KNX radio configuration quicklink

The radio configuration sets up the functional connection between commanding (transmitters) and function-executing (receivers) radio components. Thus, central, group, extension unit and time controls, for example, can be implemented in a wireless manner.

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

► See Table 5

ℹ 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).

fct LED display	Configurable functions		Function resulting from transmitter operation, notes
	On switch insert	On dimmer insert	
🟧	on off ON/OFF [1]	🔅 ON/OFF, dim UP/DOWN [1]	Short button-press: Switch ON/OFF Long button-press: Dimming, reverse dimming direction per actuation
🟩	on ON [1]	＋ ON, dim UP [1]	Short button-press: Switch ON Long button-press: Dim UP to maximum brightness
🟥	off OFF [1]	－ OFF, dim DOWN [1]	Short button-press: Switch OFF Long button-press: Dim DOWN to minimum brightness
🟩⬜🟩 1	Scene 1 [1]		Receiver is allocated to a scene due to the configuration of the function. Short button-press: Short button-press: Recall the saved state of the connected load for the scene
🟩⬜🟩 2	Scene 2 [1]		
🟥⬜🟥	⏳ Timer [1]		Switch ON for the set switch-on time Factory setting = 3 min
🟩🟥🟩🟥	／ ON/OFF (switch/push-button) [1]		Closing of the activating contact switches the load ON, opening of the contact switches the load OFF.
🟩🟧	on Forced mode ON		Switches the load with higher priority to the appropriate state. Execution of other commands is only possible after resetting the forced command.
🟥🟧🟥🟧	off Forced mode OFF		
🟧⬜🟧	24 Presence simulation [1]		Activates/deactivates execution of presence simulation (See Activating/deactivating presence simulation).
🟧⬜🟧	▷ Master-Slave [2]		Is used to extend the detection area. Receives switch-on commands in case of motion detection in the detection area of the transmitter (Slave). Switches the lighting ON for the set delay time. ℹ The brightness evaluation only takes place on the master, the slave only detects motion. ℹ Can only be configured between radio motion detectors.
⬜	✗ Cancel		No function Assignment to transmitter is deleted

[1] Execution of the receiver function and local motion detector function have the same priority:
 – If the transmitter was first switched on/off and then motion was detected afterwards, then the motion detector will override the transmitter command
 – If motion was detected and thereafter, during the delay time, the system is switched on/off via the transmitter, then the transmitter will override the motion detector
[2] Only with KNX radio motion detector on power supply for KNX radio application module as transmitter

Table 5: Configurable functions

Configuration of KNX radio motion detector as a receiver

Configuration to control the load connected to the insert via reception of a radio command.

As an example, the configuration of a wall-transmitter and a radio motion detector as receiver is described (Table 6).

Operation	Result
Start configuration	
■ Press the **cfg** button on the wall-transmitter briefly. 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 motion detector light up in red colour. All the receivers within radio range also display the configuration mode.
Select transmitter button	
■ Briefly press the press-activation point on the wall-transmitter, which should activate the function.	The **cfg** LED on the wall-transmitter flashes for 1 second. If configured already **fct** LED of the motion detector indicates the currently configured function.
Select function on receiver	
■ Repeatedly apply short presses to the **fct** button on the motion detector until the desired function is displayed (Table 5).	After each operation, 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 must be deleted and the new one needs to be configured.
Confirm function on receiver	
■ To confirm, keep the **fct** button pressed for more than 2 seconds. > 2 s	The **cfg** LED flashes during the saving process (approx. 5 s). The **fct** LED confirms the function selection by displaying the corresponding colour. ℹ Rapid flashing of the **cfg** LED indicates a combination that is not possible or an error.
Completing the configuration	
■ Briefly press the **cfg** button on the wall-transmitter again.	The **cfg** LEDs on the wall-transmitter, on the motion detector and on all receivers within radio range go out. The function is configured.

Table 6: Configuration of the function for the KNX radio motion detector

B. Berker

Configuration of KNX radio motion detector as a transmitter

If the radio motion detector is operated as a transmitter, it can support the following functions for receivers. The specific function can vary depending on the receivers used:

⌐— ON/OFF (delay time)
Preconfigured command in Automatic mode: Motion detection with simultaneous undershooting of the brightness threshold switches the load ON and, after the delay time has elapsed, it switches the load OFF. The delay time elapses in the motion detector and is permanently set (3 min).

⌛ Timer
Motion detection with simultaneous undershooting of the brightness threshold switches the load ON and, after the switch-on time has elapsed, it switches the load OFF. The switch-on time elapses in the receiver and can be adjusted through configuration.

ℹ The radio motion detector must be attached to a switch insert or dimmer insert. If the radio motion detector is mounted on a power supply for KNX radio application modules, then it can only be configured as a transmitting extension unit (slave) (see Executing a master-slave configuration).

As an example, there is a description of configuring the radio motion detector with receivers below, for which the **cfg** LED and **fct** LED provide the supported displays (Table 7). Different configuration displays, such as for receivers with a display, are provided in the instructions for the receiver.
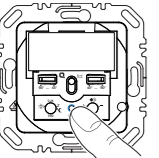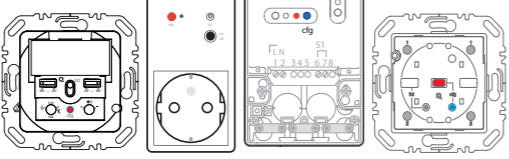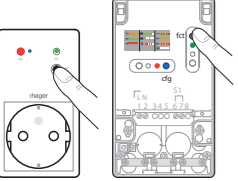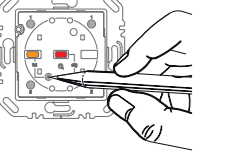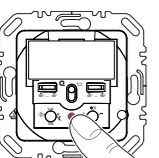
Operation	Result
Start configuration	
■ Briefly press the **cfg** button on the radio motion detector. ℹ If there is no further operation, the configuration is automatically ended after 10 minutes.	The **cfg** LEDs on the radio motion detector and the receivers within radio range light up in red colour. Radio motion detector (transmitter) and receiver are in configuration mode.
Select function on receiver	
■ Briefly press the **fct** button several times on the receiver to select the desired function (see the receiver operating instructions).	After each actuation, the **fct** LED displays a function. ℹ If the radio motion detector 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.
Confirm function on receiver	
■ To save the allocation of command and function, press the **fct** button on the receiver for longer than 2 seconds.	The **cfg** LED flashes. After a successful saving, the **fct** LED signals the saved function. ℹ Rapid flashing of the **cfg** LED indicates a combination that is not possible or an error.
Completing the configuration	
■ Briefly press the **cfg** button on the radio motion detector.	The **cfg** LEDs on the radio motion detector and all receivers within radio range go out. The radio command for the radio motion detector has been configured.

Table 7: Configuration of KNX radio motion detector as a transmitter

Executing the master-slave configuration

If the radio motion detector is attached to a power supply for radio application modules, then it can only be configured as a transmitting extension unit (slave) to a radio motion detector on switch or dimmer insert (Table 8).

The slave motion detector sends a pulse in case of motion detection in its detection area. Upon receiving this pulse, the master switches on for the delay time, if the set brightness threshold is undershot. Delay time and brightness threshold are determined by the master.
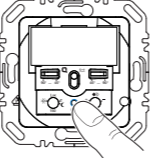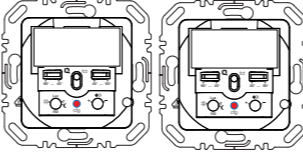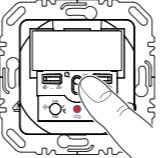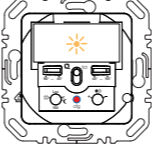
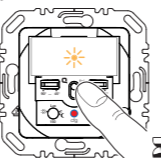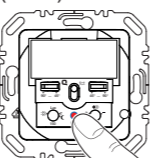| Operation	Result
Start configuration	
■ Briefly press the **cfg** button on the radio motion detector on the power supply (transmitter, slave). ℹ If there is no further operation, the configuration is automatically ended after 10 minutes.	The **cfg** LEDs on the radio motion detector (slave and master) light up in red colour. All the receivers within radio range also display the configuration mode.
Select function on receiver	
■ Briefly press the **cfg** button on the radio motion detector on the switch insert or flush-mounted dimmer (master) to select the master-slave function. ℹ Only the master-slave function or delete can be selected in this configuration.	The **fct** LED flashes orange periodically (see Table 5).
Confirm function on receiver	
■ To save the allocation of command and function, keep the **fct** button on the receiver (master) pressed for more than 2 seconds.	The **cfg** LED flashes. After successful saving, the **fct** LED signals the saved function. ℹ Rapid flashing of the **cfg** LED indicates an error.
Completing the configuration	
■ Briefly press the **cfg** button on the transmitter (slave).	The **cfg** LEDs on the radio motion detectors and all receivers within radio range go out. The master-slave configuration has been executed.

Table 8: Executing the master-slave configuration

Deleting a configuration

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

■ *Start configuration* (see Configuration of radio motion detector as a receiver).

■ If necessary, *select transmitter button*.

ℹ The *select transmitter button* step does not apply for radio motion detectors as transmitters.

■ *Select function on receiver:* Select the **Delete** function on the receiver and *confirm the function on the receiver*.

■ *Completing the configuration:* Briefly press the **cfg** button on the transmitter.

Configuration of group functions

By means of a group function, one transmitter, for example,
a radio motion detector, controls several receivers. To do so, the same functions must be configured on all receivers.

■ *Start configuration* (see Configuring radio motion detector as transmitter).

■ *Select function on receiver:* Select the group function as described above on each receiver to be integrated and *confirm function on the receiver*.

■ *Completing the configuration:* Briefly press the **cfg** button on the transmitter.

Setting the switch-on time for the timer

The switch-on time on the receiver can be set in stages for the **Timer** function.
The factory setting is 3 min.

■ *Start configuration.*

■ If necessary, *select transmitter button*: Select the button with the timer.

ℹ The *Select transmitter button* step does not apply for radio motion detectors as transmitters.

■ *Select function on receiver*: If the **Timer** function is displayed through the **fct** LED flashing red (Table 5), keep the **fct button** on the receiver pressed for longer than 5 seconds, until the **cfg** LED flashes briefly.

The flashing **fct** LED shows the currently set switch-on time - with a factory setting of 5x (Table 9).

x number of flashes 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 9: Settable switch-on times

■ Press the **fct** button.

Each short press of the **fct** button increases the switch-on time by one step.

ℹ During the setting, the **fct** LED indicates the switch-on time (Table 9) for orientation.

■ Press the **fct** button for longer than 2 seconds to apply the desired switch-on time.

■ *Completing the configuration:* Briefly press the **cfg** button on the transmitter.

Resetting the KNX radio motion detector to factory settings

The device is not in configuration mode.

■ Keep the **cfg** button pressed for longer than 10 seconds, until the **cfg** LED switches from being red to flashing.

■ Release the **cfg** button.

The **cfg** LED flashes rapidly in red. The device re-initialises itself. In the meantime, the **cfg** LED turns red. After that, the LED goes out and flashes 5x to indicate the compatibility. The reset is has been completed. The process lasts about 20 s.

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