

Radio Push button 1gang quicklink

Order number 8514 51 ..

Radio Push button 2gang quicklink

Order number 8514 61 ..

Radio Push button 4gang quicklink

Order number 8564 81 ..

Operating instructions**1. Safety instructions**

Electrical equipment may only be installed and assembled by a qualified electrician in accordance with the relevant installation standards, regulations, directives and safety and accident prevention directives of the country.

Failure to comply with these instructions may result in damage to the device, fire or other hazards.

The radio transmission is not suitable for safety or alarm applications.

These instructions are an integral component of the product and must be retained by the end user.

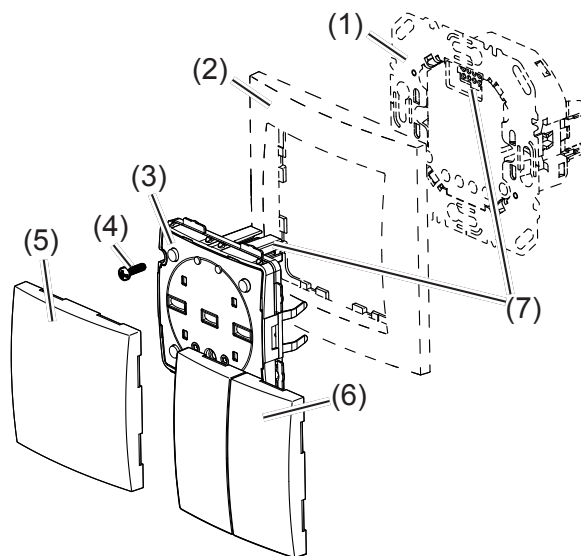
2. Design and layout of the device

Figure 1: Design and layout of the device

- (1) Insert (see "Accessories", not in scope of delivery)
- (2) Frame (not within scope of delivery)
- (3) Application module 1, 2 or 4gang
- (4) Screw for dismantling protection (not for design lines R.1/R.3)
- (5) Button design cover
- (6) 2gang button or 4gang button design cover
- (7) Interface between insert/application module

3. Function

System information

This device is a product of the quicklink system, in which installation devices communicate via radio signals.

Quicklink stands for a configuration mode in which the function-related connection between transmitters and receivers is set on the device through buttons and displays without further tools.

All devices configurable by quicklink can be operated together in one system.

Correct use

- For operation and remote control on a switch insert, on a flush-mounted dimmer or on a power supply for RF application modules
 - The device has been laid out for smaller applications in which a maximum of 20 devices are allocated
 - Only suitable for use in indoor areas with no drip and no spray water
-  The quicklink configuration of the devices must only be carried out by qualified electricians.

Product characteristics

- Functions for remote control, scenes, control switches via radio signals
- LED display of insert/application module compatibility
- Saving of switch-on brightness-level if operated on a flush-mounted dimmer

4. Operation

Operating concept

The operation of the top or bottom push-button operation area is validated differently for each button. Simultaneous pressing of top and bottom push-button operation areas triggers special functions.

Operation on a switch insert

Load status	Operation button, factory setting	Switch insert
OFF	Press top or bottom	Switch ON load.
ON	Press top or bottom	Switch OFF load.

Table 1

Operation on a flush-mounted dimmer

Dimming status	Operation button, factory setting	Flush-mounted dimmer
OFF	Short press on top or bottom	Switch ON to saved switch-on brightness-level.
ON	Short press on top or bottom	Switching OFF.
ON	Press top and bottom simultaneously > 5 s	Save brightness as switch-on brightness-level. As confirmation, the light switches OFF briefly and ON again.  In delivery condition, the maximum brightness is saved as switch-on brightness.
ON/OFF	long press on top	Dimming to maximum brightness-level
ON	long press on bottom	Dimming to minimum brightness-level
OFF	long press on bottom	Switching on with minimum brightness-level

Table 2

Operation on a power supply for RF application modules

The push-buttons are freely configurable; operation is dependent on the configuration (Table 7).

Setting the load

If the dimming and switching performance of loads is unsatisfactory after start-up, especially when circuited to energy-saving lamps and 230 V LED lamps, a load setting must be carried out for universal switch inserts or universal touch dimmers.

- Switch off load.
- Press button top and bottom area simultaneously for more than 10 seconds.
The connected load blinks once. The device is in selection mode.
- **i** If there is no further operation within the next 10 seconds, the insert switches to switching/dimming operation.
- Briefly press the button repeatedly to activate the desired setting mode (Table 3).
The load setting is executed.

Briefly press the button	Setting mode	Confirmation of the load setting	Notes
1 x	Load fine-setting	Load blinks 1 x after approx. 30 s and changes to switching/dimming operation	Not suitable for ohmic loads (e.g. incandescent, HV halogen lamps); use factory load setting. If the load fine-setting does not bring any improvement for energy-saving lamps or 230 V LED lamps, select the energy-saving lamp fine-setting or 230 V LED lamp universal setting. The load fine-setting is not available on 2gang universal inserts.
2 x	Factory load setting	Load blinks 2 x after approx. 6 s and changes to switching/dimming operation	
3 x	Energy-saving lamp fine-setting in phase cut-on	Load blinks 3 x after approx. 30 s and changes to switching/dimming operation	Energy-saving lamps are switched ON at brightness level of at least 50 % brightness in order to ensure an ignition process.
4 x	230 V LED lamp universal setting in phase cut-off	Load blinks 4 x after approx. 5 s and changes to switching/dimming operation	The universal setting contains standard values which enable the operation of typical dimmable 230 V LED lamps.
	For all setting modes	Load blinks 5 x	The selected setting mode is not supported by the insert.

Table 3: Load setting mode

Operation via extension unit, push-button, NO contact

Dimming status	Operation push-button	Switch insert	Flush-mounted dimmer
OFF	Press < 0.4 s	Switch ON	Switch ON with saved switch-on brightness-level.
ON	Press < 0.4 s	Switch OFF	Switch off
ON	Press > 0.4 s	Switch OFF	Dimming to minimum/maximum brightness-level with alternating direction
OFF	Press > 0.4 s	Switch ON	Dimming from minimum to maximum brightness-level

Table 4

- **i** The switch-on brightness-level cannot be saved on an extension unit push-button.

5. Information for electricians

Overview of the operating elements beneath the design cover

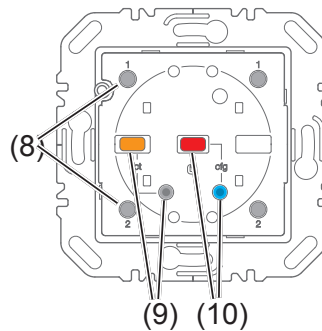


Figure 2a: Operating elements of the 1gang radio button

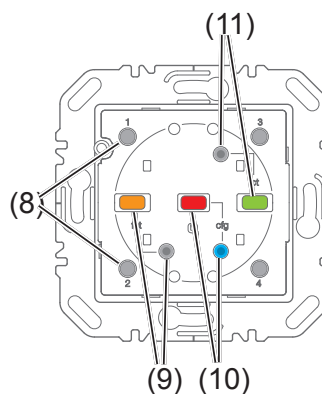


Figure 2b: Operating elements of the 2 and 4gang radio button

- (8) Press-activation point of the push-button operation area
- (9) **fct** button with **fct** LED
- (10) **cfg** button with **cfg** LED
- (11) **fct2** button with **fct2** LED

5.1 Installation

Selecting installation location

A minimum distance between the transmitter and corresponding receiver of about 1 m must be maintained.

A minimum distance to electronic devices which emit high frequency signals such as computers, electronic transformers or microwave devices of approx. 0.5 m must be maintained.

Mounting on or close to metal surfaces may cause impairment of the function.

Take material penetration into account. The range of the system can be optimised by selecting the best possible installation site:

Material	Degree of material penetration
Wood, plaster, plasterboard, uncoated glass	approx. 90 %
Brick, press boards	approx. 70 %
Reinforced concrete, underfloor heating	approx. 30 %
Metal, metal grids, aluminium laminates, coated glass	approx. 10 %
Rain, snow	approx. 1 ... 40 %

Table 5: Material penetration

Assembly of the device (Figure 1)

The insert is installed (see operating instructions for the insert).

- Attach application module (3) together with frame (2) to a suitable insert (1) and establish a connection between the insert and the application and power module (7) via the interface between application and power module.

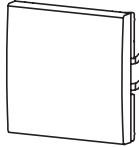
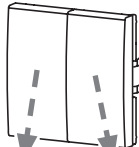
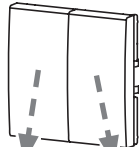
As soon as voltage is supplied to the button, the **cfg** LED (Figure 2, 10) indicates whether the button and the insert are compatible with each other:

cfg LED display	Meaning
LED blinks in green colour for 5 s	Compatible
LED blinks red for 5 s	Not compatible
LED blinks orange for 5 s	Compatible, but not configured to each other. For a new configuration, the application module must be reset to factory settings.

- If available, fix dismantling protection with screw (4).
- Click design cover (5 or 6) into place on application module (3).
-  If a configuration needs to be made or settings need to be changed, only attach the design cover afterwards.

Insert/application module combinations and operation in factory setting

Depending on the insert used, the radio button in factory setting has the following function for local operation.

	Radio button 1gang	Radio button 2gang		Radio button 4gang	
					
Switch insert 1gang	on/off	--	--	on/off	((RF))
Switch insert 2gang	--	on/off	on/off	on/off	on/off
Flush-mounted dimmer 1gang		--	--		((RF))
Flush-mounted dimmer 2gang	--				
Power supply	((RF))	((RF))	((RF))	((RF))	((RF))

-  Switching (see operation on a switch insert)
-  Dimming (see operation on a flush-mounted dimmer)
- Not to be combined
- ((RF)) Transmitter command freely configurable
(see configuration of radio button as transmitter)

Table 6: Button operation in factory setting

5.2 Radio configuration quicklink

The radio configuration sets the functional connection between commanding (transmitters) and function-executing (receivers) radio components. In so far wireless e.g. central unit, group, extension unit and time controls can be realised.

The following can be configured:

- The local operation of the load connected to the insert
- Radio commands to control other receivers
- Functions which are executed when the radio commands are received
-  The top and bottom push-button operation area can be configured differently.
-  For configuration by means of Hager connection device TX100 or ETS, additional functions are available (see operating instructions for TX100 or application description for ETS).

Configuration of radio button as a receiver

Configuration to control the load connected to the insert:

- via reception of a radio command
- via the local operation

fct LED display	Configurable functions			Function resulting from transmitter operation, Notes
	On switch insert	On flush-mounted dimmer		
	 ON/OFF	 ON/OFF, dimming UP/DOWN		Short press on push-button: Switching ON/OFF Long press on push-button: Dimming, reverse dimming direction per actuation
	 ON	 ON, dimming UP		Short press on push-button: Switching ON Push and hold button: Dimming UP to maximum brightness-level
	 OFF	 OFF, dimming DOWN		Short press on push-button: Switching OFF Short press on push-button: Dimming DOWN to minimum brightness-level
	 1 Scene 1			Receiver is allocated to a scene due to the configuration of the function. Receivers are allocated to a scene due to the configuration of the function. Short press on button: calling up the saved state of the connected load for the scene
	 2 Scene 2			
	 Timer			Switching ON for the set switch-on time
	 NO contact (contact duration)			Switching ON when the switching contact is closed Switching OFF when the switching contact is opened
	 Delete			No function Assignment to transmitter is deleted

Table 7: Configurable functions

 Local operation is a function that is pre-configured at the factory and can be changed. As an example, the configuration of a wall-transmitter and the radio button as receiver is described down below.

The button design cover is not attached.

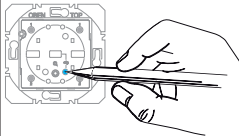
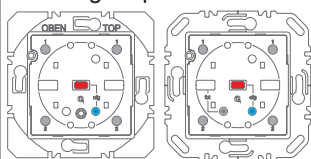
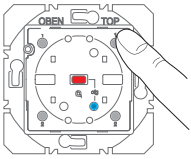
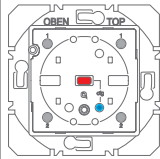
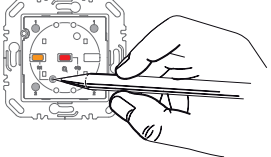
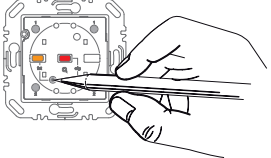
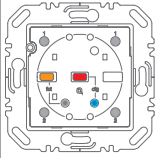
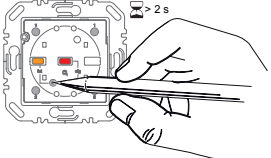
Handling step	Result
Start configuration	
■ Short press on cfg button on the wall transmitter.  ■ If there is no further activation, the configuration is automatically ended after 10 minutes.	The cfg LEDs on the wall-transmitter and the radio button light up in red colour.  All receivers within radio range also indicate the configuration mode.
Select transmitter button	
■ Short press on press-activation point on the wall-transmitter which should activate the function. 	The cfg LED on the wall transmitter blinks for 1 second.  If configured already, the fct LED of the radio button indicates the currently configured function.
Select function at receiver	
■ Repeated short press on fct button on the radio button until the desired function is displayed (Table 7). 	After each activation, the fct LED indicates the function. ■ If the transmitter button has already been configured with a function in a different receiver and/or the configured function is part of a group control, only this function can be configured. To change a function, the existing configuration needs to be deleted and the new one configured.
Confirming function on receiver	
■ To confirm, keep the fct button pressed for more than 2 seconds. 	The cfg LED blinks during the saving process (approx. 5 s). The fct LED confirms the function selection by displaying the corresponding colour.  ■ A quick blinking of the cfg LED indicates a combination that is not possible or an error.
Finish configuration	
■ Short press on cfg button on the wall transmitter again. 	The cfg LEDs on the wall-transmitter, the radio button and all receivers within radio range go out. The function is configured.

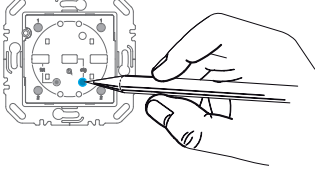
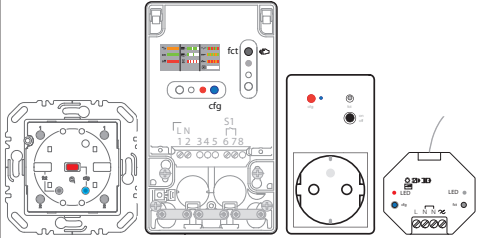
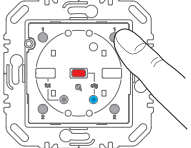
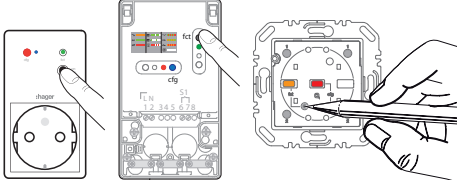
Table 8: Configuration of the function for the radio button

Configuration of radio button as a transmitter

If the radio button is operated as a transmitter, it can support the following functions for the receivers. The details of the function can vary depending on the receiver being used:

-  - ON/OFF, single-surface operation
-  - ON
-  - OFF
-  - ON/OFF, dimming UP/DOWN, single-surface operation
-  - ON/OFF dimming UP
-  - ON/OFF dimming DOWN
-  - Scene 1
-  - Scene 2
-  - Timer
-  - NO contact (contact duration)
-  - Move UP, stop
-  - Move DOWN, stop

Down below there is an illustration of the configuration of the radio push-button with receivers for which the supported displays occur via the **cfg** LED and **fct** LED. Differing configuration displays, such as for receivers with display, are to be taken from the receiver operating instructions.

Handling step	Result
Start configuration	
■ Short press on cfg button on the radio button.   If there is no further operation, the configuration is automatically ended after 10 minutes.	The cfg LEDs on the radio button and the receivers within radio range light up red colour. 
Select transmitter button	
■ Press the button of the push-button operation area for which a command should be configured. 	The cfg LED on the radio button blinks for 1 second. Afterwards the radio button (transmitter) and receiver are in configuration mode and the cfg LEDs light up. If already configured, the fct LED of the receiver indicates the current function configured with the button.
Select function at receiver	
■ Press the fct input on the receiver again briefly to select the desired function (see the receiver operating instructions). 	After each actuation, the fct LED indicates a function.  If the channel button has already been configured with a function in a different receiver and/or the configured function is part of a group control, only this function can be configured. To change a function, the existing configuration needs to be deleted and the new one configured.
Confirming function on receiver	
■ To save the allocation of command and function, hold the fct input on the receiver pressed longer than 2 seconds.	The cfg LED blinks. After a successful saving, the fct LED signals the saved function.  A quick blinking of the cfg LED indicates a combination that is not possible or an error.

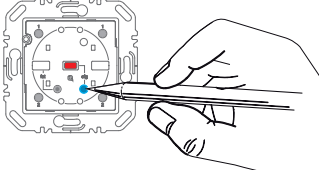
Finish configuration	
■ Short press on cfg button on the radio button. 	The cfg LEDs on the radio button and all receivers within radio range go out. The radio command for the radio button has been configured.

Table 9: Configuration of radio button as a transmitter

Deleting a configuration

To delete a configured receiver or the local operation, execute the configuration again.

- *Start configuration* (see configuration of radio button as a receiver).
- *Select transmitter button.*
- *Select function on receiver:* Select the function **Delete** on the receiver and *confirm function on the receiver.*
- *Finish configuration:* Short press on **cfg** button on the transmitter.

Configuration of group functions

By means of a group function, one transmitter controls several receivers. To do so, the same function must be configured on all receivers.

- *Start configuration* (see configuration of radio button as a receiver).
- *Select transmitter button.*
- *Select function on receiver:* Select the group function as described above on each receiver to be integrated and *confirm function on the receiver.*
- *Finish configuration:* Short press on **cfg** button on the transmitter.

Configuration of scenes

Individual settings for lighting and the position of blinds can be combined into scenes. Two different scenes can be created via quicklink and called up by pressing a button on the transmitter. A scene is created by configuring a push-button operation area of a transmitter (radio command) in the corresponding receivers with the scene function (Table 7).

- *Start configuration.*
- *Select transmitter button:* Select the button for the scene command.
- *Select function on receiver:* Select the scene function as described above on each receiver to be integrated and *confirm function on the receiver.*
- *Finish configuration:* Short press on **cfg** button on the transmitter.

Changing/saving scenes

Switching, dimming and blind statuses of the receivers in a scene can be changed and saved.

- The load status can be configured locally or by remote control on the receivers integrated into the scene, e.g. light 1 = 60 % brightness level, light 2 = 40 % brightness level, blind down.
- Keep transmitter button belonging to the configured scene command pressed for more than 5 seconds.

A brief status changeover of the receiver signals the successful saving of the scene.

Locking/unlocking scene changes

To prevent unwanted changes to a scene, the changing of the scene can be locked.

- *Start configuration.*
- *Select transmitter button:* Select the button for the scene command.

- *Select function on receiver:* When the function **Scene 1** or **Scene 2** is indicated by the **fct** LED blinking in green colour, keep the **fct** button on the receiver pressed for more than 5 seconds until the **cfg** LED blinks briefly.
 Then the **fct** LED indicates the currently configured status by blinking:
 1 x blinking: Possible to change and save scene
 2 x blinking: Changing the scene is locked.
- Press **fct** button and select the desired setting.
 The setting changes each time the button is pressed.
- To accept the selected setting time, keep the **fct** button pressed for more than 2 seconds.
- *Finish configuration:* Short press on **cfg** button on the transmitter.

Setting of switch-on time for function "timer"

In order to realise the function **Timer**, the switch-on time can be set on the receiver in stages. The factory setting is 3 min.

- *Start configuration.*
- *Select transmitter button:* Select button with timer.
- *Select function on receiver:* If the function **Timer** is indicated by the **fct** LED blinking red (Table 7), keep pressed the **fct** button on the receiver for more than 5 seconds until the **cfg** LED blinks briefly.
 The blinking **fct** LED indicates the currently set switch-on time - 5 x for factory setting (Table 10).
- Press **fct** button.
 Each short press on **fct** button increases the switch-on time by one step.
-  During the setting, the **fct** LED indicates the switch-on time (Table 10) for orientation.
- To accept the selected switch-on time, keep pressed the **fct** button for longer than 2 seconds.
- *Finish configuration:* Short press on **cfg** button on the transmitter.

x-times flashing of the fct LED	Switch-on time
1 	1 s
2 	30 s
3 	1 min
4 	2 min
5 	3 min
6 	5 min
7 	15 min
8 	30 min
9 	1 h
10 	3 h

Table 10: Configurable switch-on times

Resetting the radio button to factory settings

The device is not in configuration mode.

- Keep the **cfg** button pressed for more than 10 seconds until the **cfg** LED changes from a red lighting to blinking.
- Release the **cfg** button.
 The **cfg** LED blinks red rapidly. The device re-initialises itself. Meanwhile the **cfg** LED lights up red. After that the LED goes out and blinks 5 x to indicate the compatibility. The reset is made. The process lasts about 20 s.

- i** This process deletes the complete configuration of the radio button. Settings of the insert (switch-on brightness-level, load setting) are not reset.

6. Appendix

6.1 Technical data

Radio frequency	868 MHz
Radio protocol	KNX radio
Power supply	via insert, see accessories
Quicklink logic functions	max. 20 transmitters/receivers
Receiver category	2
Transmitter duty cycle	< 1 %
Degree of protection	IP 20
Relative humidity	0 ... 65 % (no condensation)
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-20 ... +60 °C
Mounting orientation	interface between application and power module on top
The Declaration of Conformity can be taken from our Internet site.	

6.2 Accessories

For Radio push button 1gang quicklink

Relay insert	8512 12 0x
Universal switch insert 1gang	8512 11 0x
Touch dimmer (R, L)	8542 11 0x
Universal touch dimmer 1gang	8542 12 0x
Power supply for radio application module	8502 01 0x

For Radio push button 2gang quicklink

Universal switch insert 2gang	8512 22 0x
Universal touch dimmer 2gang	8542 21 0x
Power supply for radio application module	8502 01 0x

For Radio push button 4gang quicklink

Relay insert	8512 12 0x
Universal switch insert 1gang	8512 11 0x
Touch dimmer (R, L)	8542 11 0x
Universal touch dimmer 1gang	8542 12 0x
Universal switch insert 2gang	8512 22 0x
Universal touch dimmer 2gang	8542 21 0x
Power supply for radio application module	8502 01 0x

6.3 Warranty

We reserve the right to make technical and formal changes to the product in the interest of technical progress.

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

If you have a warranty claim, please contact the point of sale or ship the device postage free with a description of the fault to the appropriate regional representative.