

Radio module for modular smoke detector/VdS
1143 00

GIRA

Gira
Giersiepen GmbH & Co. KG
Electrical installation systems
P.O. Box 1220
42461 Radevormwald
Germany
Tel + 49 21 95 / 602 - 0
Fax + 49 21 95 / 602 - 119
www.gira.com
info@gira.com

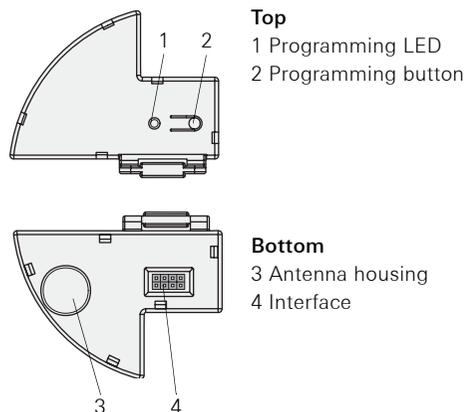
41 04 12 45/08

GIRA

Functional description

Radio module for wireless connection of modular smoke detectors/VdS. If a smoke detector detects smoke, all assigned smoke detectors signal an alarm. Up to 10 radio modules can be used within the transmission range (150 m free field). The radio module is plugged in at the interface of the modular smoke detector/VdS. As the networking terminals of the smoke detector can still be used when the module is inserted, wire-networked lines networked via radio can be set up. For this, only one radio module is used for each smoke detector line. In addition, receivers from the radio bus system can be operated, e.g. to switch on light or raise blinds during an alarm. A local smoke alarm can be silenced with a radio remote control or wall transmitter.

Device description



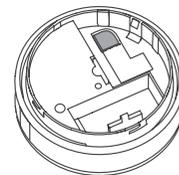
! Do not insert the radio module while the battery is connected
The radio module may not be inserted into the smoke detector while the battery is connected.

Installation of the radio module

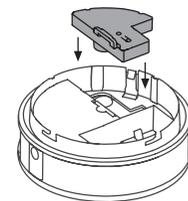
! Do not insert the radio module while the battery is connected
The radio module may not be inserted into the smoke detector while the battery is connected.

Please install the radio module as follows:

1. Remove the modular smoke detector/VdS from the base by rotating it anticlockwise and remove the battery.
2. Remove the tab (shaded grey in the figure) by levering it out with a suitable tool (e.g. a screwdriver).



3. Insert the radio module into the connector until it engages.
4. Connect the battery, place the smoke detector into the base and lock it by turning it clockwise.



! One radio module per smoke detector line
With wired smoke detector lines, only one radio module may be used per line. Otherwise, both radio modules would send alarm telegrams in case of an alarm and interfere with one another.

Assignment of radio transmitters and receivers

To allow the radio transmitters and radio receivers to communicate with one another, they must be assigned to one another. The sensitivity of the radio receiver is reduced in programming mode. Accordingly, the distance between the transmitters and receiver should be between 0,5 m and 5 m during assignment.

i Behaviour of smoke detector in programming mode
The smoke detector signals active programming mode of the radio module with alternative flashing/short signal sound in 20-sec. cycle. The volume of the smoke detector signal transmitter is reduced in programming mode.

! Note
The radio module may not be assigned to a radio repeater.

A differentiation is made between three types of assignment procedures:

Assignment of radio modules to one another
If a smoke detector detects smoke, all assigned smoke detectors signal an alarm (see Seite 1).

Assignment of radio module in radio receiver
The alarm telegram of the radio module is used to operate radio receivers (see Seite 2).

Assignment of radio transmitters in radio module
For silencing a local smoke alarm for approx. 10 minutes (see Seite 2). Up to 14 radio transmitters can be assigned.

i Silencing a smoke detector
To silence a local smoke detector, it may be necessary to actuate the transmitter button several times or for a longer time. With use of a radio transmitter for muting of a local smoke detector the VdS approval of the smoke detector expires.

Assignment of radio modules to one another

Before carrying out assignment, the radio modules must first be inserted into the smoke detectors (see Seite 1) and the batteries of the smoke detectors must be connected.

Then assign the radio modules to one another:

1. Start programming mode at all radio modules to be taught in by pressing the programming buttons of the radio modules for approx. 4 sec. The active programming mode is displayed via flashing (1 Hz) of the programming LED on the radio module.
2. Press the test button on any of the smoke detectors with the radio module until programming LED illuminates on all radio modules.
3. Programming mode ends automatically after approx. 1 min. or after a brief press of the programming button.
4. Carry out a function test.

Subsequent assignment of a radio module to a group

If radio-networked smoke detector groups are to be expanded or if they cannot all be assigned during the initial assignment of several radio modules, radio modules can be subsequently assigned to an existing group:

1. Start programming mode at all radio modules to be assigned subsequently by actuating the programming button for approx 4 sec. The programming LED then flashes (1 Hz) for approx. 1 min.
2. Start programming mode at a radio module already assigned to the group.
3. Press the test button on the smoke detector which has already been assigned until the programming LED illuminates on all radio modules.
4. Programming mode ends automatically after approx. 1 min. or after a brief press of the programming button.
5. Carry out a function test.

Assignment of radio module in radio receiver

Radio receivers can be operated via an alarm signal of the smoke detector. This can be used, for example, to switch on lights or raise blinds in case of an alarm.

The alarm telegram of the radio module leads to the following set responses by the radio receivers:

- Switching actuators: switched on
- Dimming actuators: switched to memory value
- Blind actuators: raise command

A radio receiver is assigned to the radio module as follows:

1. Switch the radio receiver to programming mode (see operating instructions of the radio receiver).
2. Start programming mode at the radio module of the smoke detector by pressing the programming button for approx. 4 sec. The active programming mode is displayed via flashing (1 Hz) of the programming LED on the radio module.
3. Press the test button on the smoke detector until the LED at the radio receiver stops blinking and starts illuminating continuously.
4. Programming mode ends automatically after approx. 1 min. or after a brief press of the programming button.

Assignment of radio transmitters in radio module

Silencing local smoke alarms

During a local alarm, the signalling of the local smoke detector and the forwarding of the alarm signal to external smoke detectors can be suppressed for approx. 10 min. A silencing telegram must be sent from a radio remote control or wall transmitter for this purpose.



Note

Forwarded external alarms (wire or radio) have a higher priority than the local alarm. They cannot be silenced and are signalled despite active silencing. With use of a radio transmitter for muting of a local smoke detector the VdS approval of the smoke detector expires.

To assign the channel button of a transmitter to the radio module, proceed as follows:

1. Start programming mode at the radio module by pressing the programming button for approx. 4 sec. The programming LED then flashes (1 Hz) for approx. 1 min.
2. Trigger a radio telegram with the channel button of the radio transmitter. For this purpose, press the channel button longer than 1 sec. (see also operating instructions of radio transmitter).
3. The radio module acknowledges the assignment with continuous illumination of the LED.
4. Programming mode ends automatically after approx. 1 min. or after a brief press of the programming button.

Only one remote control or wall transmitter can be assigned for each learn process. To assign an additional transmitter to the radio module, learning mode must be exited and reactivated.

Deleting all assignments

It is possible to delete all assignments, both radio modules and radio transmitters, in the radio module. This resets the radio module to the state of delivery. Proceed as follows to delete all assignments:

1. Start programming mode at the radio module by pressing the programming button for approx. 4 sec. The programming LED then flashes (1 Hz) for approx. 1 min.
2. Press the programming button again. Keep the programming button pressed until the programming LED stops flashing and starts illuminating continuously after approx. 10 sec.

Continuous illumination ends after approx. 1 min. or by briefly pressing the programming button.

Test function

The test function can be called up to check the programming. When the test function is active, the signal transmitter of the smoke detector is silenced.

Activation of the test function

To activate the test function, briefly press the programming button (< 4 sec.). The active test function is indicated via flashing (1 Hz) of the programming LED.

Checking reception of the radio module

Reception is constantly checked while the test function is active. If an alarm telegram is received, the programming LED illuminates for 1 sec. If additional telegrams are received during this second, the illumination duration is extended accordingly.

Checking the transmission function

Press the test button of the smoke detector while the test function is active to trigger alarm telegrams. The programming LED flashes (2 Hz) while these telegrams are being transmitted.

Ending the test function

The test function ends automatically after approx. 1 min. or after a brief press of the programming button.

Radio transmission

Radio transmission occurs on a non-exclusive transmission path, and for this reason interference cannot be ruled out.

The radio transmission is not suitable for security purposes, e.g. emergency stop, emergency call. The range of a radio system depends on the power of the transmitter, the reception characteristics of the receivers, the ambient humidity, the installation height and the structural conditions of the object.

Examples for material penetration:

Dry material	Penetration
Wood, plaster, sheetrock	approx. 90 %
Brick, pressboard	approx. 70 %
Reinforced concrete	approx. 30 %
Metal, metal screens, aluminium cladding	approx. 10 %
Rain, snow	approx. 0-40 %

Information on radio operation

- The interconnection of this radio system to other communication networks is only permissible in the context of the applicable national laws.
- This radio system may not be used for communication across property boundaries.
- Operation in Germany is subject to the relevant regulations (Amtsblatt Vfg 73/2000).
- If used as intended, this device complies with the requirements of the R&TTE Directive (1999/5/EG). A complete declaration of conformity can be found on the Internet at: www.gira.de/konformitaet.

The smoke detector with radio module may be operated in all EU and EFTA countries.

Technical data

Power supply:	via 9 V battery of the smoke detector
Transmission frequency:	433.42 MHz, ASK
Transmission range:	typically 150 m (in free field)
Temperature range:	0 °C to +55 °C
Protection type:	IP 20

Warranty

We provide a warranty as provided for by law. Please send the unit postage free with a description of the defect to our central customer service via your specialised dealer:

Gira
Giersiepen GmbH & Co. KG
Service Center
Dahlienstraße 12
D-42477 Radevormwald
Germany