

# ZRH12



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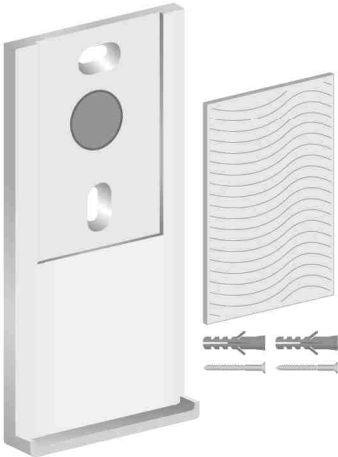


*Dear Sir/Madam! Thank you for purchasing the product from FAKRO. We do hope that it will meet your expectations. To ensure appropriate functioning of the product, please peruse this User Manual.*

Remote control (controller)



Remote control holder



Remote control includes batteries 2x1.5V AAA (LR03)

REMOTE CONTROL DESCRIPTION

The ZRH12 is designed for the remote control of devices compatible with the Z-Wave standard. The remote control enables to operate up to 12 devices in each of 12 groups (a total of 144 devices). The currently selected group is marked with the appropriate number on the screen. The Z-Wave network features division into PRIMARY and SECONDARY remote controls.



PRIMARY remote control – used to operate devices. It can add and remove devices. Only one PRIMARY remote control can be in one network.



SECONDARY remote control – used only to operate devices. Many SECONDARY remote controls can be in one network.



Warning! Use only alkaline batteries for the replacement.



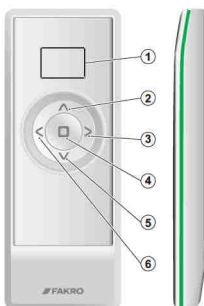
Warning! Risk of explosion if batteries are replaced by batteries of an incorrect type. Dispose of worn-out batteries according to the instructions.

TECHNICAL SPECIFICATION

**Power supply:**  
2x1.5V AAA (LR03)  
**Reach:**  
Up to 20m in a building  
**Working temperature:**  
0-40°C  
**Dimensions:**  
125/48/16 mm

**Radio protocol:**  
Z-Wave  
**Frequency:**  
EU – 868,4 MHz  
AS/NZ – 921,42 MHz  
US/Canada – 908,4 MHz  
RUJ – 869 MHz  
(depending on version)

## REMOTE CONTROL STRUCTURE



- ① Display
- ② Navigation, control button – UP
- ③ Navigation button – RIGHT
- ④ Stop, accept button – STOP
- ⑤ Navigation, control button – DOWN
- ⑥ Navigation button – LEFT

## REMOTE CONTROL PREPARATION



- Open the battery cover by sliding it down.
- Remove foil.
- Close the battery cover by sliding it up until you click the latches.

## CONTROL

### CONTROL MODES



SHORT press of control button (shorter than 0.5 sec.) causes the action to reach end position.



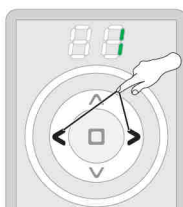
LONG press of control button (longer than 0.5 sec.) causes the action until releasing the button.



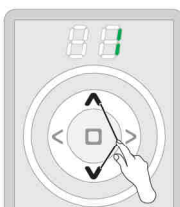
Pressing STOP button stops the action.

## DEVICE CONTROL

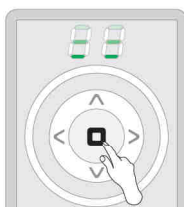
Controlling devices using the ZRH12 remote control consists in controlling selected group of devices. If you want to control devices independently, they must be assigned to separate groups.



Using LEFT / RIGHT buttons select group which you want to control (only active groups).



Using UP / DOWN buttons control device or devices.



Stop the action using STOP button.

## REMOTE CONTROL MENU DESCRIPTION

The ZRH12 remote control is equipped with a segment screen located under the front of the housing. This makes it easy to find the function that you are interested in. Abbreviations displayed on the screen are described below.

### HOLDING STOP + UP BUTTON FOR 3 SECONDS



QUICK START / ADDING DEVICE (QUICK START) - Adding devices both to network and group.



ASSOCIATE / ADDING DEVICES TO GROUP.



INCLUDE / ADDING DEVICES TO NETWORK.



COPY GROUP – Copying groups to other remote controls in the same network.



ASSIGN A ROUTE / ASSOCIATING DEVICES – Control signal is sent between associated devices.



LISTENING MODE – It enables remote configuration of the remote control from another controller.



Back to previous screen.

### HOLDING STOP + DOWN BUTTON FOR 3 SECONDS



LEARN MODE – It enables to add the ZRH12 remote control to the network as SECONDARY.



DELETE NODE / REMOVING DEVICES FROM GROUP.



DELETE GROUP / REMOVING GROUP – It removes the entire selected group.



EXCLUDE / REMOVING DEVICE FROM NETWORK.



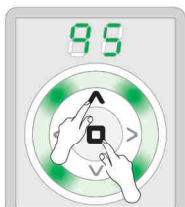
DEFAULT / RESETTING REMOTE CONTROL – It resets settings of the remote control and removes information about devices and network.



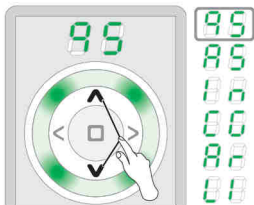
Back to previous screen.

## ADD DEVICE (QUICK START)

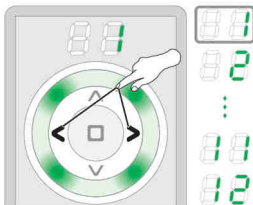
This function allows you to add the device to the Z-Wave network, while assigning it to selected group.



Hold simultaneously UP and STOP buttons until you enter configuration mode.



Using UP / DOWN buttons select marked position.



Using LEFT / RIGHT buttons select group to which you want to assign the device (e.g. 1).

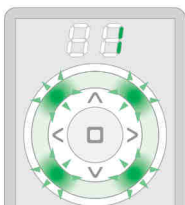


Accept using STOP button.



Within 12 seconds enter the device being added into programming mode\*1.

- \*1** Programming mode can be achieved using two methods:
1. Remotely by running the AUTOINCLUSION mode on the device being added. The AUTOINCLUSION mode is available for 10 minutes after turning on the power.
  2. Manually by pressing programming button "P" on the device being added.



Procedure performed correctly. Green backlight flashes once.



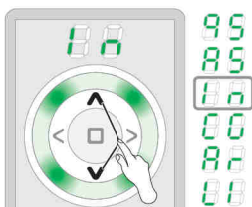
Error. Red backlight flashes 3 times. Repeat procedure or see page 18, point 1 or 2.

## ADD DEVICE TO NETWORK

This function allows you to add devices to the network without adding them to group. Once this procedure is completed, add devices to group (page 7). Using ADD DEVICES TO NETWORK you can also add another secondary remote controls.



Hold simultaneously UP and STOP buttons until you enter configuration mode.



Using UP / DOWN buttons select marked position.



Accept using STOP button.

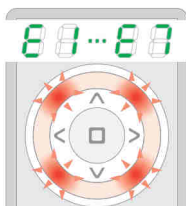


Within 12 seconds enter the device being added into programming mode\*1.

If instead of the device you add another remote control, run ASSIGN REMOTE CONTROL AS SECONDARY. The ZRH12 remote control – page 12. Remote control of other type – see its user manual.



Procedure performed correctly. Green backlight flashes once.



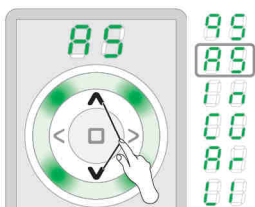
Error. Red backlight flashes 3 times. Repeat procedure or see page 24, point 1.

## ADD DEVICE TO GROUP

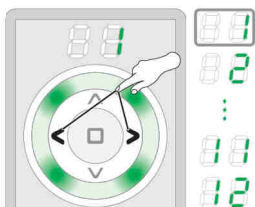
This function allows to add the device to up to 12 groups. Maximum 12 devices can be added to each group. Only those devices can be added to the group which have already been added to the network. The group becomes active once the device is added to it.



Hold simultaneously UP and STOP buttons until you enter configuration mode.



Using UP / DOWN buttons select marked position.



Using LEFT / RIGHT buttons select group to which you want to assign the device (e.g. 1).



Accept using STOP button.



Within 12 seconds enter the device being added into programming mode\*1.



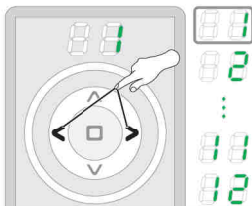
Procedure performed correctly. Green backlight flashes once.



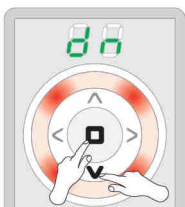
Error. Red backlight flashes 3 times. Repeat procedure or see page 24, point 2.

## REMOVE DEVICE FROM GROUP

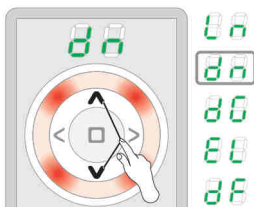
This function allows to remove the device from the group without removing from the Z-Wave network. The device can be added again to the group of any remote control in the same network.



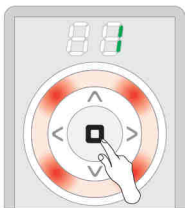
Using LEFT / RIGHT buttons select the group from which you want to remove the device (e.g. 1).



Hold simultaneously STOP and DOWN buttons until you enter configuration mode.



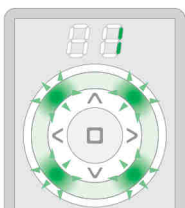
Using UP / DOWN buttons select marked position.



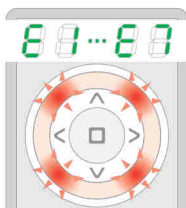
Accept using STOP button.



Within 12 seconds enter the device being removed into programming mode\*1.



Procedure performed correctly. Green backlight flashes once.

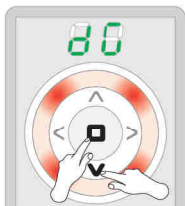


Error. Red backlight flashes 3 times. Repeat procedure or see page 24, point 3.



## REMOVE GROUP

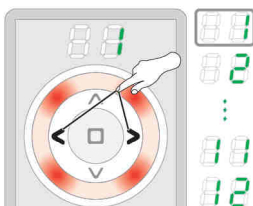
This function allows to remove the entire group of devices. Device control is possible only after re-adding it to the group (page 7).



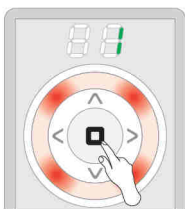
Hold simultaneously STOP and DOWN buttons until you enter configuration mode.



Using UP / DOWN buttons select marked position.



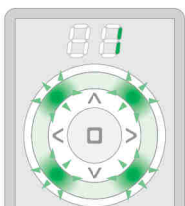
Using LEFT / RIGHT buttons select the group which you want to remove (e.g. 1).



Accept using STOP button.



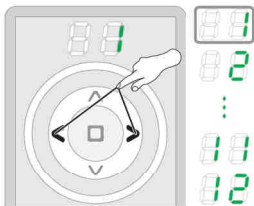
Two cyclically moving lines will appear for a few seconds.



Procedure performed correctly. GREEN backlight flashes once.

## COPY GROUP

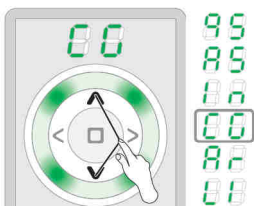
This function allows to copy the entire group to another remote control in the same network.



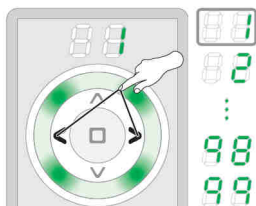
Using LEFT / RIGHT buttons select the group which you want to copy (e.g. 1).



Hold simultaneously UP and STOP buttons until you enter configuration mode.



Using UP / DOWN buttons select marked position.



Using LEFT / RIGHT buttons select a target group.



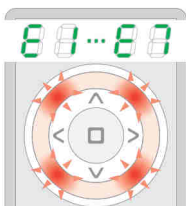
Accept using STOP button.



Within 12 seconds run LISTENING MODE on the target remote control.



Procedure performed correctly. Green backlight flashes once.



Error. Red backlight flashes 3 times. Repeat procedure or see page 24, point 4.

## REMOVE DEVICE FROM NETWORK

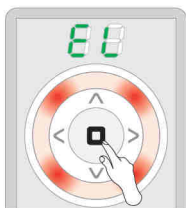
Devices can be removed from the network using PRIMARY remote controls.



Hold simultaneously STOP and DOWN buttons until you enter configuration mode.



Using UP / DOWN buttons select marked position.



Accept using STOP button.



Within 12 seconds enter the device being removed/reset into programming mode\*1.



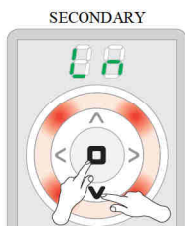
Procedure performed correctly. Green backlight flashes once.



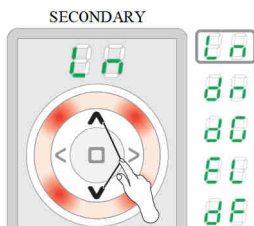
Error. Red backlight flashes 3 times. Repeat procedure or see page 25, point 5.

## ASSIGN ZRH12 AS SECONDARY

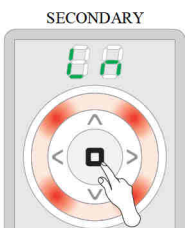
This function allows to assign the ZRH12 remote control to existing Z-Wave network as **SECONDARY**. **PRIMARY** remote control in the same network can be of any type. Devices must be added to selected group of the remote control (page 7) in order to be controlled by **PRIMARY** remote control.



Hold simultaneously **STOP** and **DOWN** buttons until you enter configuration mode.



Using **UP** / **DOWN** buttons select marked position.

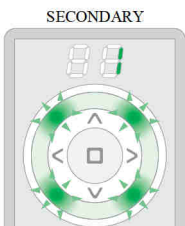


Accept using **STOP** button.



Within 12 seconds run on **PRIMARY** remote control **ADD DEVICE TO NETWORK\***.

\* ZRH12 remote control – page 6  
Remote control of other type – see its user manual.



Procedure performed correctly. **GREEN** backlight flashes once.



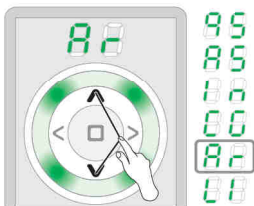
Error. Red backlight flashes 3 times. Repeat procedure or see page 25, point 6.

## ASSOCIATE DEVICES

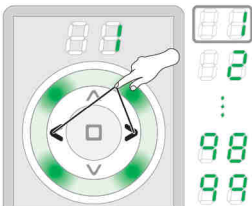
This function allows to configure devices that are in one Z-Wave network to have controlled device run another device. For example, a window with a rain sensor can send a signal to close other windows once the rain is detected. Please check in manuals of devices to be associated whether such function is available.



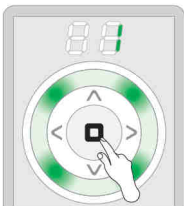
Hold simultaneously UP and STOP buttons until you enter configuration mode.



Using UP / DOWN buttons select marked position.



Using LEFT / RIGHT buttons select group for associating devices (e.g. 1).



Accept using STOP button.



\*See manuals of devices that you want to associate.

## CONTROLLED

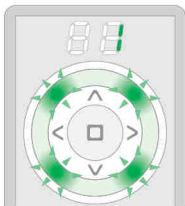


Within 99 seconds enter the device that is to be controlled by another device into programming mode\*1.

## CONTROLLING



Within 99 seconds enter the device that is to to control another device into programming mode\*1.



Procedure performed correctly. Green backlight flashes once.

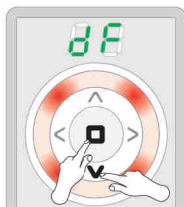


Error. Red backlight flashes 3 times.  
Repeat procedure or see page 25, point 7.

## RESET REMOTE CONTROL

**PRIMARY REMOTE CONTROL RESET** – It removes all information about the network, groups, etc. Controlling devices is possible only after all devices have been removed (page 11) and added again (page 5 or 6 and 7).

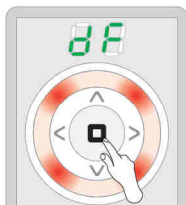
**SECONDARY REMOTE CONTROL RESET** – It removes all information. Controlling devices is possible only after the remote control has been assigned to the network again (page 12) and devices have been added to groups (page 7).



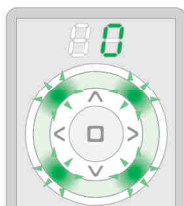
Hold simultaneously STOP and DOWN buttons until you enter configuration mode.



Using UP / DOWN buttons select marked position.



Accept using STOP button.



Procedure performed correctly. Green backlight flashes once.

## LISTENING MODE

### Advanced function

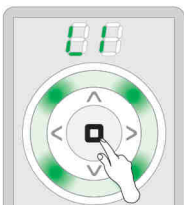
The remote control entered into listening mode enables remote configuration from another controller, e.g. Gateway Z-Wave. Triggering transfer function\*2 – page 16.



Hold simultaneously STOP and UP buttons until you enter configuration mode.



Using UP / DOWN buttons select marked position.



Accept using STOP button.



The remote control enters listening mode. Green LEDs flash sequentially, clockwise. The remote control remains in the listening mode for 30 seconds after the end of data transmission.

## Z-WAVE DEVICE PARAMETERS CHANGE

AWNING BLIND AMZ SOLAR, VMZ SOLAR AND ROLL-UP AWNING VMB  
SOLAR PARAMETERS CHANGE.

### OPERATION MODE SETTINGS

A0 – manual / A1 – semi-automatic / A2 – automatic.



Hold STOP button for 3 seconds. The first set of parameters appears.

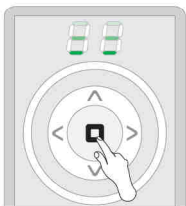


Using UP/ DOWN buttons select marked position.



Using LEFT/RIGHT buttons select operation mode:

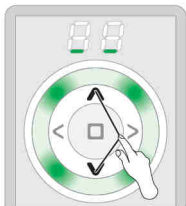
A0 – manual,  
A1 – semi-automatic,  
A2 – automatic.



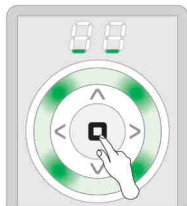
Accept using STOP button.



The parameter change has been introduced.



Using UP/ DOWN buttons select exit.



Accept using STOP button.



## INSOLATION SENSITIVITY SETTINGS



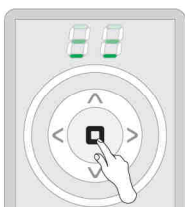
Hold STOP button for 3 seconds. The first set of parameters appears.



Using UP/ DOWN buttons select marked position.



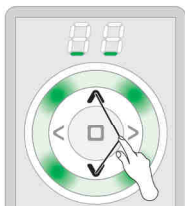
Using LEFT/RIGHT buttons select insulation sensitivity level available within the range of 20-90%.



Accept using STOP button.



The parameter change has been introduced.



Using UP/ DOWN buttons select exit.



Accept using STOP button.

# RUNNING TIME OF AUTOMATIC AND SEMI-AUTOMATIC MODE SETTINGS



Hold STOP button for 3 seconds. The first set of parameters appears.



Using UP/ DOWN buttons select marked position.



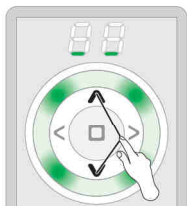
Using LEFT/RIGHT buttons select time after which the blind will work within the range of 3-10 minutes.



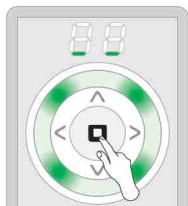
Accept using STOP button.



The parameter change has been introduced.



Using UP/ DOWN buttons select exit.

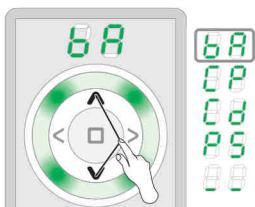


Accept using STOP button.

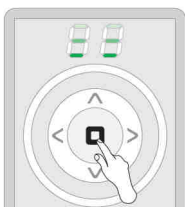
## BATTERY CHARGE LEVEL CHECK



Hold STOP button for 6 seconds. The second set of parameters appears.



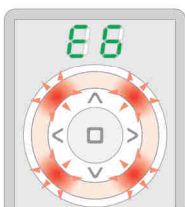
Using UP/ DOWN buttons select marked position.



Accept using STOP button.



Charge level [%]. Information about the critical battery level - FF will be displayed with the value below 18%.



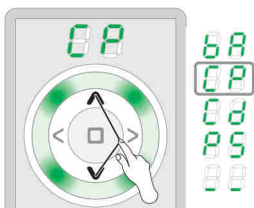
Error. Red backlight flashes 3 times. The device has no batteries.

\* 99 - full battery charge.

REQUEST FOR PARAMETER VALUE



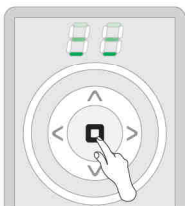
Hold STOP button for 6 seconds. The second set of parameters appears.



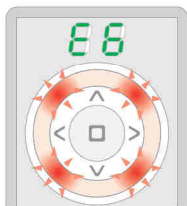
Using UP/ DOWN buttons select marked position.



Using LEFT/RIGHT buttons select the parameter.



Accept using STOP button.



Error. Red backlight flashes 3 times. The device has no selected parameter.

## PARAMETER VALUE CHANGE



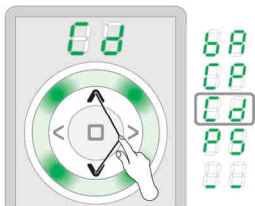
Hold STOP button for 6 seconds. The second set of parameters appears.



Using UP/ DOWN buttons select marked position.



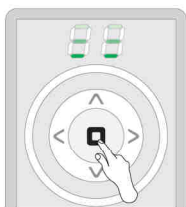
Using LEFT/RIGHT buttons select the parameter.



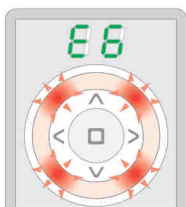
Using UP/ DOWN buttons select marked position.



Using LEFT/RIGHT buttons select the parameter value.

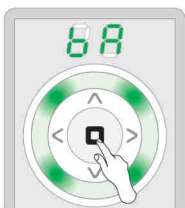


Accept using STOP button.

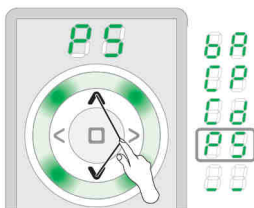


Error. Red backlight flashes 3 times. The device has no selected parameter.

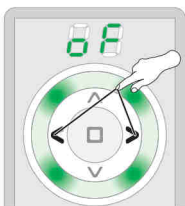
## MULTILEVEL MODE CHANGE



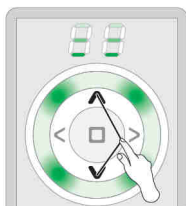
Hold STOP button for 6 seconds. The second set of parameters appears.



Using UP/ DOWN buttons select marked position.



Using LEFT/RIGHT buttons select marked position to turn off "GO TO" MULTILEVEL function. Accept using STOP button.



Hold UP or DOWN buttons until requested position is reached.

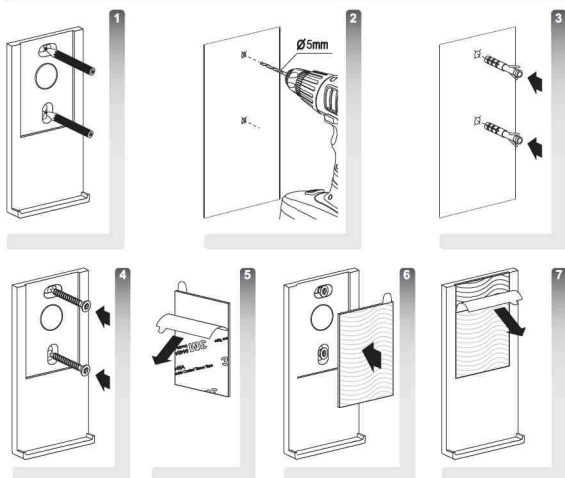


Using LEFT/RIGHT buttons select marked position to turn on "GO TO" MULTILEVEL function. Accept using STOP button.



Hold UP or DOWN buttons to select requested position. Accept using STOP button.

## REMOTE CONTROL HOLDER INSTALLATION



## ADDITIONAL INFORMATION

### \*1 – Programming mode

Programming mode can be achieved using two methods:

1. Remotely by running the AUTOINCLUSION mode on the device being added. The AUTOINCLUSION mode is available for 10 minutes after turning on the power.
2. Manually by pressing programming button “P” on the device being added.

### \*2 – Transfer mode

Function available only in remote controls with the possibility allowing for remote transfer of changes in settings in the remote control with listening mode function. Each remote control of this type can have a separate name of this function.

## INFORMATION CODES



No reach, programming button not pressed.



Low remote control battery level.



Exit menu automatically.



Stop procedure (using stop button).



Group to which the device is to be added is full.



The battery level cannot be checked if more than one device is in the group. The device does not have batteries.



Group is empty.



**WARNING STATUS:** low battery level. After pressing any button, that is after waking up the remote control, the symbol lights for 2 seconds. The device can still be controlled.

**CRITICAL STATUS:** critically low battery level. The symbol lights for 2 seconds. In addition, red backlight flashes quickly for 2 seconds. The device cannot be controlled.

## EU DECLARATION OF CONFORMITY

FAKRO PP Sp. z o.o. hereby declares that a type of radio device ZRH12 complies with Directive 2014/53/EU.

The full text of the EU Declaration of Conformity can be found at:

<http://www.fakro.com/ce-declarations/search/>

## COMPLIANCE WITH THE WEEE DIRECTIVE

Devices marked with this symbol must not be disposed of or thrown away as household waste. It is the user's responsibility to deliver devices that are worn out to the designated recycling area.



### PROBLEMS

CAUSE	SOLUTION
1. Device cannot be added to the Z-Wave network.	
Device is added to other Z-Wave network.	REMOVING DEVICE FROM NETWORK (page 11).
Programming button is not pressed.	Press programming button for 2 seconds.
Too long waiting time for pressing programming button on the device.	Press programming button in time no longer than 12 seconds.
Controller is assigned to the network as SECONDARY.	Only PRIMARY controller can add and remove devices.
2. Device cannot be added to selected group.	
Group is full (dot at group number, e.g. "1.").	Add device to another group
Programming button is not pressed.	Press programming button for 2 seconds.
Too long waiting time for pressing programming button on the device.	Press programming button in time no longer than 12 seconds.
3. Device cannot be removed from the group.	
Programming button is not pressed.	Press programming button for 2 seconds.
Too long waiting time for pressing programming button on the device.	Press programming button in time no longer than 12 seconds.
4. Group cannot be copied.	
Too long waiting time for running LEARNING MODE on the target controller.	Run LEARNING MODE on the target controller in time no longer than 12 seconds.



#### 5. Device cannot be removed from the network.

Programming button is not pressed.

Press programming button for 2 seconds.

Too long waiting time for pressing programming button on the device.

Press programming button in time no longer than 12 seconds.

Controller is assigned to the network as SECONDARY.

Only PRIMARY controller can add and remove devices.

#### 6. ZRH12 remote control cannot be added as SECONDARY.

The controller being added is assigned to other Z-Wave network.

Restore the controller being added to factory settings.

Too long waiting time for running ADD DEVICE function on PRIMARY controller.

Run ADD DEVICE function on PRIMARY controller in time no longer than 12 seconds.

#### 7. Devices cannot be associated.

Devices have been associated in reverse order.

Repeat the procedure while maintaining the correct order of adding devices.

Too long waiting time for pressing programming button on the device.

Press programming button for in time no longer than 99 seconds.

#### 8. Problems with reach.

Too big device distance or no power.

Check whether the device that you want to control is properly connected to the power source. This can be done by using manual control button.

## WARRANTY

The manufacturer guarantees correct device functioning. It also undertakes to repair or replace faulty device if damage is a result of material or structural faults. The warranty period is 24 months from the date of purchase, fulfilling the following conditions:

- Installation has been performed as per manufacturer recommendations.
- Seals remain intact and no authorised structural changes have been made.
- The device has been used in accordance with its intended use as per user manual.
- Damage is not a result of improperly made electrical system or atmospheric phenomena.
- The manufacturer is not liable for damage which occurred as a result of improper use or mechanical damage.

In case of failure, the device must be submitted for repair with a Warranty Card. Defects revealed within the warranty period will be removed free of charge no longer than 14 days after accepting the product for repair. Warranty and post-warranty repairs are performed by the manufacturer i.e. FAKRO PP. Sp. z o.o.

Fakro Sp. z o.o.  
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[www.fakro.com](http://www.fakro.com)

Quality certificate:

Device

---

Model

---

Serial number

---

Seller

---

Address

---

Purchase date

---

Invoice No.

---

Signature (stamp) of person installing a device



This image shows a vertical rectangular page filled with evenly spaced horizontal grey lines, resembling notebook paper or a template for writing. There are no margins, text, or other markings present.