

homematic IP HmIP-WRCR Rotary Button



# homematic IP HmIP-WRCR Rotary Button User Manual

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**homematic IP HmIP-WRCR Rotary Button**



## Product Information

### Specifications

- Voltage: 2x 1.5 V LR03/Micro/AAA
- Current Consumption: 100 mA max.
- Battery Life: 3 years (typical)
- Protection Class: IP20
- Environmental Temperature:
- Dimensions (W x H x D):
  - Without frame: 55 x 55 x 27 mm
  - With frame: 86 x 86 x 29 mm
- Weight: 91.4 g (including batteries)
- Wireless Frequency Band: 868.0-868.60 MHz, 869.4-869.65 MHz
- Max. Wireless Transmission Power: 10 dBm
- Wireless Range: 180 m
- Duty Cycle: <1% per hour, <10% per hour

### Product Usage Instructions

#### Pairing

To pair the device:

1. Follow the instructions in the manual for pairing.

#### Mounting

## Adhesive Strip Mounting

If using adhesive strips for mounting:

1. Clean the mounting surface thoroughly.
2. Remove the backing from the adhesive strips.
3. Attach the device to the desired location firmly.

## Screw Mounting

If using screws for mounting:

1. Select a suitable location ensuring no electrical lines are obstructed.
2. Use the provided screws and plugs to secure the device in place.

## FAQ

- **Q: What should I do if the device shows a short orange blinking light?**

A: This indicates that the device is in pairing mode or the batteries are low. Please replace the batteries.

- **Q: How can I reset the device to factory settings?**

A: To reset the device to factory settings, follow the instructions provided in the manual.

## Mounting instruction and operating manual

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- Changes may be made without prior notice as a result of technical advances.
- 154876 (web)
- Version 1.1 (10/2023)

## Information about this manual

- Read this manual carefully before beginning operation with your Homematic IP components. Keep the manual so you can refer to it at a later date if you need to.
- If you hand over the device to other persons for use, hand over this manual as well.

## Symbols used:

-  **Attention!**

This indicates a hazard.



• **Please note:**

This section contains important additional information.

## **Hazard information**

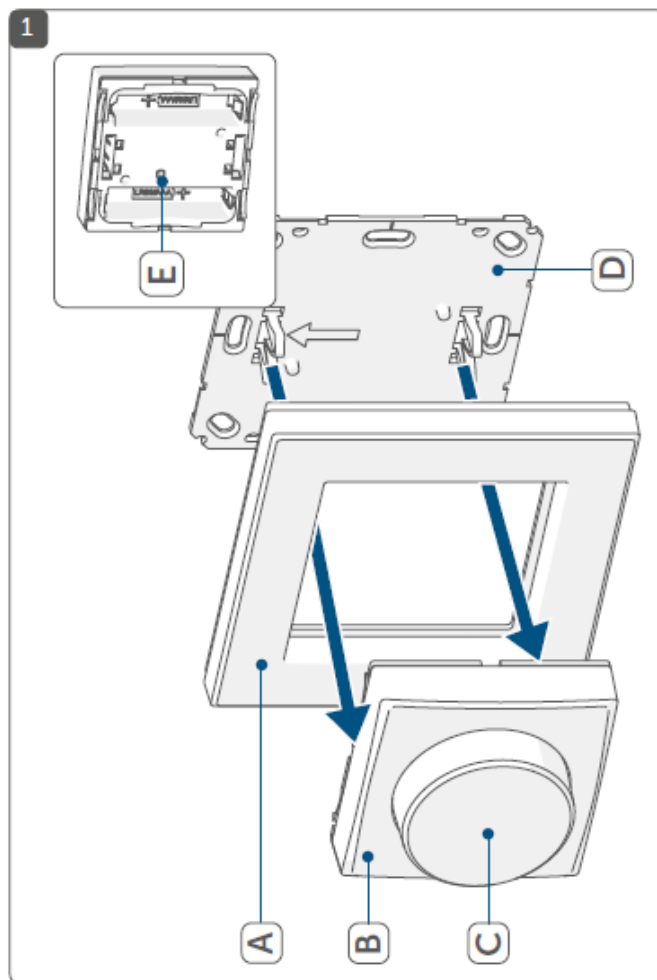
- Do not open the device. It does not contain any parts that can be maintained by the user. In the event of an error, have the device checked by an expert.
- For safety and licensing reasons (CE), unauthorized change and/or modification of the device is not permitted.
- The device may only be operated in dry and dust-free environment and must be protected from the effects of moisture, vibrations, solar or other methods of heat radiation, cold and mechanical loads.
- The device is not a toy; do not allow children to play with it. Do not leave packaging material lying around. Plastic films/bags, pieces of polystyrene, etc. can be dangerous in the hands of a child.
- We do not assume any liability for damage to property or personal injury caused by improper use or the failure to observe the hazard information. In such cases, any claim under warranty is extinguished! For consequential damages, we assume no liability!
- The device may only be operated within residential buildings.
- Using the device for any purpose other than that described in this operating manual does not fall within the scope of intended use and shall invalidate any warranty or liability.

## **Function and device overview**

- The Homematic IP Rotary Button is a flexible wireless push-button with three channels for controlling Homematic IP devices, such as dimming actuators. For example, you can easily dim lights bright or dark and switch them on or off.
- Thanks to battery operation, the device is highly flexible where mounting and selecting a mounting location are concerned. The device is mounted and removed very easily with the supplied clip-on frame using screws or adhesive strips. It is compatible with a number of different surfaces. It is also possible to integrate the rotary button into existing switches of other manufacturers.

### **Device overview (see figure 1):**

- (A) Clip-on frame
- (B) Electronic unit
- (C) Rotary button
- (D) Mounting plate
- (E) System button (pairing button and LED)



### General system information

This device is part of the Homematic IP smart home system and works with the Homematic IP protocol. All devices of the system can be configured comfortably and individually with the user interface of the Central Control Unit CCU3 or flexibly via the Homematic IP smartphone app in connection with the Homematic IP cloud. All available functions provided by the system in combination with other components are described in the Homematic IP Wired Installation Guide. All current technical documents and updates are provided at [www.homematic-ip.com](http://www.homematic-ip.com).

### Start-up

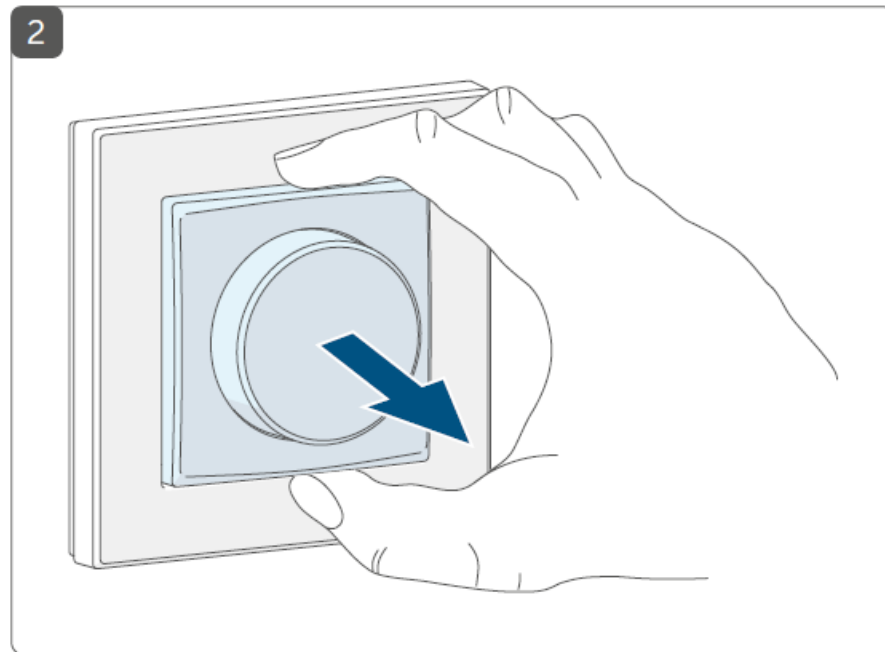
#### Pairing

- Read this entire section before starting the pairing procedure.
- You can connect the device either to the Homematic IP Access Point or the Central Control Unit CCU3. For detailed information, refer to the Homematic IP User Guide, available for download in the download area of [www.homematic-ip.com](http://www.homematic-ip.com).
- First set up your Homematic IP Access Point via the Homematic IP app to enable operation of other Homematic IP devices within your system. For further information, refer to the operating manual of the Access Point.

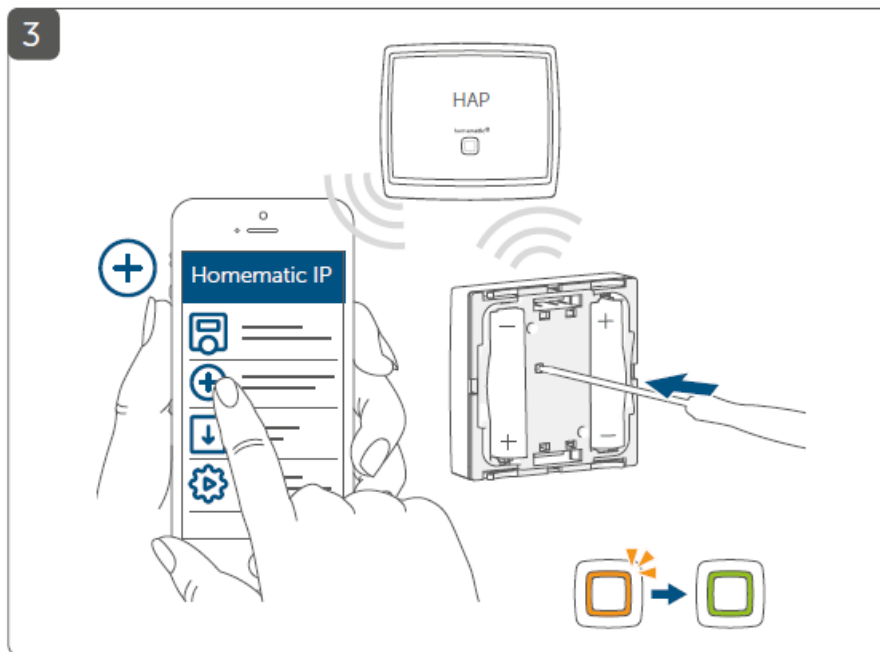
To integrate the device into your system and to enable control via the Homematic IP app, you must pair the device to your Homematic IP Access Point first.

- Open the Homematic IP app on your smartphone.
- Select the menu item “Pair device” (see figure 3).

- To remove the electronic unit (B) from the frame (A), take hold of the sides of the electronic unit and pull it out (see figure 2).
- Turn over the electronic unit.
- Remove the insulation strip from the battery compartment of the device.
- Pairing mode remains activated for 3 minutes.



- You can manually start the pairing mode for another 3 minutes by pressing the system button (E) briefly (see figure 3).
- Your device will automatically appear in the Homematic IP app.
- To confirm, enter the last four digits of the device number (SGTIN) in your app or scan the QR code. Therefore, see the sticker supplied or attached to the device.
- Wait until the connection is completed.
- If connection of the device was successful, the LED (E) lights up green (see figure 3). The device is now ready for use.
- If the LED lights up red, try again.
- Select the desired solution (e.g. light control) for your device.
- Allocate the device to a room and give the device a name.



## Mounting

Read this entire section before starting to mount the device.

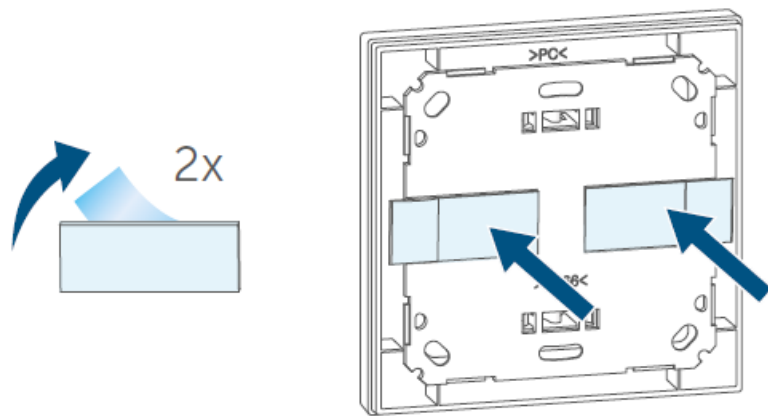
- **You can operate the the device with**
  - the supplied double-sided adhesive strips or
  - the supplied screws to fix it to a wall.
- You can also mount the device on a flush-mounting box.

## Adhesive strip mounting

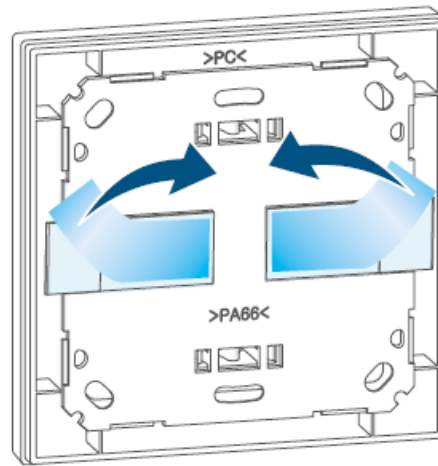
For mounting the device using the adhesive strips, proceed as follows:

- Choose a site for installation.
- Make sure that the mounting surface is smooth, solid, non-disturbed, free of dust, grease and solvents and not too cold to ensure long-time adherence.
- Fix the adhesive strips on the back side of the mounting plate (D) in the provided area. You should be able to read the letters on the back side (see figure 4).
- Remove the protective film from the adhesive strips (see figure 5).
- Press the assembled rotary button with the back side to the wall in the position where it should subsequently be attached (see figure 6).

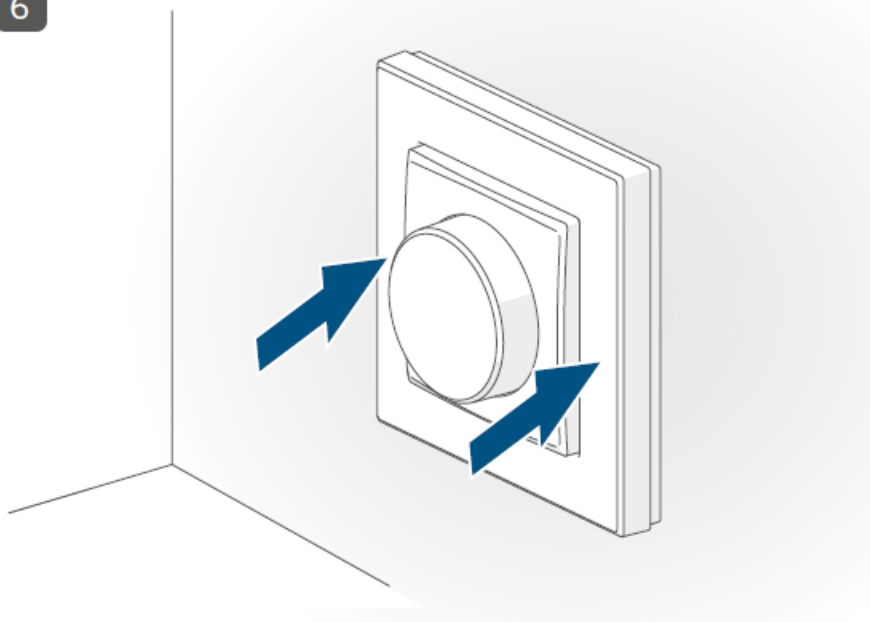
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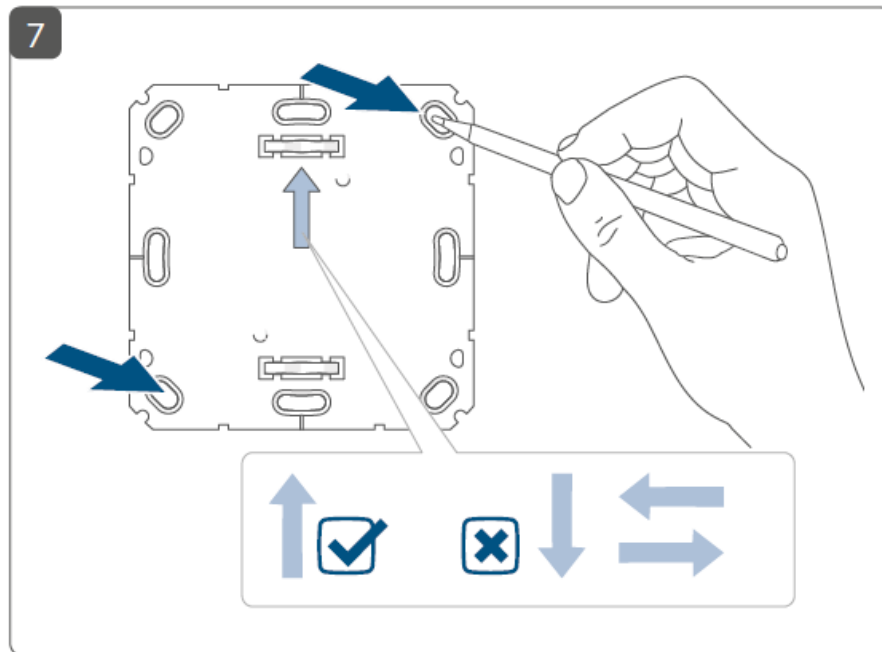




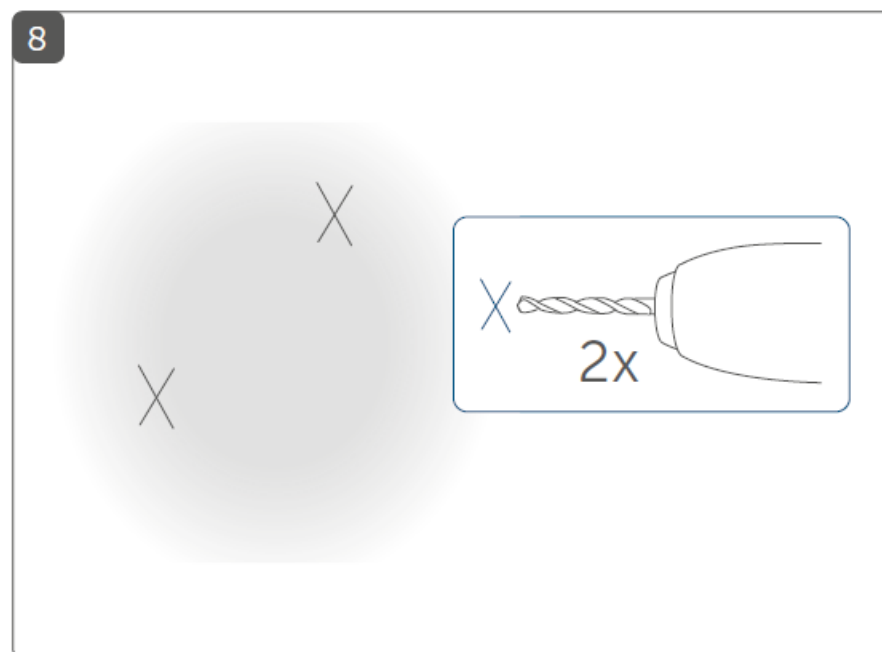
When selecting the installation location, check for electrical wires and power supply cables.

**For mounting the device using screws proceed as follows:**

- Choose a desired site for installation.
- Position the mounting plate (D) on the desired site on the wall. Make sure that the arrow on the front site of the mounting plate is pointing upwards (see figure 7).
- Use a pen to mark the positions of diagonally opposite holes in the mounting plate on the wall (see figure 7).

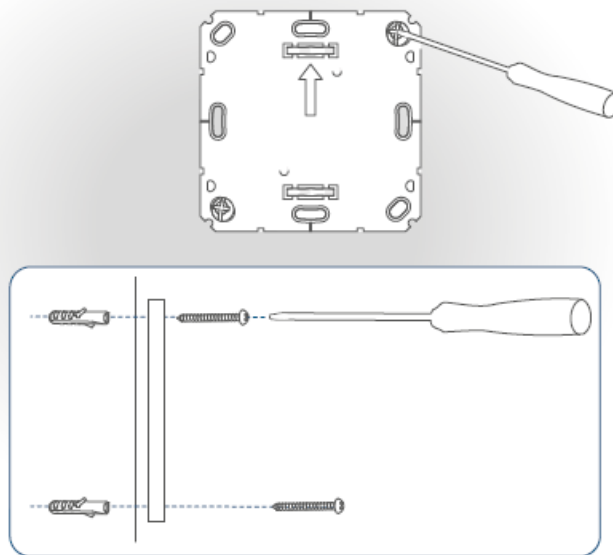


- Drill the marked holes (see figure 8).

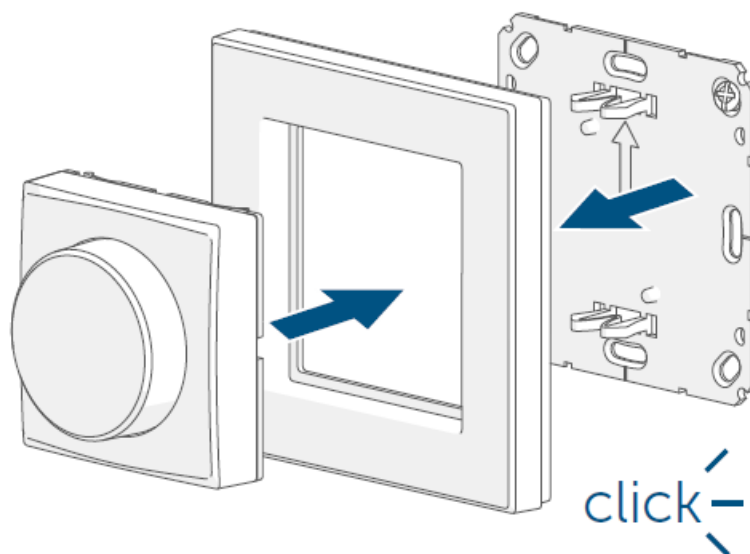


- If you are working with a stone wall, drill the marked two 5 mm holes and insert the plugs supplied. If you are working with a wooden wall, you can pre-drill 1.5 mm holes to make screws easier to insert.
- Use the supplied screws and plugs to fasten the mounting plate to the wall (see figure 9).
- Place the clip-on frame (A) onto the plate (D) (see figure 10).
- Insert the electronic unit (B) into the clip-on frame (see figure 10). Make sure that “TOP” and the arrows on the back side of the electronic unit point upwards and that the clips on the mounting plate latch into the openings on the electronic unit.

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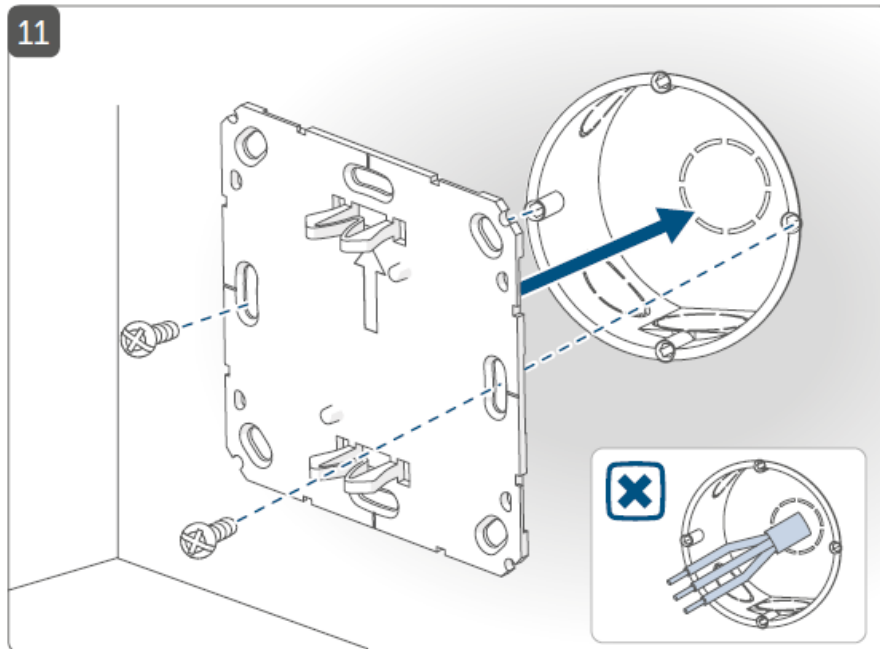


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### Mounting on flush-mounted boxes

- You can mount the device on flush-mounting/installation boxes using the screw holes (see figure 11).



- If the device is mounted to a flush-mounting box, there may be no open conductor ends.
- If changes or works have to be made on the house installation (e.g. extension, bypass of switch- or socket inserts) or the low-voltage distribution for mounting or installing the device, the following safety instruction must be considered:
- **Please note!** Only to be installed by persons with the relevant electro-technical knowledge and experience!\*
- **Incorrect installation can put**
  - your own life at risk;
  - and the lives of other users of the electrical system.
- Incorrect installation also means that you are running the risk of serious damage to property, e.g. because of a fire. You may be personally liable in the event of injuries or damage to property.

### Contact an electrical installer!

\*Specialist knowledge required for installation:

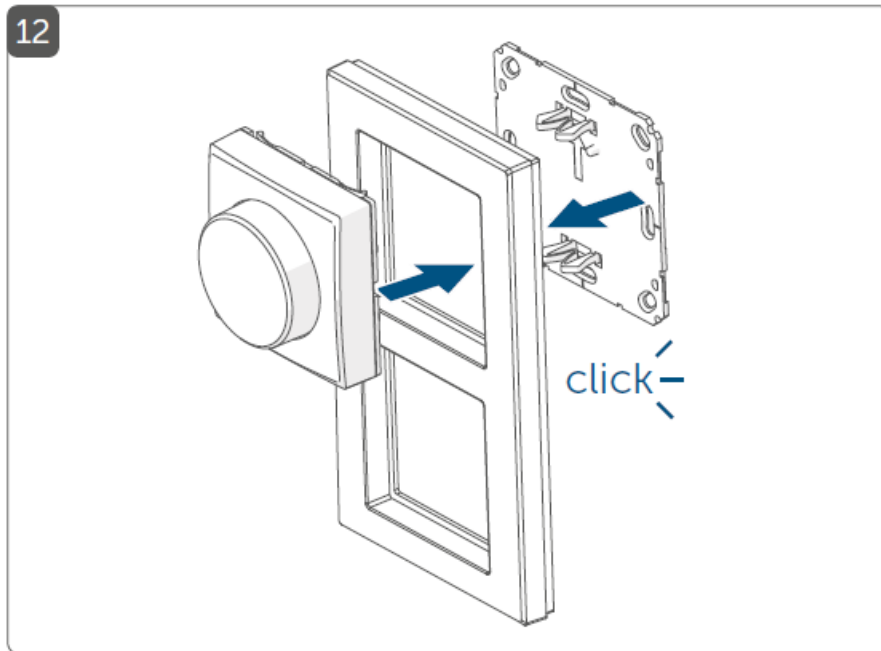
The following specialist knowledge is particularly important during installation:

- **The “5 safety rules” to be used:**
  - Disconnect from mains; Safeguard from switching on again; Check that system is de-energized; Earth and short circuit; Cover or cordon off neighboring live parts;
- Select suitable tool, measuring equipment and, if necessary, personal safety equipment;
- Evaluation of measuring results;
- Selection of electrical installation material for safeguarding shut-off conditions;
- IP protection types;
- Installation of electrical installation material;
- Type of supply network (TN system, IT system, TT system) and the resulting connecting conditions (classical zero balancing, protective earthing, required additional measures etc.).

### Mounting in existing switches

You can mount the device with the frame (A) provided or use it with frames of other manufacturers. The electronic unit (B) can also be integrated into a multi-gang frame (see figure 12). You can flexibly fix the mounting plate (D) to the wall using adhesive strips or screws. For mounting with multiple combinations, make sure that the mounting plate of the device is seamlessly aligned to the already fixed mounting plate/retaining ring.


An overview of compatible switch series is available in the download area of [www.homematic-ip.com](http://www.homematic-ip.com).

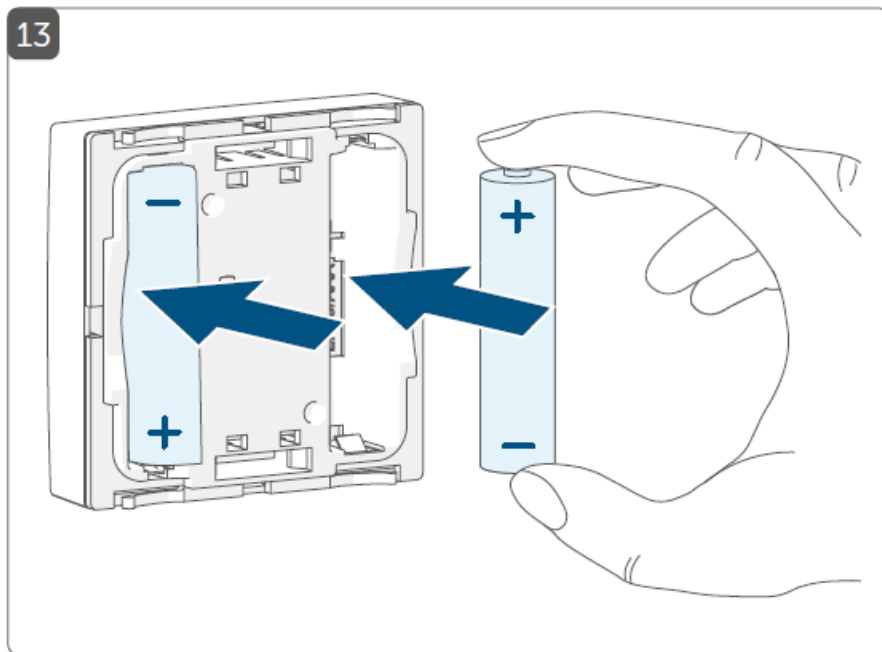


## Operation

- After the device has been connected and installed, simple operations are available directly on the device. Configuration is possible via the Homematic IP app or the WebUI user interface.
- The rotary button (C) is used to transmit switching commands to other Homematic IP device like dimming actuators for example. The rotary button offers operation with different gestures:
  - rotate clockwise
  - rotate anti-clockwise
  - button press on the rotary button

## Replacing batteries


- If the symbol for empty batteries (  ) appears in the app, replace the used batteries by two new LR03/micro/AAA batteries. You must observe the correct battery polarity. To replace the batteries of the device, proceed as follows:
  - Once mounted, the electronic unit (B) can easily be pulled out of the mounting plate (D). To remove the electronic unit from the frame, take hold of the sides of the electronic unit and pull it out (see figure 2).
  - Turn the electronic unit over to remove or insert the batteries.
  - Insert two new 1.5 V LR03/micro/batteries into the battery compartment, making sure that you insert them the right way round (see figure 13).
  - Put the electronic unit back into the frame. Make sure that the clips on the mounting plate latch into the openings on the electronic unit.
  - Pay attention to the flashing signals of the device LED (E) while inserting the batteries (see “8.4 Error codes and flashing sequences” on page 49).



- Once the batteries have been inserted, the device will perform a self-test (approx. 2 seconds). Afterwards, initialisation is carried out. The test display will indicate that initialisation is complete: orange and green lighting.
- **Caution!** There is a risk of explosion if the battery is not replaced correctly. Replace only with the same or equivalent type. Never recharge non-rechargeable batteries. Do not throw the batteries into a fire. Do not expose batteries to excessive heat. Do not short-circuit batteries. Doing so will present a risk of explosion.

## Troubleshooting

### Weak battery

- Provided that the voltage value permits it, the device will remain ready for operation also if the battery voltage is low. Depending on the particular load, it may be possible to send transmissions again repeatedly, once the batteries have been allowed a brief recovery period.
- If the voltage drops too far during transmission, the empty battery symbol (  ) and the corresponding error code will be displayed in the app (see “8.4 Error codes and flashing sequences” on page 49). In this case, replace the empty batteries by two new batteries (see “7 Replacing batteries” on page 45).

### Command not confirmed

- If at least one receiver does not confirm a command, the device LED (E) lights up red at the end of the failed transmission process. The failed transmission may be caused by radio interference (see “11 General information about radio operation” on page 52). The failed transmission may also be caused by the following:
  - Receiver cannot be reached.
  - Receiver is unable to execute the command (load failure, mechanical blockade, etc.).
  - Receiver is defective.

### Duty cycle

- The duty cycle is a legally regulated limit of the transmission time of devices in the 868 MHz range. The aim of this regulation is to safeguard the operation of all devices working in the 868 MHz range.

- In the 868 MHz frequency range we use, the maximum transmission time of any device is 1% of an hour (i.e. 36 seconds in an hour). Devices must cease transmission when they reach the 1% limit until this time restriction comes to an end. Homematic IP devices are designed and produced with 100% conformity to this regulation. During normal operation, the duty cycle is not usually reached. However, repeated and radio-intensive pairing processes mean that it may be reached in isolated instances during start-up or initial installation of a system. If the duty cycle is exceeded, this is indicated by one long flash of the device LED (E), and may manifest itself in the device temporarily working incorrectly.
- The device starts working correctly again after a short period (max. 1 hour).

### Error codes and flashing sequences

Error and flashing codes	Meaning	Solution
Short orange flashing*	Radio transmission/ attempting to transmit/data transmission	Wait until the transmission is completed.
1x long green lighting*	Operation confirmed	You can continue operation.
Short orange flashing (every 10 seconds)	pairing mode active	Enter the last four numbers of the device serial number for confirmation (see "5.1 Pairing" on page 38).
Short orange lighting (after green or red confirmation)	Batteries empty	Replace the batteries (see "7 Replacing batteries" on page 45).
1x long red lighting	Transmission failed or duty cycle limit is reached	Try again (see sec. "8.2 Command not confirmed" on page 47 or "8.3 Duty cycle" on page 48).

6x long red flashing	Device defective	Have a look at your app for error message or contact your retailer.
1x orange	Test display	After the test
and 1 x green		display has
lighting (after		stopped, you can
inserting		continue.
batteries)		

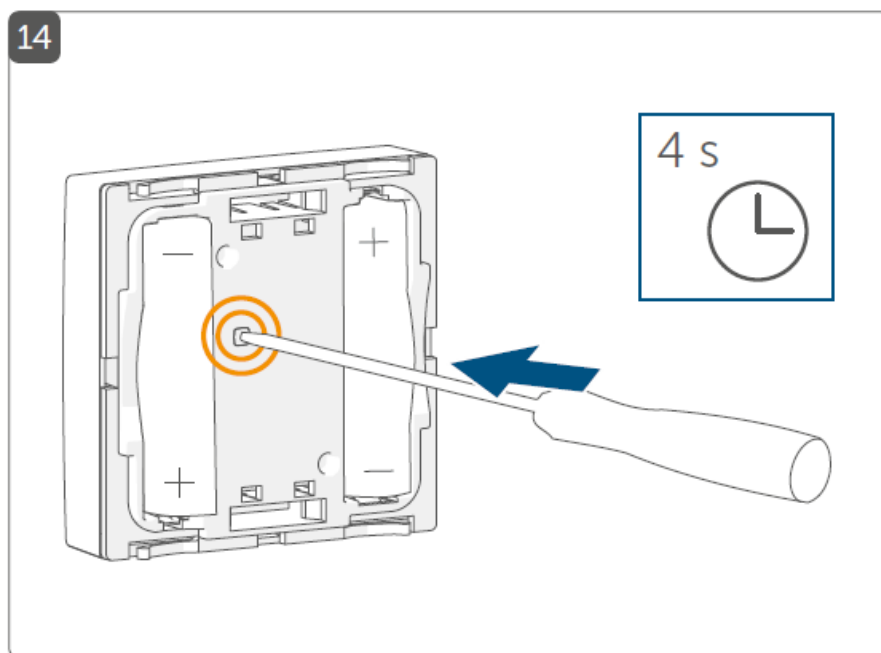
\*Flashing code can be deactivated in the settings

### Restore factory settings

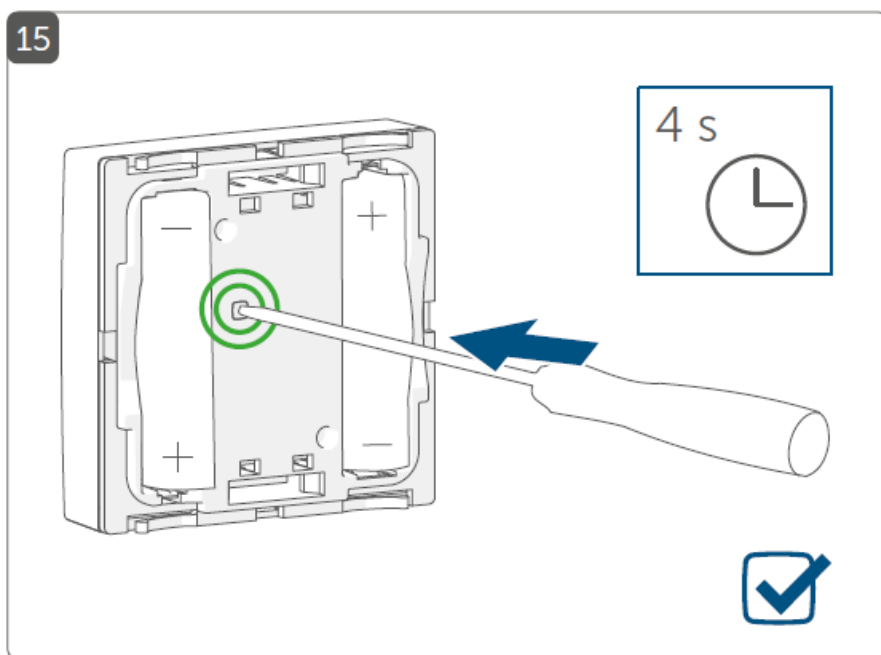
The factory settings of the device can be restored. If you do this, you will lose all your settings.

- To restore the factory settings of the wall thermostat, please proceed as follows:
- To remove the electronic unit (B) from the frame, take hold of the sides of the electronic unit and pull it out (see figure 2).
- Remove a battery.

- Insert the battery ensuring that the polarity is correct (see figure 7) and Press and hold down the system button (E) for 4 seconds with a pointed object (e.g. a pen) until the LED (E) starts flashing orange quickly (see figure 14).
- Release the system button again.



- Press and hold down the system button again for 4 seconds, until the status LED lights up green (see figure 15)..
- Release the system button to finish the procedure.



- The device will perform a restart.

## Maintenance and cleaning

- The device does not require you to carry out any maintenance other than replacing the battery when necessary. Enlist the help of an expert to carry out any repairs.
- Clean the device using a soft, lint-free cloth that is clean and dry. Do not use any detergents containing solvents, as they could corrode the plastic housing and label.

## General information about radio operation

- Radio transmission is performed on a non-exclusive transmission path, which means that there is a possibility of interference occurring. Interference can also be caused by switching operations, electrical motors or defective electrical devices.
- The range of transmission within buildings can differ greatly from that available in the open air. Besides the transmitting power and the reception characteristics of the receiver, environmental factors such as humidity in the vicinity have an important role to play, as do on-site structural/screening conditions.
- Hereby, eQ-3 AG, Maiburger Str. 29, 26789 Leer/Germany declares that the radio equipment type [Markenname] [Gerätekurzbezeichnung] is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: [www.homematic-ip.com](http://www.homematic-ip.com)

## Technical specifications

- Device short name: HmIP-WRCR
- Supply voltage: 2x 1.5 V LR03/micro/AAA
- Current consumption: 100 mA max.
- Battery life: 3 years (typ.)
- Degree of protection: IP20
- Degree of pollution: 2
- Ambient temperature: 5 to 35 °C
- Dimensions (W x H x D):
  - Without frame: 55 x 55 x 27 mm
  - Including frame: 86 x 86 x 29 mm
- Weight: 91.4 g (including batteries)
- Radio frequency band: 868.0-868.60 MHz 869.4-869.65 MHz
- Maximum radiated power: 10 dBm
- Receiver category: SRD category 2
- Typ. open area RF range: 180 m
- Duty cycle: < 1 % per h/< 10 % per h

Subject to technical changes.

## Instructions for disposal

This symbol means that the device and the batteries or accumulators must not be disposed of as household waste, general waste, or in a yellow bin or yellow sack. For the protection of health and the environment, you must take the product, all electronic parts included in the scope of delivery, and the batteries to a municipal collection point for old electrical and electronic equipment to ensure their correct disposal. Distributors of electrical and electronic equipment or batteries must also take back obsolete equipment or batteries free of charge. By disposing of it separately, you are making a valuable contribution to the reuse, recycling and other methods of recovery of old devices and old batteries. You must separate any old batteries and accumulators of old electrical and electronic devices from the old device if they are not enclosed by the old device before handing it over to a collection point and to dispose of them separately at the local collection points. Please also remember that you, the end user, are responsible for deleting personal data on any old electrical and electronic equipment before disposing of it.





### Information about conformity

- The CE sign is a free trading sign addressed exclusively to the authorities and does not include any warranty of any properties.

#### CE

- For technical support, contact your specialist dealer.
- Kostenloser Download der Homematic IP App! Free download of the Homematic IP app!



### Manufacturer's authorised representative:

eQ-3 AG

Maiburger Straße 29

26789 Leer / GERMANY [www.eQ-3.de](http://www.eQ-3.de)

### Documents / Resources

	<a href="#">homematic IP HmIP-WRCR Rotary Button</a> [pdf] User Manual HmIP-WRCR Rotary Button, HmIP-WRCR, Rotary Button, Button
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### References

- [e Startseite - eQ-3](#)

- [IP Home page | Homematic IP](#)
- [User Manual](#)

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