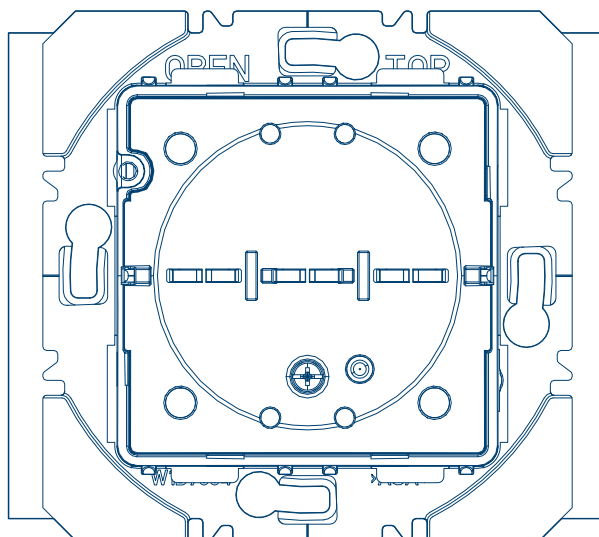


# Switches and systems

## Wall-mounted transmitter



Push button with battery, 1-gang, surface-mounted

**WAC2010**

Push button with battery, 2-gang, surface-mounted

**WAC2020**

CE

**:hager**

|          |   |           |
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# 1 Introduction

## 1.1 About these instructions

This manual describes the installation and operation of the connected wall-mounted transmitters, 1 and 2-gang, with battery supply.

In addition to the QuickGuide supplied with the product, the following information can be found:

- Detailed product characteristics
- Operation



### **Additional information**

Additional settings are described in a separate configuration guide.

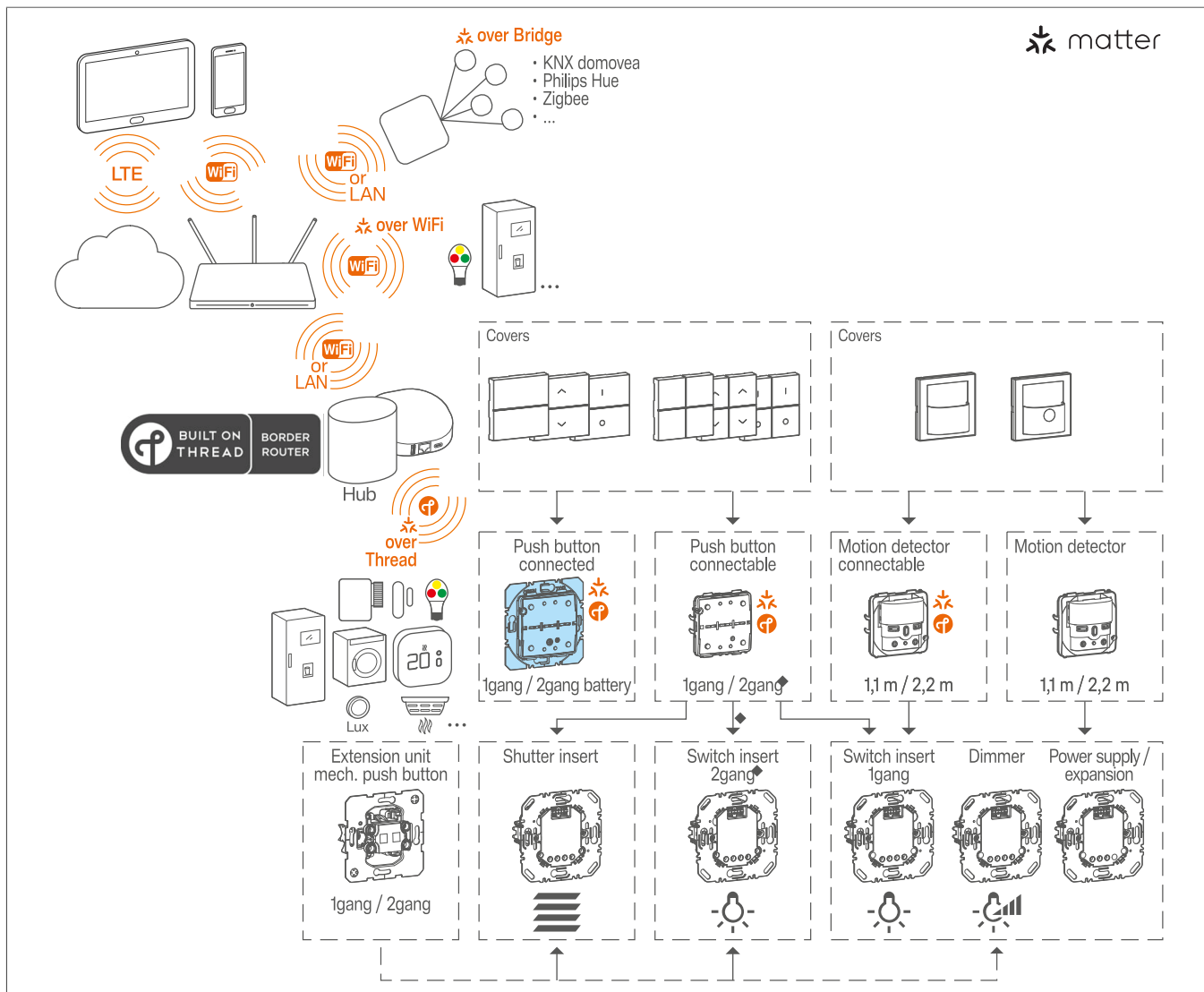
- ▶ See configuration instructions



Observe the general terms of use:

- ▶ [developer.hager.com/terms-of-use](https://developer.hager.com/terms-of-use)

System overview



## **2 Safety instructions**

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

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

**Button cells do not belong in children's hands! If button cells are swallowed, seek immediate medical assistance.**

**Danger of explosion! Do not throw batteries into a fire.**

**Danger of explosion! Do not recharge batteries.**

**Danger of chemical burns! Batteries can burst and leak.**

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

### 3 Scope of delivery

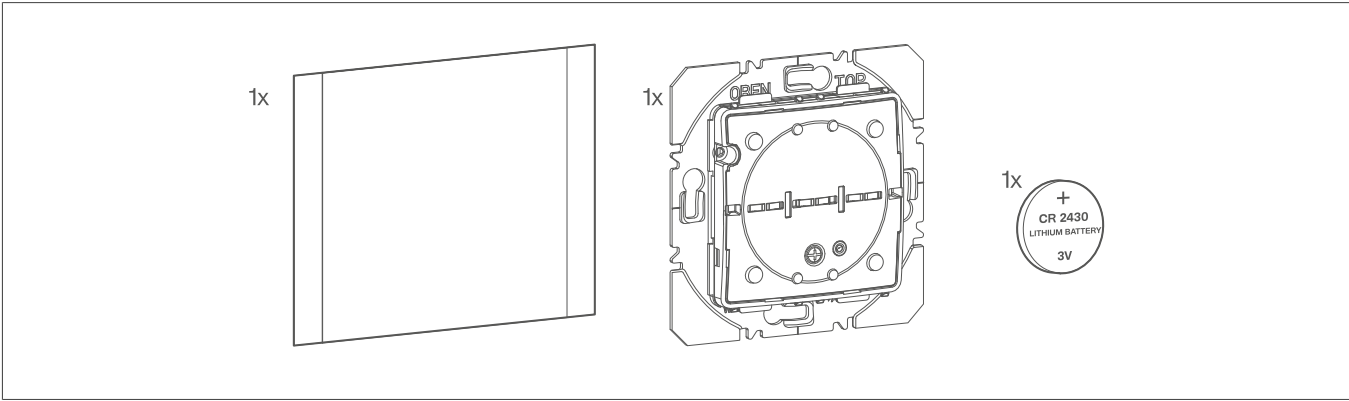


Fig. 1: Scope of delivery

## 4 Design and layout of the device

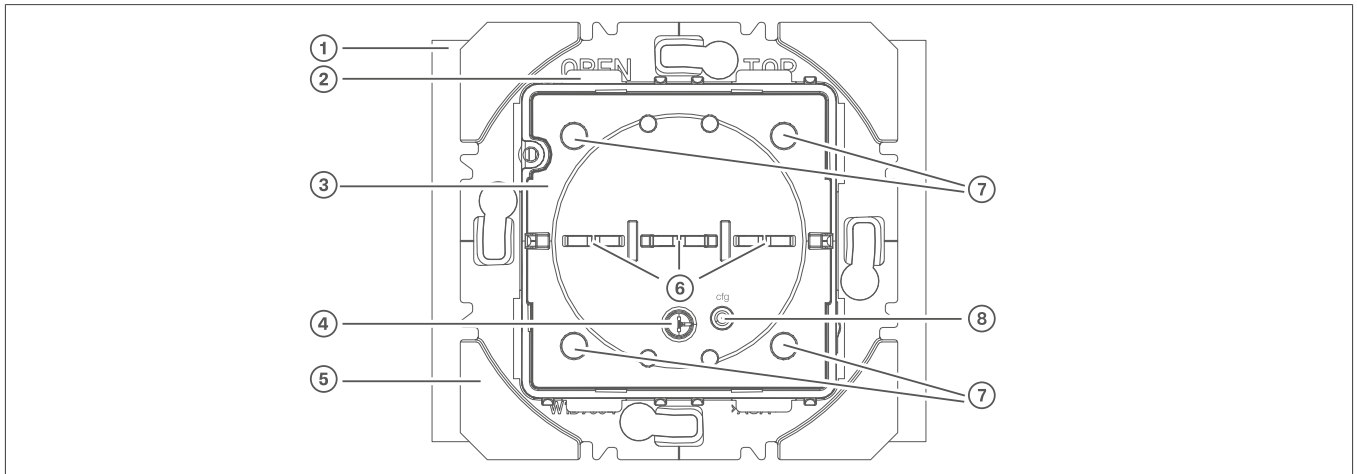


Fig. 2: Design and layout of the device

- ① Adhesive pad
- ② Intermediate ring
- ③ Radio module
- ④ Fastening screw
- ⑤ Supporting ring
- ⑥ Status LED
- ⑦ Operation buttons
- ⑧ Configuration button (cfg button)

## 5 Function

The wall-mounted transmitter, compatible with Matter, enables wireless control of lighting and other Matter functions within indoor environments. The power supply is provided by a battery.

### System information

This device is part of the modular Hager electronics platform, which allows system components to communicate via Matter wireless signals. The device can control other Matter-enabled devices and functions locally. A Thread Border Router is required for optional wireless networking. The Matter end device and the border router communicate in encrypted form using the power-efficient Thread wireless network protocol. Hager Matter products create a Thread mesh network that routes signals efficiently, improving both range and signal quality. The configuration and control is achieved via the application of the connected smart home system, e.g. Apple Home, Samsung SmartThings, Amazon Alexa or Google Home. The device can be updated via the app. All Matter-enabled devices can be operated together in one system. The number of devices depends on the smart home system.

### 5.1 Intended use

- Flat surface-mounted installation and combination extensions
- Only suitable for use in indoor areas with no drip and no spray of water
- Wireless connection to a border router using the Thread standard

### 5.2 Product characteristics

- Functions for remote operation, voice control, control circuits

Matter product characteristics

- Matter certified
- Operates with the Thread wireless standard (Matter over Thread)
- Secure authentication of devices on the network
- Encrypted data transmission
- Integrates with smart home systems that support Matter over Thread (e.g. Apple Home, Google Home, Amazon Alexa and Samsung Smart Things)
- The number of devices and functions depend on the respective smart home system
- Matter commissioning via smartphone or tablet using the app for the smart home system
- Can be updated using smart home apps

## 6 Operation

### Operating concept

The button areas can be freely configured. The scope of the supported functions depends on the system configuration and on the Smart Home System used.

Operation is performed by pressing a button.

For each button, a separate command can be executed for a single, double or long press.

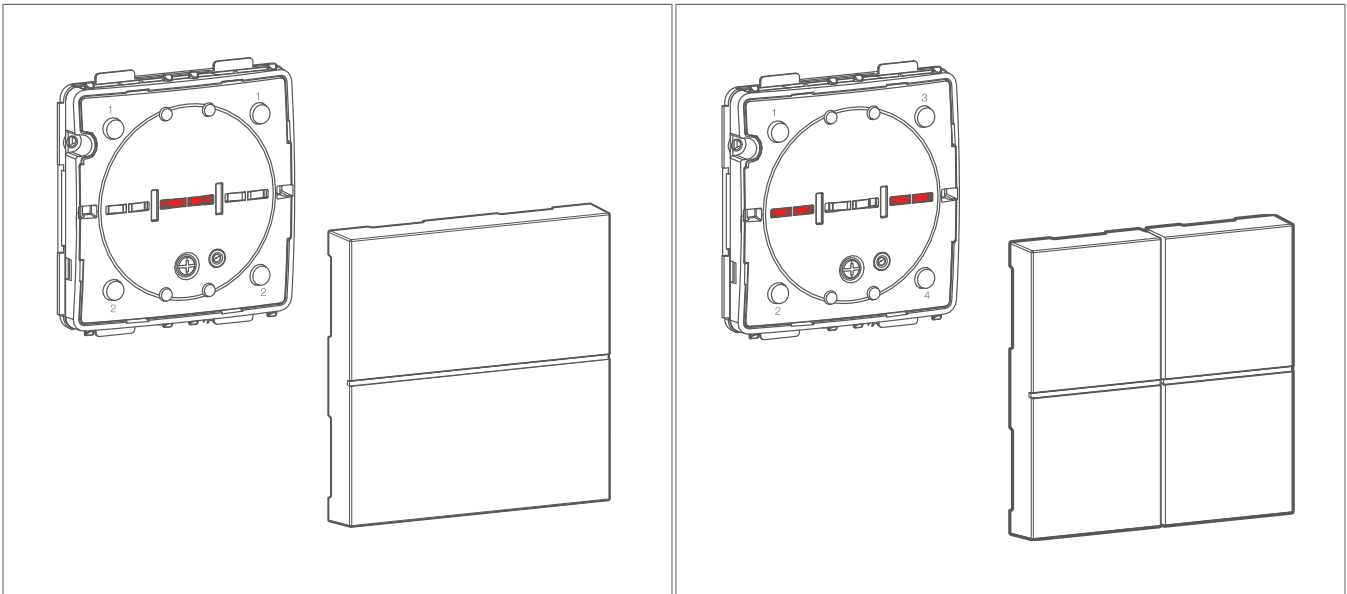


Fig. 3: Wall-mounted transmitter, 1-gang cover with 2 buttons Fig. 4: Wall-mounted transmitter, 2-gang cover with 4 buttons

### Functions

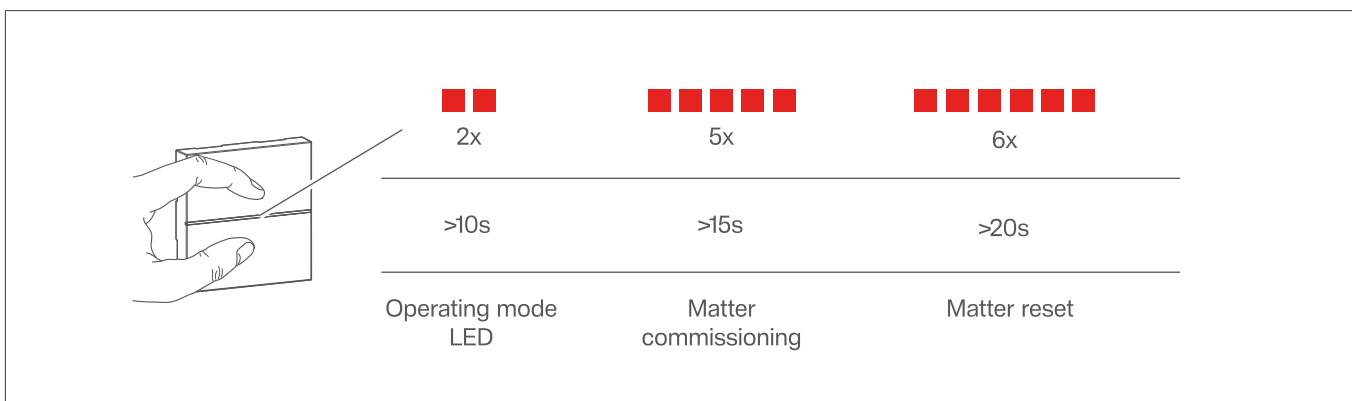


Fig. 5: Functions via control buttons

### Set LED operating mode

The status LED indicates successful transmission and can be deactivated locally on the device.



#### Note

As per default factory setting, the status LED lights up when the buttons are pressed.

- Press and hold the button for more than 10 seconds, until the status LED flashes 2x red.
- Pressing the button once switches to the desired setting. (see [Tab. 1: Operating mode LED](#) ).

## Operation

| Button press | Status LED      | Setting           |
|--------------|-----------------|-------------------|
| 1x           | Red flashing 1x | Status LED is OFF |
| 1x           | Red flashing 2x | Factory setting   |

Table 1: Operating mode LED

- Press and hold the button for > 2 seconds to confirm the entry.

### Detecting the battery condition

The status LED indicates the battery level and lights up when the button is pressed if the battery is low.

- Briefly press the button.

When the battery is low or critical, the status LED lights up red (see [Tab. 2: Battery condition](#) )

| Status LED            | Battery condition |
|-----------------------|-------------------|
| Rapid red flashing 2x | Low               |
| Rapid red flashing 3x | Critical          |

Table 2: Battery condition

### Starting the Matter commissioning



#### Note

A QR code is located on the supporting ring. It is identical to the QR code on the wireless module and is used to commission the device.

If the QR code on the wireless module cannot be scanned, the digital code on the supporting ring can be entered manually under "Add device" in the relevant app.

The QR code can also be found on the back of the button device. This refers to the Hager product page of the device. A description of the Matter configuration can be found under Downloads.

- Press and hold the button for more than 25 seconds, until the status LED flashes 5x red.
- Press and hold the button for > 2 seconds to confirm the entry.

The device switches to ready for connection and flashes red 1 times every 5 seconds (see [Tab. 3: Matter commissioning](#) ).

The connection mode enables the device to be configured in a smart home system (► see configuration instructions).

During commissioning, the Bluetooth function is active.



**Note**

If no further actions are performed within the next 15 minutes, the device switches to normal operation.

If the status LED flashes red quickly, it indicates that the device is already paired with a Smart Home System. Re-commissioning requires calling up the device in the Smart Home app of the system with which it is currently paired. If access to the existing Smart Home System is not possible or if the device is to be integrated into another system, a Matter reset must be performed ([Reset the Matter connection](#)).

| Operating status  | Status LED  |
|---|---|
| Connection mode: The device is in pairing mode and ready for integration  | Flashes red, 1 s ON, 4 s OFF<br>Cycle duration: 5 s                       |
| Commissioning phase: The device is configured and integrated into the target environment                                  | Flashes red, 1 s ON, 1 s OFF, 1 s ON, 2 s OFF<br>Cycle duration: 5 s      |
| Commissioning is not possible: The device is currently in a condition that prevents commissioning from being carried out. | Flashes red quickly<br>100 ms ON, 100 ms OFF (5x)<br>Cycle duration: 1 s  |
| Commissioning failed  | Flashes red quickly<br>100 ms ON, 100 ms OFF (10x)<br>Cycle duration: 2 s |

Table 3: Matter commissioning

**Reset the Matter connection**

The device removes the connection data to Thread and the smart home system.

- Press and hold the button for more than 30 seconds, until the status LED flashes 6x red.
- Press and hold the button for > 2 seconds to confirm the entry.
- Remove the device from the Smart Home System app.



**Note**

To reconnect the device, it must be removed from the App of the smart home system first.

## 7 Information for electricians

### 7.1 Installation

#### 7.1.1 Location for installation

##### Selecting the location for installation

The range of the system can be optimised by selecting the best possible mounting location:

- Maintain a minimum distance of approx. 1 m between the transmitter and the corresponding receiver.
- A minimum distance of approx. 0.5 m must be respected from electronic devices that emit high-frequency signals, such as computers, electronic transformers or microwave devices.

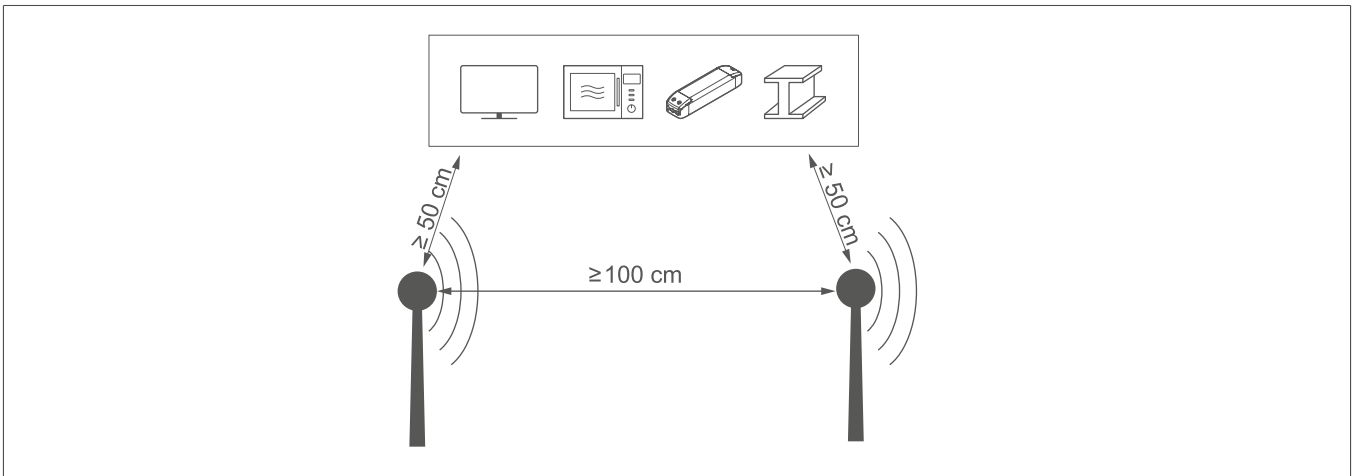


Fig. 6: Note on minimum distance

- Material penetration must be considered.

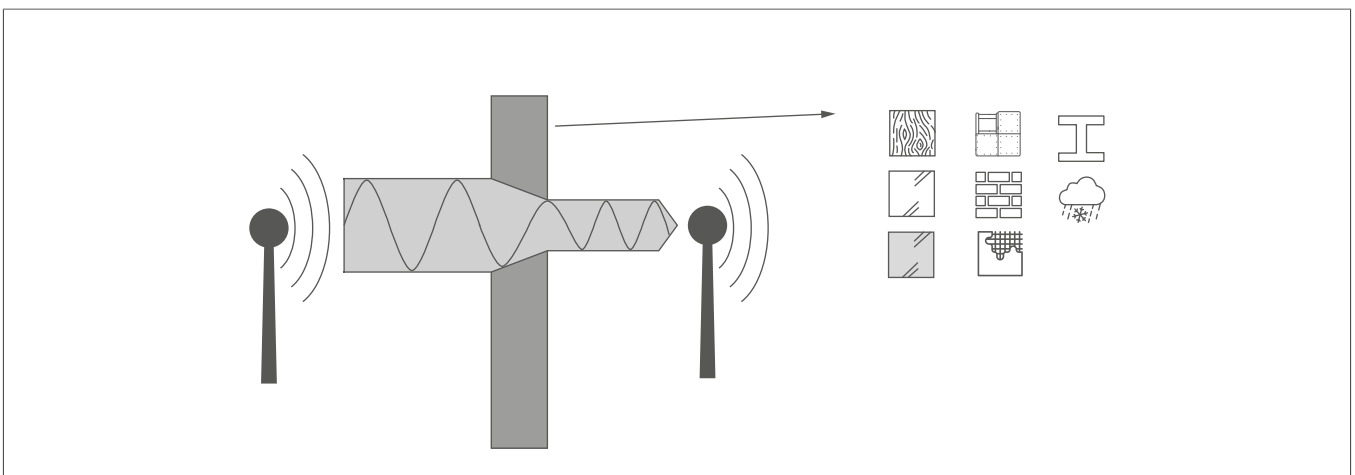


Fig. 7: Note on material penetration



| Symbol  | Material                                    | Degree of material penetration |
|---|---|--------------------------------|
|   | Wood, plaster, plasterboard, uncoated glass | approx. 90 %                   |

Table 4: Material penetration

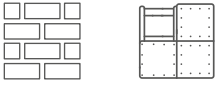

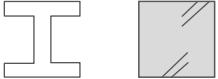

| Symbol  | Material  | Degree of material penetration |
|---|---|--------------------------------|
|  | Brick, press boards                                   | approx. 70 %                   |
|  | Reinforced concrete, underfloor heating               | approx. 30 %                   |
|  | Metal, metal grids, aluminium laminates, coated glass | approx. 10 %                   |
|  | Rain, snow  | approx. 1 ... 40 %             |

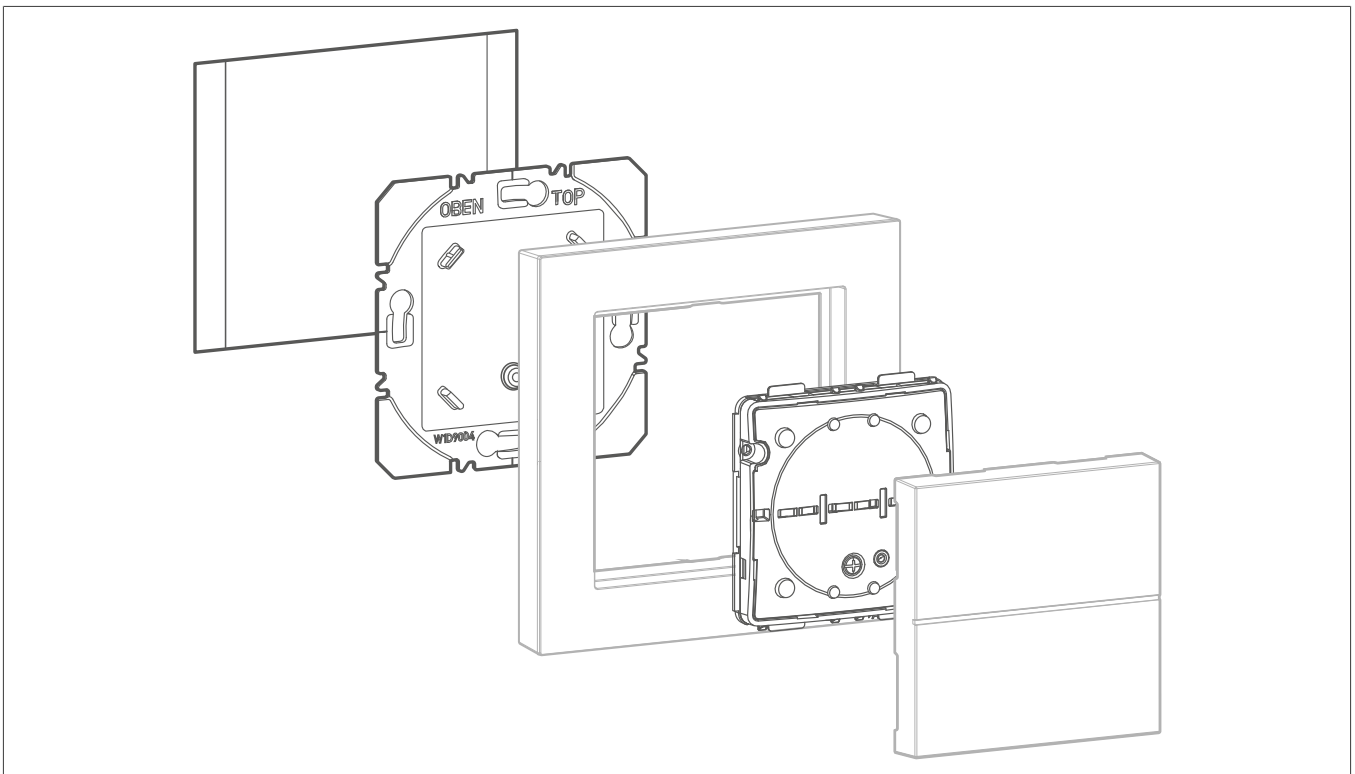
Table 4: Material penetration



### Note

Installing the device on or close to metal surfaces may cause interferences with the radio transmission.

## 7.1.2 Installing the device



### Mount the adhesive pad

- The surface is smooth, free of dust and grease.
- The appropriate location for installation has been considered.

- 1 Peel off the backing film from the adhesive pad.
- 2 Align the adhesive pad.
- 3 Apply to the surface and smooth it out.
- 4 Remove the front film.
- 5 Glue the supporting ring to the adhesive pad. Please consider the **TOP** label.

#### Optional: Install the supporting ring with screws

- Align the support plate.
- Secure with screws (not included).



#### Note

The adhesive pad can be used as an extra aid when fitting with screws.

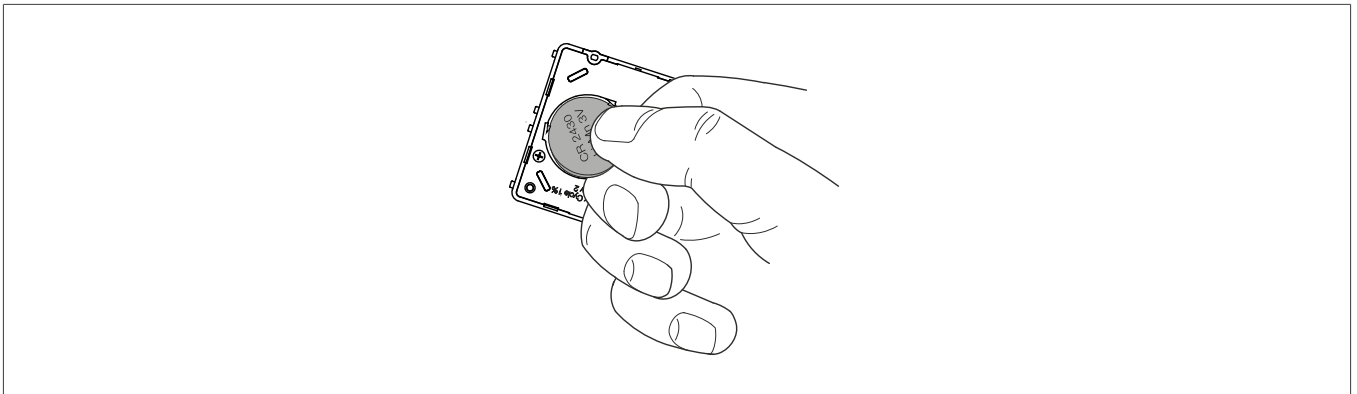


#### Warning

Danger of chemical burns!  
Batteries can burst and leak.

- 1 Wear gloves.
- 2 In case of contact with battery acid, wash hands immediately with soap and water.

#### Fit the wireless module



- 1 Place the battery on the positive terminal of the battery holder and press it into place. Pay attention to the polarity: The positive terminal of the battery must be positioned so that it is visible from the outside.
- 2 Attach the cover frame to the supporting ring together with the wireless module.
- 3 Provide dismantling protection using the screw.



#### Note

Carry out the commissioning procedure before fitting the design cover.

- 4 Attach the design cover to the wireless module.

### 7.1.3 Replacing the battery



**Warning**

Danger of chemical burns!

Batteries can burst and leak.

- Wear gloves.
- In case of contact with battery acid, wash hands immediately with soap and water.

- Remove the design cover.
- Loosen the fastening screw.
- Carefully pry the wireless module out at the intended location using a screwdriver.
- Carefully lever out the empty battery with a screwdriver.
- Insert new battery on the plus contact of the battery holder and press to click into place. Pay attention to the polarity: The positive terminal of the battery must be positioned so that it is visible from the outside.



**Note**

Only replace empty batteries with a battery of identical or equivalent type.

Keep battery and battery holder contacts clean and free of grease.

- Attach the wireless module.
- Provide dismantling protection using the screw.
- Attaching the design cover.

## 7.2 Commissioning

The cfg button enables Matter commissioning, the execution of a Matter reset and also the reset to the factory settings.

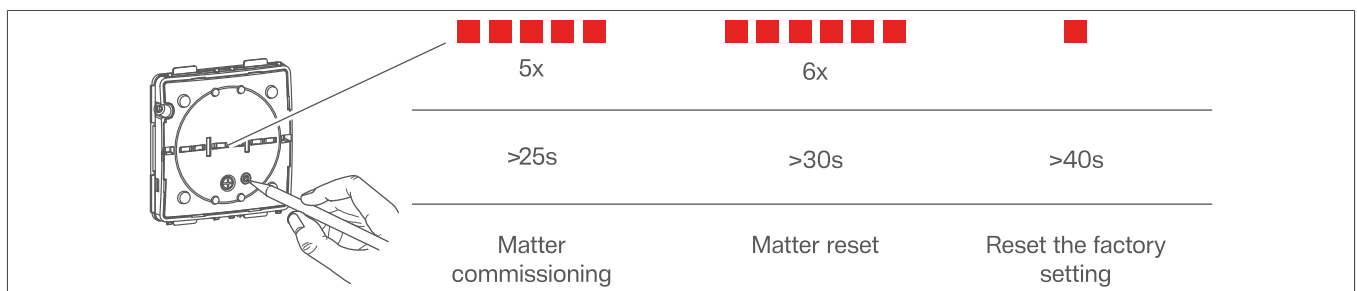


Fig. 8: Functions via the cfg button

### Starting the Matter commissioning



**Note**

A QR code is located on the supporting ring. It is identical to the QR code on the radio module and is used to commission the device.

If the QR code on the button cover cannot be scanned, the digital code printed on the sticker can be entered manually under "Add device" in the relevant app.

The QR code can also be found on the back of the button device. This refers to the Hager product page of the device. A description of the Matter configuration can be found under Downloads.

- Press and hold the cfg button for more than 25 seconds, until the status LED flashes 5x red.
- Press and hold the cfg button for > 2 seconds to confirm the setting.  
The device switches to ready for connection and flashes red 1 times every 5 seconds (see Tab. 5: Matter commissioning ).
- The connection mode enables the device to be configured in a smart home system (► see configuration instructions).  
During commissioning, the Bluetooth function is active.



**Note**

If no further actions are performed within the next 15 minutes, the dimmer switches to normal operation.

If the status LED flashes red quickly, it indicates that the device is already paired with a Smart Home System. Re-commissioning requires calling up the device in the Smart Home app of the system with which it is currently paired. If access to the existing Smart Home System is not possible or if the device is to be integrated into another system, a Matter reset must be performed ( Reset the Matter connection ).

| Operating status   | Status LED   |
|--|--|
| Connection mode: The device is in pairing mode and ready for integration   | Flashes red, 1 s ON, 4 s OFF<br>Cycle duration: 5 s                      |
| Commissioning phase: The device is configured and integrated into the target environment   | Flashes red, 1 s ON, 1 s OFF, 1 s ON, 2 s OFF<br>Cycle duration: 5 s     |
| Commissioning is not possible: The device is currently in a condition that prevents commissioning from being carried out.<br>Troubleshooting | Flashes red quickly<br>100 ms ON, 100 ms OFF (5x)<br>Cycle duration: 1 s |
| Commissioning failed.  | Flashes red quickly<br>100 ms ON, 100 ms OFF (10x)                       |

Table 5: Matter commissioning

**Operating status****Status LED**

Cycle duration: 2 s

Table 5: Matter commissioning

**Reset the Matter connection**

The device removes the connection data to Thread and the smart home system.

- Press and hold the cfg button for more than 30 seconds, until the status LED flashes 6x red.
- Press and hold the cfg button for > 2 seconds to confirm the setting.
- Remove the device from the Smart Home System app.

**Reset to factory setting**

The device removes the connection data to Thread and the smart home system. In addition, all settings made on the device are reset to the factory settings.

- Press and hold the cfg button for > 40 seconds until the status LED lights up red.
- Press and hold the cfg button for > 2 seconds to confirm the setting.



## 8 Appendix

### 8.1 Accessories

#### Dismantling protection

|  |         |
|--|---------|
| Tamper-proof screw for Matter electronic modules | WDN9011 |
|--|---------|

#### Device covers for button module 1-gang and 2-gang

|   |  |           |
|---|--|-----------|
|  | Device cover 1-gang for push button, Matter compatible | WAN7010xx |
|  | Device cover 2-gang for push button, Matter compatible | WAN7020xx |

### 8.2 Technical data

|                                  |                                     |
|----------------------------------|-------------------------------------|
| Type of fastening                | Surface mounting                    |
| Power supply                     | Via battery                         |
| Transmission frequency           | 2400-2483.5 MHz                     |
| Radio protocol                   | Thread, Bluetooth                   |
| Connection standard              | Matter                              |
| Receiver category                | 2                                   |
| Transmitter duty cycle           | < 1%                                |
| Transmission range in open field | 100 m                               |
| Transmission power               | Max. 100 mW                         |
| Degree of protection             | IP 20                               |
| Relative humidity                | 0 ... 65%<br>(without condensation) |
| Ambient temperature              | -5 to +45 °C                        |
| Storage/transport temperature    | -20 to +60 °C                       |
| Assembling height                | 14 mm                               |

#### Battery

|                 |                    |
|-----------------|--------------------|
| Nominal voltage | 3 V=               |
| Battery type    | 1 x Lithium CR2430 |
| Battery life    | Up to 3 years      |

### 8.3 Troubleshooting

#### Commissioning is not possible.

##### The device is already paired with a Smart Home System.

- 💡 Check if the device is already registered.
- 💡 If access is not possible: Reset the Matter connection of the device to the factory settings.

#### Commissioning failed.

##### Communication problems

- 💡 Check the network connection and make sure that the device is reachable.
- 💡 Reset the Matter connection of the device to the factory settings.

## 8.4 EU Declaration of Conformity

Hereby Berker GmbH & Co. KG declares that the radio system type WAC2010, WAC2020 is in compliance with the directive 2014/53/EU. The complete text of the EU declaration of conformity is available at the following Internet address: [hager.com](http://hager.com)

## 8.5 Disposal note



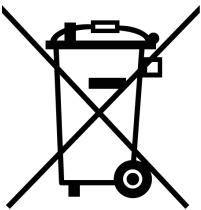
**Correct disposal of this product (electrical waste).**

**(Applicable in the European Union and other European countries with separate collection systems)**

This marking shown on the product or its documentation indicates that it should not be disposed of with other household waste at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this device from other types of waste. Recycle the device responsibly to promote the sustainable reuse of material resources.

Household users should contact either the dealer where they purchased this product, or their local government office, for details of where and how they can take this device for environmentally safe disposal.

Commercial users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial waste for disposal.



Immediately remove empty batteries from the device and dispose of in an environmentally acceptable manner. Do not throw away batteries in household waste. The local authorities provide information about environmentally friendly disposal. According to statutory requirements, the end consumer is obliged to return used batteries.



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