Wireless Smoke Alarm

FERION 5000 OW

BOSCH

en

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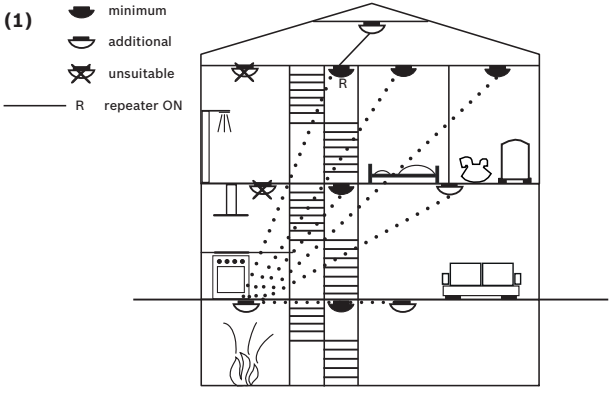
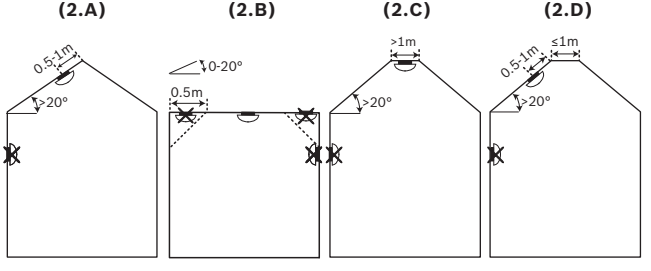
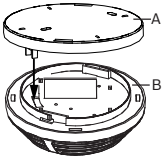
1 Graphics

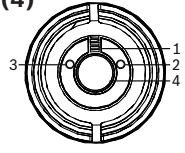

(1)
minimum
additional
unsuitable
R repeater ON
R


(2.A)
(2.B)
(2.C)
(2.D)
0.5-1m
>20°
0-20°
0.5m
>1m
>20°
0.5-1m
≤1m
>20°

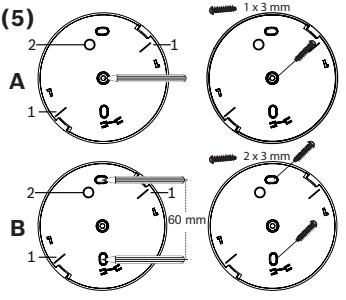
(3)



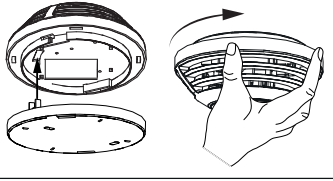
(4)



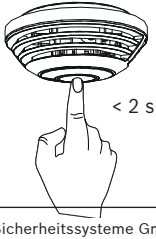
(5)



(6)



(7)



2 Introduction

The FERION 5000 OW wireless smoke alarm device with built-in long-life battery, built-in siren (4.1), alarm LED (4.2), emergency light (4.3) and big button for operation (4.4) is solely designed for residential applications. The device reliably warns you of the emergence of a fire in your house or flat. If the smoke emissions exceed a certain limit, an alarm is raised. More information, CE declaration, and declaration of performance is available on www.boschsecurity.com/ferion/.
The safety notes and instructions contained in this manual must be observed in order to ensure proper function. The device must not be modified in any way. If you have any questions about the method of operation, safety or connection of the device, consult the place of purchase.

Caution!
Only use original parts. Only use installation materials as recommended in this manual. Do not paint over the device! Do not cover it with wallpaper! Replacement after 10 years recommended.

Notice!

Do not use if there are signs of damage, or in case of malfunction. Return defective devices to the place of purchase.

Not suitable for household room illumination!

	Old devices are not to be disposed of with the household waste. Dispose of them according to the guidelines for electric and electronic waste at the local collection points.

Parts included

1 smoke alarm device: base (3.A) and detector head (3.B)
Fastening material: 1 screw, 1 plug

3 Mounting

Notice!

The device is designed for mounting according to DIN 14676 on flat or slanted ceiling. Wall mounting is not allowed.

Perform the following steps. Find exact information about the single steps on the following pages in this manual. See also the graphics at the beginning of this manual.

1. Determination of the mounting locations. (1) Observe the information regarding *Unsuitable locations for mounting, page 8*, and regarding *Audibility, page 8*. Each device is to be

mounted horizontally on the ceiling in centered position with a minimum distance of 0.5m to walls and objects. On slanted ceilings >20° it is to be mounted 0.5m to 1m from the top of the ceiling. (2.A), (2.B), (2.C), (2.D)

2. *Connecting devices, page 10*. For testing the network, position the devices near to the determined mounting locations: *Testing the network, page 10*. If necessary switch the repeater function on for one device, see *Repeater function, page 11*.
3. For each device: *Mounting the base*. (5) Observe the mark (5.2) for adjusting the emergency light and the marks (5.1) for alignment with BOSCH label/siren.
4. *Functional check, page 12*, for each device after setting it up into operation. (6) (7)

Unsuitable locations for mounting

– Kitchen/bathroom (steam)
– Rooms with open fireplaces (fumes)
– In the immediate vicinity of halogen lamps, transformers, fluorescent or energy-saving lamps
– Garages (exhaust fumes)
– Dusty and dirty rooms
– In the vicinity of windows, ventilators (air movement)
– In the vicinity of areas where people smoke

Audibility

You must hear an alarm at any place in your building or flat. The alarm really has to wake you up. If necessary adapt the number of the devices for achieving audibility in your whole building or flat.

Mounting the base

Mount the base with one central screw and plug. (5.A) Or optionally use two screws and plugs. (5.B) To set the device into operation you screw the detector head to its base by twisting it clockwise until it latches. (6)

4 Radio Network

Up to 40 FERION 5000 OW can be interconnected to create a network. Thus, an alarm is raised at all devices giving the chance to react faster to a distant fire. Before mounting to the ceiling, position the devices you want to connect next to each other. Leave a minimum distance of 1 m in between.

Notice!
FERION 5000 OW is not compatible with FERION 3000 OW. Both types cannot be integrated in one network.

Notice!
Hereby, Bosch Sicherheitssysteme GmbH declares that the radio equipment type FERION 5000 OW is in compliance with Directive 1999/5/EC and is designed for the use in all countries of the European Union. The full text of the EU declaration of conformity is available at the following internet address:
www.boschsecurity.com/ferion/

Attentively read the following instructions before programming.

Connecting devices

If the device which you want to connect was not in use before proceed with step 1. If the device which you want to connect was already in use, disassemble head and base. Then press and hold the button for about 4 s to clear for installation. If it was already element of a network, then reset it first, see *Disconnecting a device (Reset), page 12*.

1. Both devices must be in operation (head and base assembled) and in normal mode (no optical signal).
2. For both devices, press and hold the button for about 4 s until both devices flash orange (connecting). -> After a short delay the devices light up green (connecting successful) or red (connecting failed).

To connect a further device, repeat the procedure for one device of the existing network and the unprogrammed device. (Up to 40 devices can be interconnected.)

Once you have connected all devices and the devices are in normal mode again (no optical signal), test the network.

Testing the network

In addition to the *Functional check, page 12* (7), for each device, test the network:

1. Select the device that has to cover the longest distance to connected devices. To send a radio test signal, press and hold the button for about 4 s until the LED flashes orange (connecting).
2. Press and release the button (< 2 s).

After short delay all devices in the network flash green 5 min (no audible signal). If not, the connecting procedure failed or the distance between the connected devices is too large (the connected devices cannot reach each other). To extend the operating range switch the repeater function on.
To stop the flashing earlier you press and hold the button for about 10 s.

Notice!
The radio signal transmission can be obstructed due to buildings or vegetation, walls, ceilings, radio frequency interference. Significant inhibition of the wireless signal results from the vicinity of solid steel beams, large metal surfaces, or similar. The device does not automatically indicate a reduced operating range or loss of network connection.

Repeater function
If the network test has shown that not all devices can be reached, then select the last reachable device and switch its repeater function on to extend its operating range. One device in the network can be configured as a repeater to cover long distances. (1) See also www.boschsecurity.com/ferion/.

1. If the device is in normal mode (no optical signal) press and hold the button for about 4 s until LED flashes orange (connecting).

2. Press and hold the button for about 4 s. -> The LED lights up red (repeater function off) or green (repeater function on) for 30 s. To change the mode of the repeater function press and release the button (< 2 s). -> LED changes the color promptly. After 30 s the device will switch to normal mode again.

Adding devices to an existing network

Perform *Connecting devices, page 10* for one device of the existing network and the unprogrammed device. (Up to 40 devices can be interconnected.)

Disconnecting a device (Reset)

For disconnecting a device you restore the factory settings. The device will continue to work, but it will not be connected any longer with other devices.

– If the device is in normal mode (head and base assembled, no optical signal) press and hold the button more than 10 s. -> LED flashes first orange (connecting), then red (reset). After releasing the button the LED changes from red, green to orange (LED test).

5 Maintenance

Functional check

A visual inspection and a functional check must be done for each device monthly. After the functional check the device is muted for 10 min, even when an alarm will be triggered.

– The device is in normal mode (no signal). To perform the functional check press and release the button (< 2 s). (6) -> Siren sounds 3 times ≥85 dB(A), LED flashes red, emergency light on. Then LED flashes red once every 10 s (muted). After 10 min the device will switch to normal mode again.

If the functional check fails the device is defective and must be replaced.

Siren off (alarm signal)

LED of the device that triggered an alarm flashes red fast.

– If you press and release the button (< 2 s) of a device that has triggered an alarm, then all devices stop sounding and emergency light turns off (delay up to 16 s).
– If you press and release the button (< 2 s) of another device in the network, then all devices (except the device that triggered the alarm) stop sounding and emergency light turns off (delay up to 16 s).

After turning the siren off, the LED of the device that has triggered the alarm flashes red once every 10 s (muted). After 10 min the device will switch to normal mode again.

Polluted smoke chamber/weak battery

If the siren sounds short 3 times every 43 s (polluted smoke chamber), then you have to replace the device. If the siren sounds short once every 43 s (weak battery), also then you have to replace the device.

If the siren sounds short once every 3 h the device indicates weak battery of another device in the network. The device with weak battery sounds every 43 s and must be replaced.

6 Technical data

Sound pressure level at a distance of 3 m in dB(A)	≥85
Power supply (2 x 3V, non-replaceable)	LiMnO2
Dimensions (diameter x height, mm)	119 x 50
Weight (g)	167
Protection category (EN 60529)	IP20
Operating temp. (°C)*	0 ... +45
Storage temp. (°C)*	-10 ... +55
Max. rel. humidity (%, noncondensing)	93
Guarantee without batteries (y)**	10
Typical battery lifetime (y)***	10

* high temperature (> +30 °C) reduce the battery lifetime
** during standard usage and operation as stated in the user guide
*** based on typical storage temperature (-5 ... +30 °C) and typical operating temperature (+5 ... +30 °C) and monthly functional tests

Certification	CE , VdS , Q-Label
Harmonized standards	EN 14604:2009-02
	1999/5/EC

Wireless operation

Transmission band (MHz)	868.3
Receiver category (SRD Class)	2
Duty Cycle (%/h)	1
Range in free field (repeater function off, m)	≤100
Max. no. of devices in network	40

Signals

Mode	**Optical**	**Audible**
Normal	-	-
Functional test OK	flashes red fast, emergency light	3 x ≥85 dB(A)
Alarm	flashes red fast, emergency light	3 x ≥85 dB(A) / 4 s
Muted	flashes red 1 x / 10 s for 10 min	-

Mode	Optical	Audible
Weak battery	flashes red 1 x / 43 s	1 x short / 43 s
Polluted smoke chamber	flashes red 3 x / 43 s	3 x short / 43 s

Signals in wireless operation

Mode	Optical	Audible
Alarm from another device	emergency light	3 x ≥85 dB(A) / 4 s
Network test OK	flashes green 5 min	-
Weak battery of another device	flashes red 1 x / 3 h	1 x short / 3 h
LED test	LED change: red, green, orange	-

7 Customer Service

Replacement of the product is only possible with proof of purchase during guarantee.

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