detection chamber – if the smoke alarm is placed in a room where windows are opened for ventilation in winter, for example, or close to exits, balcony doors or other locations where conditions switch between hot and cold.	Avoid installing smoke alarms in rooms where the temperature changes rapidly or close to windows or doors that 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 incorrectly in an unstable indoor environment may lead to false alarms due to draughts, close proximity to electrical devices (EMC) and lighting.	Position smoke alarms at least 5 metres away from fireplaces, stoves or other heaters. 2 metres away from ventilation 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 manufacturing 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.

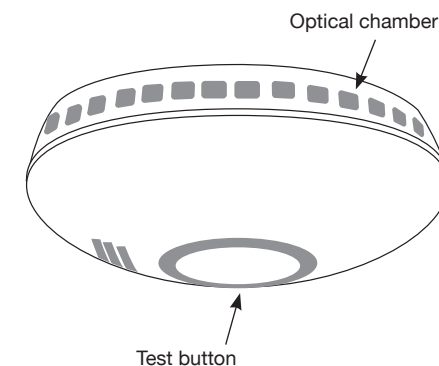
MAINTENANCE AND CLEANING

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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NEXA13215-CPR-001
EN14604:2005/AC:2008
Smoke alarm for household

Manufacturer:
Nexa Trading AB, Sweden

The Declaration of Performance (DoP) can be found on our website – www.nexa.se

Nexa Bridge and the FS-558/RF smoke alarm allow you to easily create an automated system that is triggered when the smoke alarm is activated. For example, you can send a notification to your mobile phone, sirens can be activated and lights can be switched on.

NEXA BRIDGE

