

Radio pushbutton with sensor connection

Order no.: 0545 ..

Function

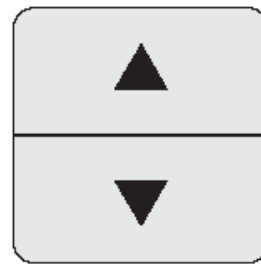
This radio control pushbutton with sensor input is a component of the Blind/Shutter Control and Radio Bus systems.

It is used in combination with a blind/shutter control insert.

Depending on the actuation of a radio transmitter (e. g. hand-held radio transmitter) or on manual control through the attachment, the shutter slats will be readjusted (short pressing of the pushbutton < 1 s) or the entire blind/shutter moved (long pressing of the pushbutton > 1 s), respectively.

The radio control pushbutton can accommodate up to 30 radio channels.

A)



Lightscape

You can, for instance, combine into up to five lightscares the end position of the blind/shutter (completely up, completely down) with the associated lighting configuration. The latter can be saved and recalled with corresponding radio transmitters (e. g. 'Komfort' handheld radio transmitter).

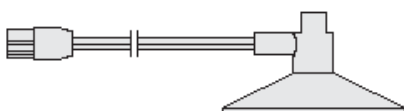
Sensors

Sun sensor

The sun sensor (Fig. B) can be attached to the window pane and offers a sunlight protection function.

Fix the sun sensor at the height the blind/shutter is supposed to reach if the brightness exceeds the value preset by the potentiometer.

B)



Prior to activating the sunlight protection function, you must bring the blind/shutter to its upper end position in the 'continuous' mode (running time 2 minutes).

The sunlight protection function will move down the blind/shutter about 2 min. after the preset brightness value has been exceeded.

This delay of about 2 min. (hysteresis) is necessary to compensate short-time brightness variations. The blind/shutter will not be moved up and down upon any brightness difference.

If the brightness remains below the preset value for at least 15 min. the blind/shutter will be moved up again (short-time brightness variations being ignored).

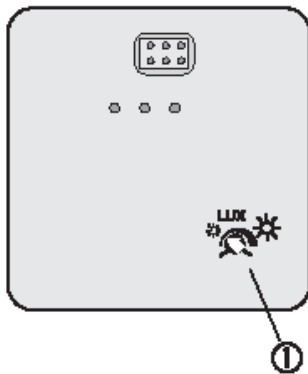
You can use the potentiometer on the back of the pushbutton (Fig. C ①) to set the brightness value between approx. 5,000 and approx. 80,000 lux.

Position ☼: approx. 80,000 lux

Position * : approx. 5,000 lux

The potentiometer has been factory-set to about 10,000 lux (position as shown in Fig. C).

c)



Glass breakage sensor

The glass breakage sensor (Fig. D) offers protection against the weather in the event of a broken window pane. If a pane is broken, the blind/shutter will move to its lowermost position.

You can use the ▲ key to reset a glass breakage message. This will make the blind/shutter move up.

D)



Installation

You can place into operation the radio control pushbutton only in conjunction with a blind/shutter control insert. The operating instructions manual of the insert describes how to connect and install the latter.

Procedure

1. Install the blind/shutter control insert ① into a flush-mounted box (deep box recommended) with the connecting terminals of the insert at the bottom.
2. Plug radio control pushbutton ② onto the insert together with frame ③ when the mains voltage is disconnected.

Note

The distance to electrical loads (e. g. blind/shutter motor, hifi and TV systems) must be at least 0.5 m.



Note

Do not use the glass breakage sensor in conjunction with the wind sensor. If the glass breakage sensor has tripped the wind protection function will be disabled through the extension input (▲ Up), with the blind/shutter remaining shut.



Safety Instructions

Attention: Electrical equipment must be installed and fitted by qualified electricians only.

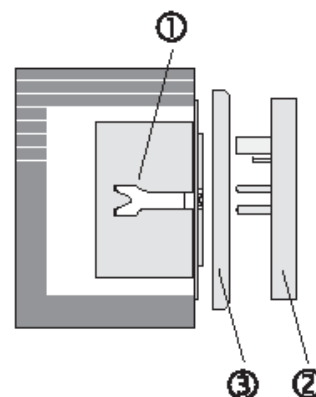
The blind/shutter control has been exclusively designed for switching blind/shutter motors, respectively.

Do not switch any other loads.

Other applications such as controlling a sliding gate may entail certain hazards.

Please observe the motor manufacturers' information on how to connect the blind/shutter motors in parallel as well as on their reversing time and maximum duty cycle (ED).

E)



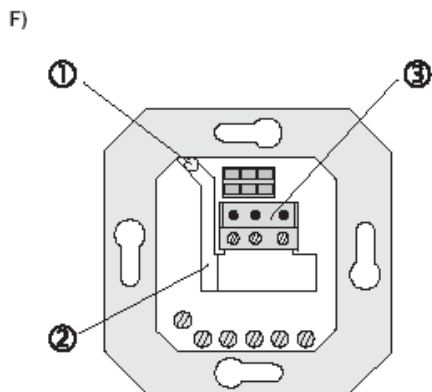
Connecting the sensors

i Important

- The sensor line carries safety extra-low voltage (SELV). Please observe the installation instructions of VDE 0100.
- For the description, installation and connection of the insert, please refer to the operating instructions manual of the „blind/shutter control insert“.

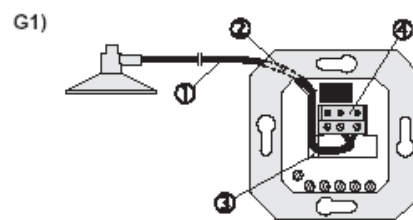
Sensor concealed wiring procedure (Fig. F)

- Choose a cable type suitable for the installation of the sensor wiring.
Recommended cable: J-Y(ST)Y 2x2x0.6 mm.
- Pass the individual wires of the sensor cable through the insulating sleeving supplied with the device. Then lead the wires together with the sleeving through opening ① of the insert.
- Run the wiring through duct ② to connecting terminal ③. The sleeving must insulate the full length of the single wires from the outer jacket to the connecting terminal.
- Press the terminal block into the insert as shown in Fig. F.



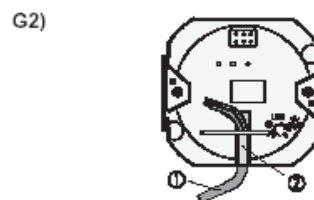
Sensor surface wiring procedure Version 1 (Fig. G1)

- Pass the sensor cable ① behind the mounting frame (between wall and frame) through opening ② into the duct ③ of the insert.
- Lead the line through the duct down to terminal connector ④. The line must be laid properly in the duct and run straight to the terminals without forming any loops in the 230 V AC connecting compartment.
- Press the terminal block into the insert as shown in Fig. G1.



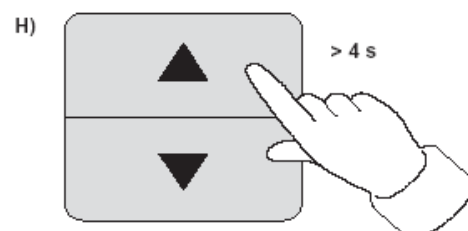
Sensor surface wiring procedure Version 2 (Fig. G2)

- Pass the sensor cable ① through cable duct ② in the attachment to the terminal block in the insert.
- Press the terminal block into the insert as shown in Fig. G2.



Programming a Radio Transmitter

In the programming mode, the sensitivity of a radio receiver is reduced to approx. 5 m. Therefore, the distance between the radio control pushbutton and the radio transmitter to be programmed should be between 0.5 m and 5 m.



Procedure

1. Simultaneously press both rockers of the radio control pushbutton for about 4 s (Fig. H: entire pushbutton surface) to get into the programming mode. This will activate the programming mode for about 1 min. and be indicated by a sequence of tone pulses (Fig. I).
2. Start the selected radio transmitter to send a data telegram (Fig. J); refer to the „Radio Transmitter“ operating instructions manual).
 - Programming a channel**
Press the channel key for more than 1 second.
 - Programming a lightscape key**
Press the lightscape key for more than 3 seconds.
3. The radio pushbutton will confirm storage by a continuous tone (Fig. K).
4. You will automatically exit the programming mode after about 1 min. or by shortly pressing one of the rockers of the radio control pushbutton.

Note:

If all of the 30 memory locations are occupied you will have to delete one of the transmitters already stored to program another one.

Deleting a Radio Transmitter

You can delete a radio transmitter already stored by reprogramming the same.

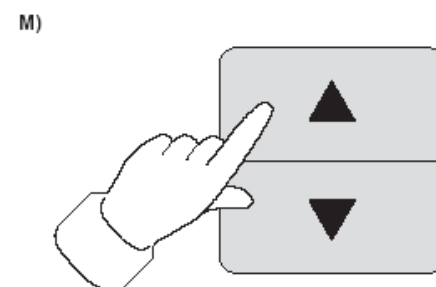
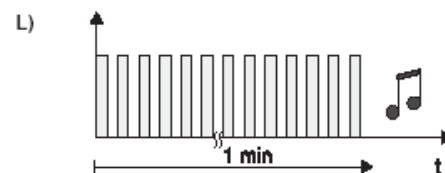
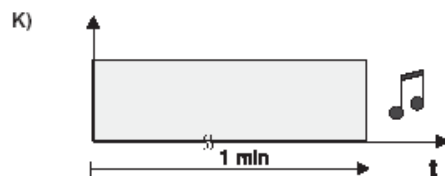
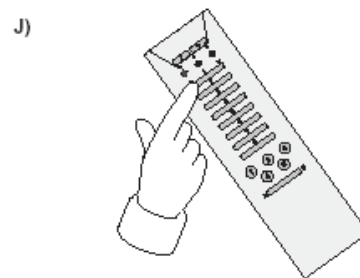
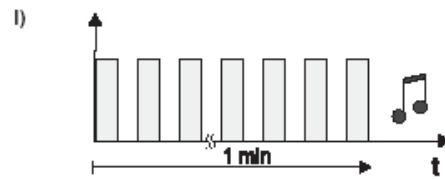
You must delete all channels and lightscape keys individually.

Successful deleting will be confirmed by a tone having a higher pulse frequency than for programming (Fig. L).

Operation

The rocker of the radio control pushbutton has two positions. For operation, distinction is made between long-time and short-time pressing of the pushbutton.

You can use the ▲ key to move the blind/shutter up and the ▼ key to move it down.



Short-time pressing of the pushbutton (up to 1 s)

It will move the blind/shutter for the period the pushbutton is held pressed (e. g. slat readjustment). You can press the pushbutton for a short time to stop a moving blind/shutter.

Long-time pressing of the pushbutton (at least 1 s)

It will start the blind/shutter motor for some 2 min. The blind/shutter will be moved up or down. After this time has elapsed or the mechanical or electronic limit switches have been reached, the motor will stop.

Lightscape

The end positions of a blind/shutter and the corresponding lighting can be combined and stored into a lightscape. You can change a lightscape any time by reprogramming.

Before saving or recalling a lightscape, you must have programmed the lightscape key of the radio transmitter (please refer to „Programming a Lightscape Key“).

Saving a lightscape

1. Move the blind/shutter to the desired and position.
2. Press the desired lightscape key of the radio transmitter for at least 3 s.



Note

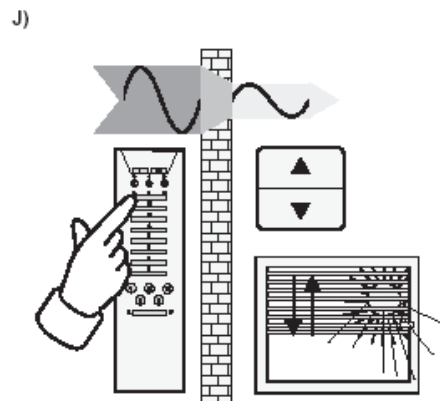
If the blind/shutter is not at one of its end positions or on the way there while a lightscape is being saved this blind/shutter will not be stored in such lightscape.

Radio Transmission

Radio transmission takes place on a non-exclusive path. Therefore, interference cannot be excluded. This type of radio transmission is not suitable for safety applications such as emergency stops or emergency calls.

The range of a radio-control system depends on transmitter power, receiver characteristics, air humidity, fitting height and building conditions. The figure illustrates the penetration of building materials by radio waves:

| <u>Dry material</u> | <u>Permeability</u> |
|--|---------------------|
| Timber, gypsum, gypsum-plasterboards | approx. 90 % |
| Brickwork, particle boards | approx. 70 % |
| Reinforced concrete | approx. 30 % |
| Metal, metal grating, aluminium lamination | approx. 10 % |
| Rain, snow | approx. 0 - 40 % |



Radio operation

- The inter-connection of this radio system with other communication networks must comply with national

legislation.

- This radio system must not be used for communication beyond property boundaries.

Conformity

Gira Giersiepen GmbH & Co. KG hereby declares that the radio system type Order No. 0543 xx corresponds to the directive 2014/53/EU. You can find the

full article number on the device. The complete text of the EU Declaration of Conformity is available under the Internet address: www.gira.de/konformitaet

Specifications

Power supply: from flush-mounting insert

Number of radio channels: 30

Receive frequency: 433,05 MHz ... 434,79 MHz

Switch-over time for directional changes: approx. 1 s

Receiver category: 2

Temperature range: approx. 0 °C ... +55 °C

Warranty

The warranty is provided in accordance with statutory requirements via the retailer.

Please submit or send faulty devices postage paid and with an error description to your sales representative (retailer/installation company). They will forward the devices to the Gira Service Center.

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