Signal Overview for Smoke Detection

Status	Sound Signal	Smoke Detector LED
Normal operation	off	off
Smoke alarm	3 beeps every 4 s	blinks red
Heat alarm	4 beeps every 5 s	blinks orange
Other alarm	5 beeps every 6 s	off
Fault	2 beeps every 60 s	2 red blinks every 60 s
Low battery	1 beep every 60 s	1 red blink every 60 s
Alarm silenced	off	1 orange blink every 6 s
Function test (while housing is pressed)	continuous tone	heat alarm: lights orange smoke alarm: lights red

Signal Overview for LOXONE Status

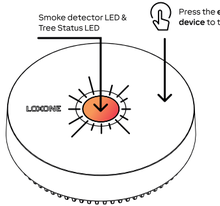
Status	Sound Signal	Tree Status LED
Normal operation	off	off
Connected but not configured	off	blinks orange
Device being identified via LOXONE Config	rapidly alternating beeps	blinks red/green rapidly
Device not mounted	off	blinks orange/red rapidly

Function Test

A function test must be carried out after **installation**, after **each cleaning**, **battery replacement**, and at least **once a month**.

1. Press and hold the entire housing to activate the function test.
2. After approx. 3 s, an acoustic signal will sound and will continue as long as the housing is held down.

- If the device is functioning properly, the signal will stop once the device is released.
- In case of a fault, the error signal will sound and repeat every minute.
  - Possible causes: low battery, sensor fault



If the device is not mounted, no continuous tone will sound during the function test. The function will only be active after the device is mounted and a 10-second timeout has passed. Therefore, start the function test at least 10 seconds after mounting.

Extended Function Test (with Test Gas)

To perform an extended function test with test gas (e.g., smoke spray), the service mode must first be activated.
Press and hold the housing for more than 3 s to trigger the function test. The service mode will be active for 60 s.
During this time, the detector can be tested with test gas.

The alarm is loud. Use **hearing protection** and maintain as much distance as possible from the device during the test.

Networked Smoke Detector

Smoke detectors can be networked by connecting them to the same Tree branch. In the event of a fire, the devices communicate with each other and emit an alarm sound.
Up to 50 smoke detectors can be connected to each Tree branch, with a maximum branch cable length of 500 m (1 640 ft).

Silence Alarm

To temporarily silence the smoke detector alarm after detecting smoke, press the device briefly (1 s).
The LED blinks orange every 6 s during silencing.
After 10 min, the detector returns to normal operation.

Cleaning

Perform cleaning as soon as LOXONE Config reports that the detector is soiled and recommends cleaning.

1. Detach the detector from its base and remove the battery.
2. Carefully clean the smoke chamber using compressed air.
3. Ensure the compressed air is **free of oil and water residues** – contaminated air can damage the sensor or cause additional contamination.
4. Reinsert the battery and remount the detector.
5. Perform a **function test**.

Electrical Specifications

Supply voltage	9 ... 30 V DC
Battery	Ultralife 9 V (U9VL) or Varta 6122
Battery lifetime	>5 years

Battery Replacement

1. Remove the detector from the base by turning it counterclockwise.
2. Replace the 9 V lithium battery with the recommended battery.
3. Reattach the detector to the base by turning it clockwise.
4. Perform a **function test**.

CAUTION: There is a risk of explosion if the battery is replaced improperly.
The replacement must only be with the same or specified type.
Do not expose the battery to heat, fire, or direct sunlight. Do not recharge, short-circuit, or open the battery.
Dispose of the used battery in accordance with local regulations.

Safety Instructions

Use only as intended. For indoor use only. Not suitable for habitable recreational vehicles – improper use may result in damage or injury.
Installation must comply with local regulations and applicable fire safety standards.

Smoke Detection Specifications

Smoke detection	Tyndall effect (optical)
Max. coverage area	area up to 40 m² height up to 5 m
Alarm indication	optically (red LED) and acoustically (sound signal >85 dB(A)/3 m)
Temperature threshold for heat alarm	58 °C / 136.4 °F
Replacement interval	10 years after activation

Presence Detection Specifications

Motion detection	passive infrared sensor
Motion detection range	Ø 6 m / 20 ft (at a height of 2.4 m / 8 ft)
Detection angle	horizontal 360°, vertical 100°
Recommended installation height	2.4 ... 3.5 m / 8 ... 11.5 ft
Max. installation height	5 m / 16.5 ft
Measuring range of brightness sensor	0 ... 32 000 lx
Acoustic detection	60 Hz ... 20 kHz, mono Max. sound pressure level (SPL): 160 dB Signal-to-noise ratio (SNR): 64 dBA

LOXONE Tree Interface

Tree Interface	connection with Miniserver / Tree Extension

Recommended Cable

LOXONE Tree Cable (100637)	wire cross-section: Ø 0.8 mm (0.5 mm² / AWG 21)

Connecting Terminals

Wire cross-section	0.25 ... 0.8 mm²/ AWG 23 ... 18
Stipping length	5 mm / 0.2"
Temperature resistance	-40 ... 105 °C / -40 ... 221 °F

Ambient Conditions

Temperature	0 ... 40 °C / 32 ... 104 °F
Humidity	max. 95 % r.H. (non condensing)
Ingress Protection	IP20

Smoke & Presence Detector Tree

Part No.: 100653 (White)
Part No.: 100654 (Anthracite)

LOXONE

About the product

The Smoke & Presence Detector Tree combines a presence sensor and a smoke detector in a single device. It provides optical smoke detection according to EN 14604 for early fire warning, along with reliable detection of presence, motion, and brightness.

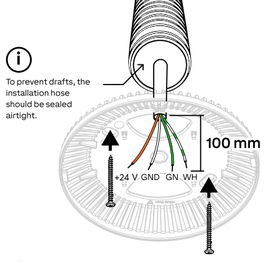
Features

- Autonomous smoke detection operation with long-lasting battery
- Heat detector
- Optical smoke detection
- Presence and brightness sensor
- Visual and acoustic alarm
- Full integration with LOXONE Tree
- Compact, unobtrusive design for ceiling installation

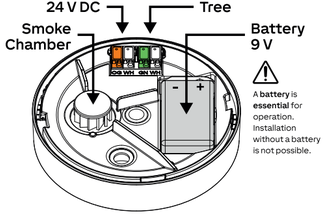
Commissioning

Follow the instructions below for proper operation:

- A Loxone Miniserver and a LOXONE Tree interface are required.
- The device can be paired once:
  - The battery is inserted,
  - The 24 V power supply is connected,
  - LOXONE Tree is connected,
  - The device is placed on the base, and
  - The status LED blinks orange.
- Connect via LOXONE Config with the Miniserver to pair the device and create a program.
- Additional information is available via the QR code and link on the back of this document.



The detector can be mounted on a flush-mount box, which is recommended for easier cable management and proper installation.



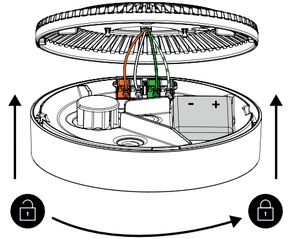
A **battery** is **essential** for operation. Installation without a battery is not possible.

Mounting

Place the smoke detector onto the base and turn it clockwise until it clicks firmly into place. A detector that is not fully engaged may not sit securely and will not function properly.

Mounting Check

If the detector is not mounted correctly, the LED will flash orange/red after programming. Additionally, in the Config, a message will be displayed indicating that the device has been removed.



During installation, ensure that no dust, debris, or residues from cables fall onto the detector, as this can impair proper operation.

Mounting Instructions

The installation of smoke detectors must comply with the respective **country-specific regulations** and **standards**.

For optimal protection, install multiple smoke detectors throughout the apartment or house.

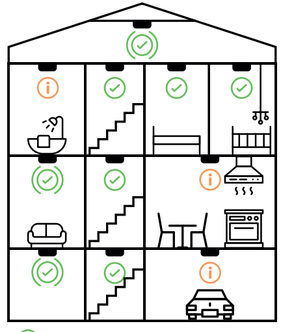
If possible, smoke detectors should be mounted centrally on the ceiling, at least 0.5 m away from walls, beams, or furniture that could obstruct the entry of smoke.

In hallways up to 3 m wide, the maximum spacing between two smoke detectors should not exceed 15 m. The distance from the smoke detector to the end of the hallway should be no more than 7.5 m. Smoke detectors must also be installed at intersections, junctions, and corners.

If a room is divided by a gallery or platform, a smoke detector must be installed below it if the platform is larger than 16 m² and both length and width are greater than 2 m.

Ceiling structures such as beams or suspensions that create separate ceiling areas must also be taken into account. If the height of these structures exceeds 0.2 m and the resulting ceiling area is larger than 36 m², a smoke detector must be installed in each section.

Planning Example



Yes

Not mandatory! Recommended for optimal protection

Recommendation: Use Smoke & Presence Detector as a heat detector

False Alarm

CAUTION: Smoke, dust, steam, electromagnetic interference, condensation, and insects can cause false triggers.

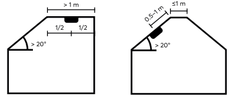


CAUTION: Drafts can affect smoke detection.

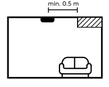


After a false alarm, follow the instructions in the "Cleaning" section and perform a function test.

Mounting on Sloped Ceilings



The smoke detector can be mounted on the ceiling. A minimum distance of 0.5 m from any obstacles must be observed.



For more information about this product, visit
loxone.com/help/smoke-presence-tree

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