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KNX radio blind button quicklink
Order no. 8524 51 xx

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

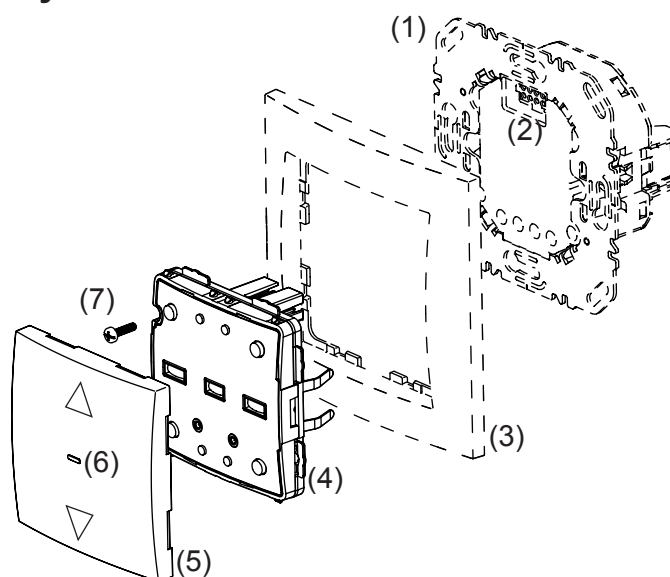Figure 1: Design and layout of the device

(1) Insert (see "Accessories", not in scope of delivery)

(2) Plug interface

(3) Frame (not within scope of delivery)

(4) Application module

(5) Button design cover

(6) Status LED

(7) Screw for dismantling protection (not for design lines R.1/R.3)

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.

This device complies with the R&TTE directive 1999/5/EG. The declaration of conformity and further system information can be found on our internet site www.berker.de.

The device may be operated in all EU and EFTA states.

Correct use

–   Application module for blind inserts or power supply for radio application module

–   Manual and automatic operation of blind/roller shutter motors connected to insert

–   Transmission and reception of manual, time-controlled and automatic operation commands via quicklink

–   Unsuitable for lighting control

–   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

–   quicklink functions for integration into the remote and group control of blinds/shutters

–   Integration into scenes

–   Party function to prevent unintentional operation of roller shutters by automated operation commands as well as radio/extension unit commands

–   Memory function for easy time control of connected shutters

–   Brightness-dependent operation when using a radio sun sensor

–   LED display of insert/application module compatibility

4.   Operation

Operating concept

The operation of the top or bottom push-button operation area is validated differently for each button. Simultaneous pressing of both push-button operation areas on a blind insert controls special functions such as memory or party function.
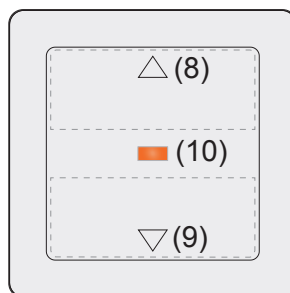

Figure 2: Operating elements

(8)   Push-button operation area ▲ for UP

(9)   Status LED

(10) Push-button operation area ▼ for DOWN

Operation on a blind insert and power supply for radio application module

■ Press push-button operation area ▲ or ▼.

 Short-press (shorter than 0.4 s): jog mode and adjustment of slat positions.

■ Long-press: self-retaining, shutter moves to final position.

🔲 Maximum operation time for self-retaining is 2 minutes.

■ Short press on push-button operation area ▲ or ▼ during the shutter movement.

 The blind stops at the position reached.

🔲 If a protection signal (wind, rain) is present, no move commands are executed (see Setting Operating Mode).

Memory function

Operation times (if additionally required, also with stop time for blind positions) can be recorded for a 24-hour interval on blind inserts using the memory function. Saved local and extension unit operations> 0.4 s are hence executed daily and automatically. (For operation, see Table 1)
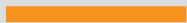
Press both push-button operation areas	Status LED display	Function and LED display
0 ... 5 s		Running/recording of memory function is finished, the Status LED goes out and the radio blind push-button changes to normal operation.
5 ... 10 s until the Status LED flashes orange for the first time	▬▬▬▬ ▮▮▮▮▮	Memory function is executed, the LED is on. The Status LED flashes for 3 s: memory is empty and the radio blind push-button returns to normal operation.
10 ... 15 s until the Status LED flashes orange for the second time	▮ ▮ ▮ ▮ ▮ ▮▮▮▮▮	Memory function operation times are recorded, the Status LED flashes orange for 2 s. Memory is full. Only 10 operation times can be recorded. The radio blind push-button changes back to normal operation.
15 ... 20 s until the Status LED flashes orange for the third time	▮▮▮	The Status LED flashes for 3 s: memory function is deleted and the radio shutter button changes to normal operation.

Table 1: Operation of memory function

🔲 After a power failure, motion and stop commands falling into that power failure period are not executed with a time delay after voltage recovery.

🔲 The memory function cannot be used when the party function is active.

🔲 A maximum of 10 actions can be recorded for the 24-hour interval.

🔲 The memory function is not available for operation on a power supply for radio application modules.

Party function

The party function prevents unintentional operation of the controlled blinds/shutters by the memory function or extension unit operation, e.g. to prevent persons from being shut out by the shutter moving down.

ℹ️ When the Party function is active, a blind/shutter can only be operated manually using the buttons. Control of the blind via high-level control-sections and sensors as well as by extension units or radio commands is deactivated.
If the blind/shutter was moved to a defined position in **forced mode** (see Table 4) and if this forced mode is active, then the Party function cannot be selected.

Press both push-button operation areas	Status LED display	Function and LED display
> 20 s until the Status LED turns red	▬▬▬	Party function is activated, the Status LED turns red
> 20 s until the Status LED flashes red 3 x	❚❚❚	Party function deactivated, the Status LED flashes red 3 x

Table 2: Operation of party function

5. Information for electricians

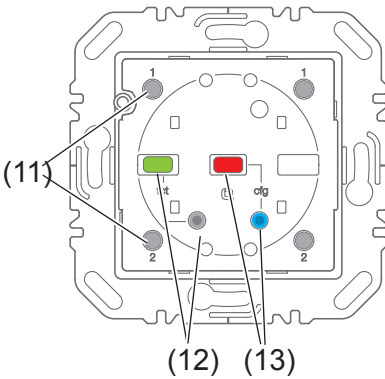**Overview of the operating elements beneath the design cover**

Figure 3: Operating elements for radio configuration

(11) Press-activation point of the push-button operation area

(12) **fct** button and **fct** LED

(13) **cfg** button and **cfg** 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 radio transmission.

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 3: Material penetration

Assembly of the device (Figure 1)

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

■   Attach application module (4) together with frame (3) to a suitable shutter insert so that the contact pins are inserted into the available jack (2).

 As soon as voltage is supplied to the radio shutter button, the **cfg** LED (Figure 3, 13) indicates whether the radio shutter button and the insert are compatible with each other. In the meantime, the operating mode can be changed if necessary (see Setting Operating Mode):

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 (7).

■   After configuration, click the design cover (6) into place on the application module (2).

Setting Operating Mode

It is possible to change between two operating modes during commissioning:

–   Protection Mode (factory setting):
 Mode for using sensors on the extension unit inputs of the insert to protect against wind or rain damage on outside blinds/awnings.

 In protection mode no move commands are executed while a signal (wind /rain sensor) is present on the extension unit input.

–   Manual Mode:
 The last move command is executed regardless of whether or not it takes place locally or via an extension unit.

The application module was attached to the insert, the insert/application module detection is executed.

■ While the LED (6) is flashing green, hold the push-button operation area ▲ and ▼ simultaneously for approx. 5 s until the LED flashes orange.

The operating mode is changed and displayed:

The LED flashes 1x. The protection mode is set.

or:

The LED flashes 2x. The manual mode is set.

ℹ️ In normal operation, the operating mode cannot be displayed.

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

ℹ️ 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).

Configuring the radio blind button as a receiver

Configuration to control the load connected to the insert (table 4):

– via reception of a radio command

– via the local operation
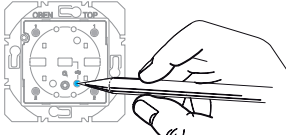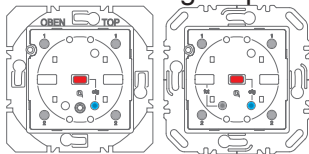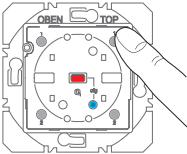
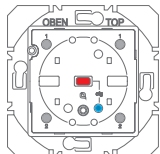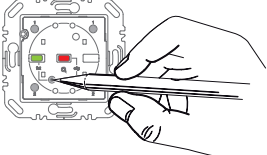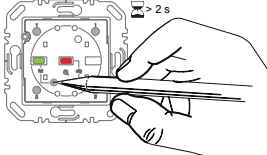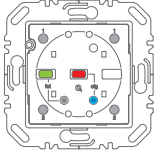| fct LED display	Configurable function		Function resulting from transmitter operation, notes
	▲	Move UP, stop	Short press on button: adjustment of the slat position / stop Long press on button: self-retaining, shutter moves to top final position.
	▼	Move DOWN, stop	Short press on button: adjustment of the slat position / stop Long press on button: self-retaining, shutter moves to bottom final position.
	▨1	Scene 1	Receiver is allocated to a scene due to the configuration of the function.eceivers 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	
	⬍⚊	Blind switch	Radio shutter switch is assigned to a compatible transmitter. Up/down function is assigned to one configuration operation.
	▲⚯	UP forced mode	Moves the blind to the appropriate final position with higher-level priority. The execution of other commands is only possible after resetting the forced operation.
	▼⚯	DOWN forced mode	
	⟳	Memory function	Activates/deactivates execution of the memory function (see Memory function). Recording cannot be activated by radio command.
	⊠	Delete.	No function Assignment to transmitter is deleted

Table 4: radio commands and operation

ℹ 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 shutter button as receiver is described below (table 5).

The design cover of the radio shutter button is not attached.

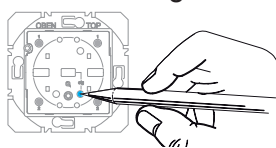| Handling step	Result
Start configuration	
■ Short press on **cfg** button on the wall transmitter. ℹ If there is no further activation, the configuration is automatically ended after 10 minutes.	The **cfg** LEDs on the wall transmitter and the radio button light up in red colour. All receivers within radio range also indicate the configuration mode.
Select transmitter button	
■ Short press on press-activation point on the wall transmitter which should activate the Up function.	The **cfg** LED on the wall transmitter blinks for 1 second. If configured already, the **fct** LED of the radio blind button indicates the currently configured function.
Select function at receiver	
■ Repeated short press on **fct** button on the radio blind button until the desired function is displayed (Table 4).	After each activation, the **fct** LED indicates the function. ℹ 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 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. ℹ A quick blinking of the **cfg** LED indicates a combination that is not possible or an error.

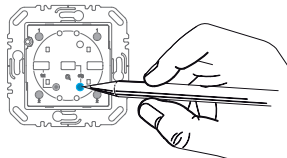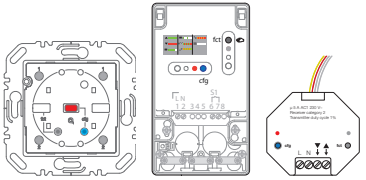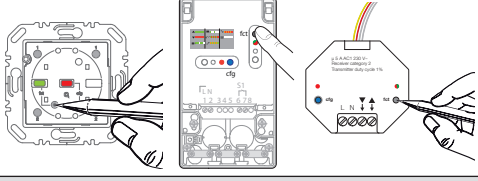| *Finish configuration*	
■ Short press on **cfg** button on the wall transmitter again. 	The **cfg** LEDs on the wall transmitter, the radio blind button and all receivers within radio range go out. The function is configured. ℹ If required, configure the Down function in the same way.

Table 5: Configuration of the function for the radio shutter button

Configuration of KNX radio shutter button as a transmitter

If the radio shutter button is operated as a transmitter, it can support the following functions for the receivers:

⬍ Up/down switch

As an example, the configuration of the radio shutter button with receivers for which the supported displays occur through the **cfg** LED and **fct** LED is described here (table 6). Differing configuration displays, such as for receivers with display, are to be taken from the receiver operating instructions.

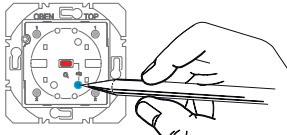| **Handling step**	**Result**
Start configuration	
■ Short press on **cfg** button on the radio shutter button. ℹ If there is no further operation, the configuration is automatically ended after 10 minutes.	The **cfg** LEDs on the radio shutter button and the receivers within radio range light up in red colour. On the **fct** LED of the radio shuter button, the current local operation is also shown (factory setting Up/Down switch, **fct** LED red/green).n the **fct** LED of the radio blind button, the current local operation is also shown (factory setting Up/Down switch, **fct** LED red/green).
Select function at receiver	
■ Short press on **fct** button on the receiver to select the UP/DOWN (switch) function (see the receiver operating instructions). 	After each actuation, the **fct** LED indicates a function. ℹ Configuration of blind operation is carried out simultaneously for both the UP and DOWN push-button operation areas.
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. ■ ℹ 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 shutter button.	The **cfg** LEDs on the radio shutter button and all receivers within radio range go out. The radio command for the radio shutter button has been configured.

Table 6: Configuring the radio blind 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).

■ If necessary *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).

■ If necessary *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 (see Table 5: Configure the function for the radio blind button).

■ *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.

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Setting the blind position for scenes

If the radio shutter button is assigned to a scene as a receiver, then the shutter position can be set for this scene.

■ Move the blind to the top final position and wait for two minutes.

■ Move the blind downwards to the desired position.

■ Set the desired slat position by pressing the button briefly several times (max. 30 UP steps).

■ Keep transmitter button belonging to the configured scene command pressed for more than 5 seconds.

 The blind moves up for a second and then down for a second. The scene position has been saved.

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:
 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.

Resetting to factory settings

By factory default, the button is preconfigured for the operation of a shutter insert (see Operation).

■ Press the **cfg** button for more than 10 seconds.

 The **cfg** LED blinks red. If the system is reset to the factory setting, the LED goes out again.

[i] This process deletes the complete configuration of the device.

[i] Reconfiguration can only commence 15 seconds after the device is reset or switched on.

6. Appendix

6.1 Technical data

Radio frequency	868.3 MHz
Radio protocol	KNX radio
Connection	Mounting on suitable inserts (see Accessories)
Power supply	via insert
quicklink logic functions	max. 20 transmitters/ receivers
Receiver category	2
Transmitter duty cycle	< 1%
Change-over time	min. 600 ms
Blind operating time	2 min
Jog mode/slat adjustment time	150 ms
Relative humidity	0 ... 65 % (no condensation)
Ambient temperature	-5 … +45 °C
Storage/transport temperature	-25 … +70 °C

The Declaration of Conformity can be taken from our Internet site.

6.2 Accessories

Shutter insert Comfort	8522 11 0x
Power supply for KNX radio application module	8502 01 0x
KNX radio brightness sensor	8580 11 00

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.