

User/Installation Instructions for Radio Smoke Detector

Model Number: 67005/74

Tunstall

Brief information

- Battery powered radio smoke detector using the scattered light method
- Provides precise smoke detection
- Reduces false alarms due to its high performance measuring chamber
- Automatic self-test of the complete electronic
- Powerful alarm signal of more than 85 dB(A) in case of fire
- Operating temperature range -10°C - $+50^{\circ}\text{C}$



Safety instructions



- The smoke detector generates a powerful and shrill noise which can be harmful to your ears. Keep at least 50 cm distance from the detector while performing the function test.
- Never use rechargeable batteries nor main supply circuits for power supply. This could cause malfunctioning or early breakdown of the detector.
- Never paint the smoke detector.
- Please note: Smoke detectors will always identify the smoke of a fire. They will not identify the flame itself.
- Smoke detectors are not able to extinguish any fire. In case of alarm evacuate the building and call the fire service.
- The smoke detector only monitors a defined zone around its own position. For optimum protection, ensure that a sufficient number of detectors are installed in the area to be monitored.
- Persons under the influence of alcohol or drugs may have difficulty hearing the alarm.

Place of installation

The smoke detector performs best when installed on the ceiling in the centre of the room. If this is not possible, ensure the detector is at least 50 cm from the wall.

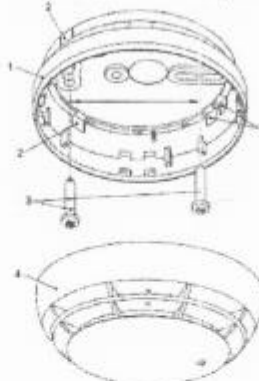


To be sure that you are woken up by the smoke detector alarm at night, detectors should be placed in all bedrooms to provide minimum protection. In houses with several floors, one smoke detector should be placed in the hallway of each floor.

Unsuitable places for installation

To avoid false alarms and malfunctions, never install the smoke detector:

- inside rooms where heavy vapor, dust or smoke develop under regular conditions (bath, kitchen)
- near to fireplaces and open fires
- near to ventilation systems. The flow of air may deviate the smoke so it will never reach the detector
- near to neon lamps and energy saving lamps. The starter may cause false alarms by electric fields that arise when turning on the lamp (minimum distance: 50 cm)
- in edges – for example house gables - in such areas smoke free air can accumulate and the identification of fire is hindered
- inside rooms with temperatures beneath -10°C or above $+50^{\circ}\text{C}$



Installation

1. Fix base (1) using the enclosed assembly parts (3). Do not allow the detectors to get dirty through occurring bore dust. Do not use countersunk head bolts.
2. Should the line that serves to link several detectors come as surface wiring, break out 1 of the 4 cable entry apertures (2) by means of a screwdriver or a similar tool.
3. Follow the instructions to link several smoke detectors, if necessary (see chapter "Linking smoke detectors"). In case that it should be connected from the back of the base coming through a cable tube please put a seal (order no. 30959) in between the ceiling and the base to avoid current of air.
4. Connect the 9V lithium battery (5) with the battery clip (6) and insert the battery in the battery tray.
5. Place the smoke detector (4) in the base and lock it by turning it gently clockwise.
6. Proceed to the function test (see chapter "Function test").

Note: The smoke detector will not engage inside the base without the battery inserted.

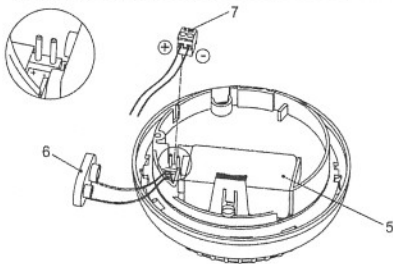
Linking smoke detectors

You may link up to 40 smoke detectors with each other in order to forward the alarm signal of one detector to all the other detectors.

The connection of the detectors is realised by twin wire cable (e.g. phone cable: J-Y(St)Y 2x2x0,6 mm) in parallel.

Note: The total line length of the detector network should not exceed 450 m.

To link the smoke detectors please proceed as follows:



1. Pull off terminal screw (7) from the board.
2. Connect the terminals to the line according to following illustration.
3. Stick terminal screw back on the board.
4. Connect additional detectors by the same way. Pay attention to polarity (plus to plus

and minus to minus).

Wireless Transmitter Module (869MHz)

The Smoke Detector is equipped with a wireless 869MHz transmitter module (SA6774). This will transmit alarm signals via Tunstall Emergency equipment to monitoring centres.

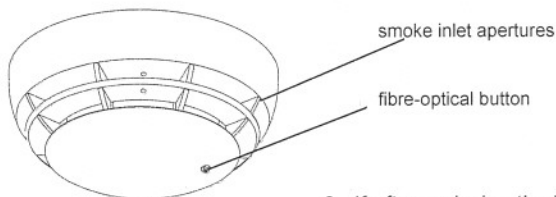
Function test



Attention: The smoke detector generates a very powerful and shrill tone which can be harmful to ears. Please keep at least a distance of 50 cm during the function test.

Perform the function test every month. Proceed as follows:

1. Check if the LED is flashing.
2. Press the fiber-optical button for at least 1 sec.: If a signal tone is generated, the detector works properly. If no signal tone is generated, please replace the batteries.



3. If after replacing the batteries a tone can still not be heard then the smoke detector is damaged and has to be replaced by a new one.

Programming to Tunstall equipment

Register the radio smoke detector to Tunstall emergency equipment by placing the emergency equipment in trigger registration mode and pressing the fibre-optical button for at least 1sec. A signal tone is generated and the detector transmits a radio message to the emergency equipment. Check that the registration is successful by pressing the fibre-optical button again to raise an emergency call. If no alarm is given, please check the following:

- Battery state?
- Smoke detector faulty?
- Emergency equipment within radio range?
- Emergency equipment programming correctly?

Self-test and battery test

The smoke detector identifies smoke at an early stage of development. An independent self-test permanently controls the function of the smoke evaluation. Possible faults are shown per alarm signal (signal tone or light diode).

The power supply is continuously checked through the battery test. If the battery voltage decreases under a defined point, the smoke detector will signal for 30 days that the battery should be replaced. The smoke detector continues to function fully during these 30 days however the battery should be replaced as soon as possible. Life time of the battery: approx. 5 years (using only Lithium Ultralife batteries).

Check the functionality of the smoke detector after each battery change.

Operation- and alarm signals

Signal		Meaning
Signal tone	LED	
-	Flashes each 40 s	Automatic self-test, regular operation mode
Loud interval tone	Flashes	Local smoke alarm or function test
Loud interval tone	-	Smoke alarm on linked smoke detector
Short signal tone each 40 s	Flashes alternating with signal tone	Failure / pollution
Short signal tone each 40 s	Flashes parallel to signal tone	Indication for battery replacement

Maintenance

A maintenance service should be provided every 6 months (or in case of a failure message) in order to guarantee the operating safety of the smoke detector over a long period.

To carry out this service, please proceed as follows:

- Remove the smoke detector from the base (turn counterclockwise) and clear away the dust.
- Wipe the smoke detector with a damp cloth.
- Place the smoke detector back in the base and turn it clockwise until it is locked.

Note: The smoke detector will not engage inside the base without the battery inserted.

- Check if the automatic self-test (smoke detector flashes approximately every 40 seconds) is executed.
- Perform a function test.

Replace all smoke detectors after 10 years.

Technical data

Detection method: Tyndall-effect
 Alarm indication: optical and acoustic
 Recommended battery using wireless module: U9VL-FP
 e.g. LITHIUM ULTRALIFE 9V (compound-battery)...Part Number S1004035
 Average lifetime of battery: approx. 5 years
 Operating temperature range: -10 to +50 °C
 Max. monitored area: 60 m² till 6 m height
 Indicator: red LED
 Signal tone: >85 dB(A)/3m
 Class of protection EN 60 529: IP 43
 Standards: ISO 12239
 Dimensions without base (Ø x H): 100 x 35,0 mm
 Dimensions with base (Ø x H): 100 x 51,0 mm
 Mounting hole distance on base: 28,0 - 65,0 mm
 Housing material/color: ABS/polar white
 Wireless range: Typically 25 - 50m
 Detector Life: 10 years
 Vds Approval: G 202042

Acceptance of guarantee

Our products are under guarantee within the scope of the statutory provisions.

Please return the unit postage paid giving a brief description of the fault:

Tunstall Telecom Ltd
 Whitley Lodge
 Whitley Bridge
 Yorkshire, DN14 0HR, UK
 +44 1977 661234