

**eNet radio hand-held transmitter 2-gang**

Art. no.: FMHS2

**eNet radio hand-held transmitter 4-gang**

Art. no.: FMHS4

## Operating instructions

**1 Safety instructions**

Electrical devices may only be mounted and connected by electrically skilled persons.

Serious injuries, fire or property damage possible. Please read and follow manual fully.

The radio communication takes place via a non-exclusively available transmission path, and is therefore not suitable for safety-related applications, such as emergency stop and emergency call.

These instructions are an integral part of the product, and must remain with the end customer.

**2 Battery safety instructions**

This device or its accessories are supplied with batteries in the form of button cells.

**DANGER! Batteries can be swallowed. This can lead directly to death by suffocation. Dangerous substances may cause severe internal burns leading to death within 2 hours.**

Keep new and used batteries away from children.

Do not use devices if the battery compartment does not close securely and keep away from children.

If you suspect that a battery has been swallowed or is in any orifice of the body, seek immediate medical attention.

**WARNING! Improper handling of batteries can result in explosion, fire or chemical burn due to leakage.**

Do not heat or throw batteries into fire.

Do not reverse polarity, short-circuit or recharge batteries.

Do not deform or disassemble batteries.

Replace batteries only with an identical or equivalent type.

Remove empty batteries immediately and dispose of in an environmentally friendly manner.

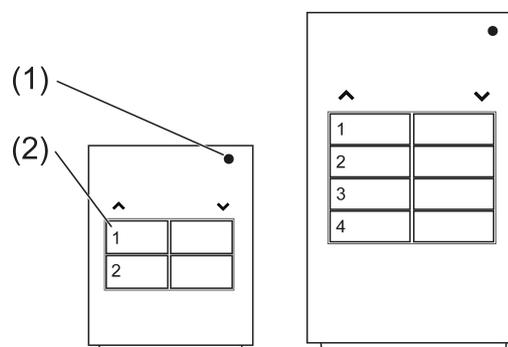
**3 Device components**

Figure 1: Radio hand transmitter 2-gang and 4-gang

- (1) Status LED
- (2) Release the

## 4 Function

### Product characteristics

- Two adjacent buttons each belong to one channel
- Status indication with LED
- Switch-on brightness of dimmer actuators can be saved.
- Battery-powered device
- Scenes, radio hand transmitter, 2x: All Off, three individual scenes.
- Scenes, radio hand transmitter, 4x: All Off, seven individual scenes.
- Signalling of transmission errors can be switched off

Can be set with eNet server:

- Scene All On
- Operation locks

Supplementary functions with eNet Server

- Fully encrypted radio transmission (AES-CCM) from eNet Server software version 2.0
- Update of the device software
- Reading of error memory

## 5 Operation

**i** When operating with the eNet Server, operation and signalling could vary from what is described here.

One channel of a radio hand transmitter consists of two buttons. These can be used in two different ways.

- As channel buttons for switching, dimming, Venetian blind operation
- As scene buttons to recall set scenes

### Function of status LED in operation

As soon as a button is pressed or released, the status LED (1) first signals radio transmission

- LED turns red for 3 seconds

and then the actuator status/group status

- LED turns green for 3 seconds:
  - At least one actuator is switched on, or one Venetian blind is not in the top end position
- LED remains off:
  - All the actuators are switched off or the blinds are all in the upper end position

or - if there is no status message from an actuator - a transmission error.

- The LED rapidly flashes red for 5 seconds:
  - The status message of at least one actuator is missing

### Operating light

- Switching: Press button for less than 0.4 seconds.
- Dimming: Press the button for longer than 0.4 seconds. The dimming process ends when the button is released.
- Switching on dimmer actuators at minimum brightness: Press the right button for longer than 0.4 seconds.
- Switching on dimmer actuators at minimum brightness and dimming to maximum brightness: Press the left button for longer than 0.4 seconds.

### Operating blind

- Moving the Venetian blind: Press the button for longer than 1 second.
- Stopping or adjusting the Venetian blind: Press the button for less than 1 second.

### Operating push-button actuator

- Press the button. The load is switched on for the duration of the button-press.

**i** The maximum actuation length is 60 seconds.

### Recalling scenes

- Press the scene button briefly.  
Actuators switching to the saved scene.

### Changing scene

- Press the scene button briefly.  
Actuators switching to the saved scene.
- Setting a new scene.
- Press scene button for longer than 4 seconds.  
Actuators first switching to the old scene and save the new scene after 4 seconds.

### Save switch-on brightness

With dimmer actuators a brightness value can be saved to which the dimmer actuator switches after a short button press.

The buttons of a channel are set as channel buttons.

- Set required switch-on brightness.
- Press both buttons of a channel simultaneously for longer than 4 seconds.  
The light is briefly switched off and switched on again to the switch-on brightness. Switch-on brightness is saved.

### Polling sum status

The buttons of a channel are set as channel buttons.

- Press both buttons of a channel simultaneously for 1 to 4 seconds.  
Signalling of radio transmission and group status (see function of the status LED in operation)

## 6 Information for electrically skilled persons

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### **DANGER!**

Mortal danger of electric shock.

During commissioning, cover the parts carrying voltage on radio transmitters and actuators and in their surrounding area.

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## 6.1 Commissioning

### Inserting the battery

The battery is included.

- i** Obey the battery safety instructions.
- Unscrew the battery compartment on the back of the hand-held transmitter. Use a small flat head screwdriver or Phillips screwdriver PH1 for this.
- Keep contacts of batteries and device free of grease.
- Apply battery to the positive contact of the battery holder. Observe polarity: the positive pole of the battery must be at the top.
- Press gently on battery to snap it in.
- Close and screw the battery compartment with max. 0.3 Nm.

Hand-held transmitter is ready for operation.

### Configuring the buttons

The **Prog** (Figure 2) button can be pressed with a thin wire or paper clip through the hole in the battery cover.

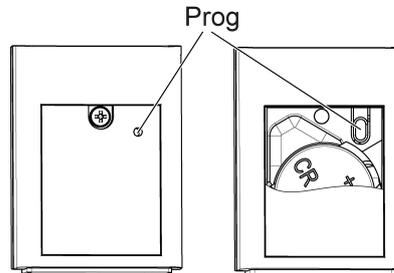


Figure 2: Button Prog

In the as-delivered state, all the buttons are configured as channel buttons.

- Press the **Prog** (Figure 2) button briefly.  
The status LED lights up red. Hand-held transmitter is in configuration mode for 10 seconds.
- Setting as channel buttons: Press the left button of the appropriate channel until the status LED turns green.  
The right and left button of the channel are set as channel buttons.
- Setting as scene button: Press the right button of the appropriate channel until the status LED turns green.  
The right and left button of the channel are set as scene buttons.

### Overview of scene buttons

Release the	Button allocation
1 left / 1 right	Scene 1 / All Off
2 left / 2 right	Scenes 2 / Scene 3
3 left / 3 right	Scenes 4 / Scene 5
4 left / 4 right	Scenes 6 / Scene 7

**i** Buttons 3 and 4 are only for 4-gang hand-held transmitters

### Connecting to radio actuator

- i** Up to 10 radio actuators can be connected to a transmitter in a single step.
  - Switch the actuator to programming mode (see actuator instructions).
  - Press the **Prog** button for longer than 4 seconds.  
Status LED (1) flashes red. The hand-held transmitter is in programming mode for approx. 1 minute.
  - Press the right or left button of the required channel or the scene button briefly  
The status LED lights up for approx. 5 seconds, and the channel buttons or scene button are connected to the actuator. The hand-held transmitter and actuator exit the programming mode automatically.
- i** The All Off button is connected to the actuator automatically as soon as the first connection to a radio transmitter takes place. Scene buttons must be connected separately.
- i** If the status LED of the radio transmitter flashes 3 times at 1-second intervals for approx. 5 seconds, then the programming operation was not successful. The actuator is outside radio range, not in programming mode or there are radio faults.

- i** If the status LED of the actuator flashes 3 times at 1-second intervals for approx. 5 seconds, then the programming operation was not successful. All the memory locations in the actuator or radio transmitter are occupied.
- i** Press the **Prog** button once again for longer than 4 seconds to terminate the programming mode earlier.

#### Disconnecting connection to an actuator

- Carry out the same steps as when connecting (see the chapter Connecting to radio actuator).  
The status LED of the actuator flashes quickly for 5 seconds. The actuator is disconnected from the radio transmitter. The actuator and radio transmitter exit the programming mode automatically.
- i** If there several connections or scene buttons for an actuator, all the connections must be disconnected individually.
- i** The All Off button of a radio transmitter is disconnected automatically as soon as the last connection to the actuator is disconnected. Manual disconnection is not possible.

#### Resetting the channel or scene button

All the connections of the channel buttons or the scene button to actuators are disconnected and parameters are reset to default setting.

- i** The connections in the actuators are preserved and must be deleted separately.
- Press the **Prog** button for longer than 20 seconds.  
The status LED (1) flashes red after 4 seconds. The status LED flashes faster after 20 seconds.
- Release the **Prog** button and press briefly a channel button of the appropriate channel or the scene button once again within 10 seconds.  
The status LED flashes more slowly for approx. 5 seconds.  
The channel buttons or the scene button has been reset. The setting as channel buttons or scene button is retained.

#### Resetting the hand-held transmitter to the default setting

All connections to actuators are disconnected and parameters are reset to default setting.

- i** The connections in the actuators are preserved and must be deleted separately.
- Press the **Prog** button for longer than 20 seconds.  
The status LED (1) flashes red after 4 seconds. The status LED flashes faster after 20 seconds.
- Release **Prog** button and press briefly once again within 10 seconds.  
The status LED flashes more slowly for approx. 5 seconds.  
The hand-held transmitter is reset to default setting. All the buttons are set as channel buttons.

## 7 Disposal of batteries



Remove empty batteries immediately and dispose of in an environmentally friendly manner. Do not throw batteries into household waste. Consult your local authorities about environmentally friendly disposal. According to statutory provisions, the end consumer is obligated to return used batteries.

## 8 Technical data

Rated voltage

DC 3 V

Battery type

1×Lithium CR 2450N

Ambient temperature	-5 ... +45 °C
Degree of protection	IP20
Dimensions L×W×H	55×40.5×15 mm
Radio frequency	868.0 ... 868.6 MHz
Transmission capacity	max. 20 mW
Transmitting range in free field	typ. 100 m
Receiver category	2

## 9 Parameter list

The device parameters can be changed with the eNet server:

### Device and channels

Parameter name	Setting options, Basic setting	Explanations
Function	Rocker, Other modes, Unused Basic setting: Rocker	<p><b>Rocker</b> The channel works as a channel button. Setting is always made in pairs.</p> <p><b>Other modes</b> The channel works as a scene button. Setting is always made in pairs.</p> <p><b>Unused</b> The channel is not displayed in the <b>eNet SMART HOME app</b> and is disabled for use in the commissioning interface.</p>
Operating mode	App use, lock-out protection, forced operation, wind alarm, sun protection, twilight Basic setting: App use	Setting the type of scene used for a scene button. Setting is always made in pairs.

### Advanced device settings

Parameter name	Setting options, Basic setting	Explanations
Manual commissioning	On, Off Basic setting: On	Disables manual commissioning for all device channels. Note: In the "Off" setting, the device cannot be reset to the factory setting.

### Extended channel settings

Parameter name	Setting options, Basic setting	Explanations
Manual commissioning	On, Off Basic setting: On	Blocks manual commissioning for the device channel. Note: In the "Off" setting, the device cannot be reset to the factory setting.
Local Operation	On, Off Basic setting: On	Blocks the device channel for local operation.

## 10 Troubleshooting

**After a button has been pressed, the status LED flashes red slowly for 3 seconds.**

Cause: Battery in the hand-held transmitter is almost empty.

Changing the battery (see chapter Commissioning – Inserting the battery).

**Receiver does not react, status LED displays a transmission error. Status LED flashes red quickly for 3 seconds.**

Cause 1: Radio range exceeded. Structural obstacles reduce the range.

Using a radio repeater.

Cause 2: Actuator is not ready for operation.

Check the actuator and mains voltage.

Cause 3: There are radio faults, e.g. through outside radio.

Eliminate radio interference.

**i** The actuator causing the transmission error can be removed from the display of transmission errors. To do this, briefly press the **Prog** button of the hand-held transmitter during signalling. The status LED lights up red. During this time, do not press any buttons on the hand-held transmitter. The actuator is automatically taken into account again when it transmits a status message after radio transmission.

**After a button has been pressed, the status LED flashes red quickly for 3 seconds.**

Cause: Maximum permitted transmission period (statutory Duty Cycle Limit) has almost been reached. For the function of the transmitter to continue, the polling and display of the sum status will be switched off. As soon as sufficient transmission time is available again, the sum status will again be polled on button actuation.

Actuate the transmitter again after a short waiting time, normally a few seconds.

Reduce the number of actuations.

Reduce the number of actuators connected to the transmitter.

## 11 Conformity

Albrecht Jung GmbH & Co. KG hereby declares that the radio system type art. no. FMHS2/ FMHS4

corresponds to the directive 2014/53/EU. You can find the full article number on the device. The complete text of the EU Declaration of Conformity is available under the Internet address: [www.jung.de/ce](http://www.jung.de/ce)

## 12 Warranty

The warranty is provided in accordance with statutory requirements via the specialist trade.

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