

### Latest operating instructions

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### Explanation of symbols



The lightning symbol inside a triangle is used when there is a potential risk of personal injury, such as electric shock.



An exclamation mark in a triangle indicates important instructions in this operating manual that absolutely have to be observed.



The arrow symbol indicates specific tips and advice on operation.



The product is only intended to be installed and used in dry, indoor rooms; it must not get damp or wet.



Observe the operating instructions!

### Delivery content

- RS2W radio-controlled switch
- Operating instructions

### Intended use

The radio-controlled switch can be used to remotely switch a connected load on and off using a suitable radio transmitter of the RS2W system.

The radio-controlled switch may only be used on mains voltage (230 V/AC, 50 Hz). A maximum load of max. 2000 W/8.7 A (resistive load) or max. 600 W/2.6 A (inductive load) can be connected.

It is intended for indoor use only. Do not use it outdoors. Contact with moisture, e.g. in bathrooms, must be avoided under all circumstances.

For safety and approval purposes, you must not rebuild and/or modify this product. If you use the product for purposes other than those described above, the product may be damaged. In addition, improper use can cause hazards such as short circuiting, fire, electric shock etc. Read the instructions carefully and keep them. Make this product available to third parties only together with its operating instructions.

This product complies with the statutory national and European requirements. All company names and product names are trademarks of their respective owners. All rights reserved.

### Safety instructions



**Read the operating instructions carefully and especially observe the safety information. If you do not follow the safety instructions and information on proper handling in this manual, we assume no liability for any resulting personal injury or damage to property. Such cases will invalidate the warranty/guarantee.**



- The device is not a toy. Keep it out of the reach of children and pets.
- Do not leave packaging material lying around carelessly. This may become dangerous playing material for children.

- Protect the product from extreme temperatures, direct sunlight, strong jolts, high humidity, moisture, flammable gases, vapours and solvents.
- Do not place the product under any mechanical stress.
- If it is no longer possible to operate the product safely, take it out of operation and protect it from any accidental use. Safe operation can no longer be guaranteed if the product:
  - is visibly damaged,
  - is no longer working properly,
  - has been stored for extended periods in poor ambient conditions or
  - has been subjected to any serious transport-related stresses.
- Please handle the product carefully. Jolts, impacts or a fall even from a low height can damage the product.
- Also observe the safety and operating instructions of any other devices which are connected to the product.
- This product may only be installed by a qualified technician (e.g., an electrician) who is familiar with the relevant regulations (e.g., VDE)!
- Improper work carried out on the mains voltage endangers not only your own life, but also the life of others!
- If you do not have the expertise required for the installation, do not install it yourself but ask a qualified technician.
- Only use the product when it is securely installed and steady. Use the product e.g. in a suitable flush-mounting or surface mounting or other suitable housing, so that the required protection against contact is ensured.
- Keep the product away from strong magnetic fields occurring near machines, electric motors or loudspeakers.

- Do not use this product in hospitals or medical institutions. Although transmitters of the RS2W system only emit relatively weak radio signals, these may lead to the malfunctioning of life-support systems. The same may also apply to other areas.
- This product should never be touched or operated with wet hands. There is a risk of a life-threatening electric shock!
- Only carry out the installation when all the mains cables to the wireless switch are disconnected from the mains voltage. Otherwise, there is a risk of a life-threatening electric shock!
- An all-pole disconnection from the mains voltage (such as a surge protector) must be provided as part of the wiring set-up.
- Never connect the product to the power supply immediately after it has been transferred from a cold room into a warm one (e.g., during transport). The condensation that forms might destroy the device. Moreover, there is danger of electric shock!
 

Allow the device to reach room temperature before switching it on. Wait until the condensation has evaporated. This might take several hours. Only after this should it be plugged in to the mains supply and put into use.
- Never overload the product. Observe the maximum connected load in the chapter "Technical Data".
- Do not use the product if it is damaged. There is a risk of a life-threatening electric shock! In this case, dispose of the product in an environmentally correct manner.
- If it can be assumed that safe operation is no longer possible, the device must be turned off and precautions must be taken to ensure that it is not used unintentionally. Do not touch the wireless switch or any device connected to it.

Disconnect the wireless switch from the mains by switching off at the appropriate circuit breaker or by pulling out the fuse. Furthermore, turn off the earth leakage circuit breaker to disconnect all the poles of the mains supply.

- Use the product only in a temperate climate, never in a tropical climate.
- Consult an expert when in doubt about operation, safety or connection of the device.
- Maintenance, modifications and repairs are to be performed exclusively by an expert or at a qualified shop.
- If you have questions which remain unanswered by these operating instructions, contact our technical support service or other technical personnel.

### Preparations for installation



Please observe the chapter "Safety instructions"!

- To use, install the radio-controlled switch in a suitable flush or wall mounted box or other suitable housing.
- Install the wireless switch only, if the switch is disconnected from the mains. First switch off all poles of the mains supply by switching off at the circuit breaker or removing the fuse and then also switch off the associated residual current device.
 

Secure it against unauthorised reconnection, e.g., with a danger sign. Then check the power supply for absence of voltage using a suitable measuring instrument.

## Connection and installation



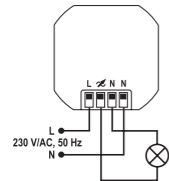
Observe the chapter "Preparations for installation".

The wireless switch is ideally suitable for switching a consumer load on/off wirelessly. The wireless switch is designed to ideally fit a flush- or surface-mounted box.



Therefore, ensure an appropriate protection against accidental contact when connecting, installing and subsequently using the wireless switch. Otherwise, there is a risk of a life-threatening electric shock!

- Connect the consumer load to the two middle screw terminals. The connection "N" is the neutral wire, the connection "L" is the connected output of phase/L.
- The outer two screw terminals are used for connecting to the mains voltage ("N" = Neutral wire, "L" = Phase).
- Install the wireless switch in the flush/ wall-mounted box or the housing you are using such that the little control button and the LED point to the front/outside towards you.



The openings of the side grounding clips match the screw fastenings of a surface-/flush-mounted box (hole spacing 60 mm).

→ The control button is required to program/teach the radio transmitter of the RS2W radio system.

When mounting make sure there is enough free space around the control button, so it will not be switched on by accident.

- Now, switch on the mains voltage.

## Function test: switching the connected load on/off using the push button

Briefly press the push button on the radio-controlled switch to switch the connected consumer on or off.

An LED next to the push button indicates the current switch state:

- LED on: Load switched on
- LED off: Load is switched off

## Programming the radio-controlled switch to a radio transmitter

→ The radio-controlled switch can be taught-in to any radio transmitter of the RS2W radio system.

Follow the operating instructions of the radio transmitter that will be used prior to the teaching procedure.

During the teach-in process maintain a 20 - 30 cm minimum distance between the wireless switch and the radio transmitter. Failing to do this may result in a registration failure.

- If the wireless switch is on (LED next to the control button is on, device is activated), switch off the wireless switch first.

Briefly press the control button, the LED next to the control button must go dark.

→ The wireless switch must be switched off (LED next to the control button is off), or else the registration process cannot be conducted.

- Start with the registration process on the radio transmitter.

Example: Both buttons "ON" and "OFF" of the desired switch channel at the 12-channel hand-held transmitter of the RS2W system must be pressed simultaneously until the red LED of the hand-held transmitter starts flashing. Release both buttons, the red LED continues to flash, the programming mode is activated.

- Press the button at the radio-controlled switch pressed until the programming process at the transmitter is complete.

Example: The LED at the 12-channel hand-held transmitter of the RS2W system lights up blue and then goes dark. Release the button at the radio-controlled switch.

- The radio-controlled switch switches on to indicate the end of the programming process.

→ Up to 5 receivers can be programmed to one switch channel of a transmitter of the RS2W system. That means you can switch on or off up to 5 radio-controlled switches simultaneously with the push of a button.

It is also possible to register the wireless switch on several radio transmitter.

However, the dimmer available for the RS2W system must not be programmed together with a radio-controlled switch to a single switch channel! Always programme it to a separate channel of the radio transmitter.



## Deleting a programmed radio-controlled switch from a transmitter

The procedure is exactly the same as for programming the radio-controlled switch to the transmitter. You can find further information in the operating instructions of the used radio transmitter of the RS2W system.

## Switching the load on/off

The radio-controlled switch and the connected load can only be switched on or off remotely, if they are programmed to a transmitter of the RS2W radio system.

Observe the operating instructions of the used transmitter.

## Range

The range of the radio signals between a transmitter of the RS2W system and the radio-controlled switch is up to 150 m under optimum conditions.

→ This value, however, is the so-called "open space range" (the range when transmitter and receiver are in line of sight, without interference).

In practice, however, there may be walls, room ceilings, etc. between the transmitter and the receiver which reduce the range accordingly.

Due to the different influences on the radio transmission, no specific range can be guaranteed. However, trouble-free operation is usually possible in a single family house.

## Sometimes the range can be considerably reduced due to:

- Walls, reinforced concrete ceilings, light-weight walls with metal post and beam construction
- Coated/metallised insulated glass
- Proximity to metallic & conductive objects (e.g. heating elements)
- Proximity to human bodies
- Other devices on the same frequency (e.g. wireless headphones, wireless speakers)

- Proximity to electric motors / appliances, transformers, power supplies, computers

## Care and cleaning

The product does not require any maintenance and should never be opened or disassembled for any reason. Repair or maintenance work must be carried out by a specialist.

## Declaration of Conformity (DOC)

Conrad Electronic SE, Klaus-Conrad-Straße 1, D-92240 Hirschau hereby declares that this product conforms to the 2014/53/EU directive.

→ Click on the following link to read the full text of the EU declaration of conformity: [www.conrad.com/downloads](http://www.conrad.com/downloads)

Select a language by clicking on a flag symbol and enter the product order number in the search box. You can then download the EU declaration of conformity in PDF format.

## Disposal



Electronic devices are recyclable waste and must not be disposed of in the household waste. At the end of its service life, dispose of the product according to the relevant statutory regulations.

You thus fulfil your statutory obligations and contribute to the protection of the environment.

## Technical data

Operating voltage ..... 230 V/AC, 50 Hz

Power consumption ..... approx. 0.4 W (off) or 1 W (on)

Power rating ..... resistive load: max. 2000 W (max. 8.7 A)  
inductive load: max. 600 W (max. 2.6 A)



Devices with mainly resistive load are e.g., light bulbs, heaters, etc.

Devices with inductive load are, e.g., engines, control gears, conventional transformers, energy saving bulbs, etc.

Transmission/  
receiving frequency ..... 868.000 - 868.600 MHz

Transmission/  
receiving range ..... max. 150 m (in open area)

Transmission power ..... <14 dBm

Hole spacing for installation... 60 mm

Ambient conditions ..... 0 to +45 °C,  
0 - 90 % RH (non-condensing)

Dimensions (W x H x D) ..... 52 x 53 x 33 mm  
(without the mounting brackets)

Weight ..... approx. 45 g

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