

## Radio-controlled Dimmer

Article no. 1 0238 300

Remote control



IP65



Receiver module

### Technical data

#### Receiver module:

Voltage supply	230 V, 50 Hz
Power consumption	Max. 1.5 W
Dimensions	54 x 94 x 34 mm (L x W x H)
Degree of protection	IP65 (except for cable ends)
Protection class	II (protective insulation)

#### Remote control:

Transmission range	Approx. 20–50 m (dep. on ambient influences)
Transm. frequency and type	868.3 MHz, AM

## 1. Safety notes

Installation and mounting of electrical devices must be carried out by qualified electricians only. The applicable accident prevention regulations must be observed.

Always switch off the power supply prior to working on the device!

The devices must only be operated with a supply voltage within the specified operating voltage range. Using other voltage levels will damage the controller.

## 2. Suitable devices to be controlled

In general, the radio receiver module can be used to control all devices equipped with a **0–10 V control input** that require a control current below 10 mA.

**Devices with a 1–10 V control input are only suitable to a limited extent.** These devices have a built-in power source, which can distort the control signal. Although general control may still be possible, the entire dimming range may not be available.

## 3. Scope of delivery

- Fully potted receiver module with mains cable and two wires for the output voltage
- Radio remote control including battery
- Operating instructions

## 4. Device description

The radio receiver module is fully potted in a plastic housing. The plastic housing is provided with two angle brackets with fixing holes. An integrated LED indicates the reception of a radio packet. The remote control has four buttons and a function indicator, which lights up in blue when a button is pressed. The lid below the buttons can be slid open to access the 10 selector switches and the battery.

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### 5. Inserting and replacing the battery

The remote control uses a cylindrical 12 V battery. The following types can be used:

V 23 GA / MN 21 / R 23 A / L 1325 / K 23A / LRV 08 / P 23 GA

To replace the battery, remove the battery compartment lid by carefully pushing it down and sliding it off. Then remove the old battery and insert a new one.

**Observe the correct polarity indicated on the bottom of the housing.**

### 6. Setting the remote control address

The radio receiver is programmed to react only to remote controls with correctly set selector switches. The position of the 10 selector switches must be as follows:



**When the switches are positioned differently, the receiver will not be able to recognize the remote control.**

### 7. Installation

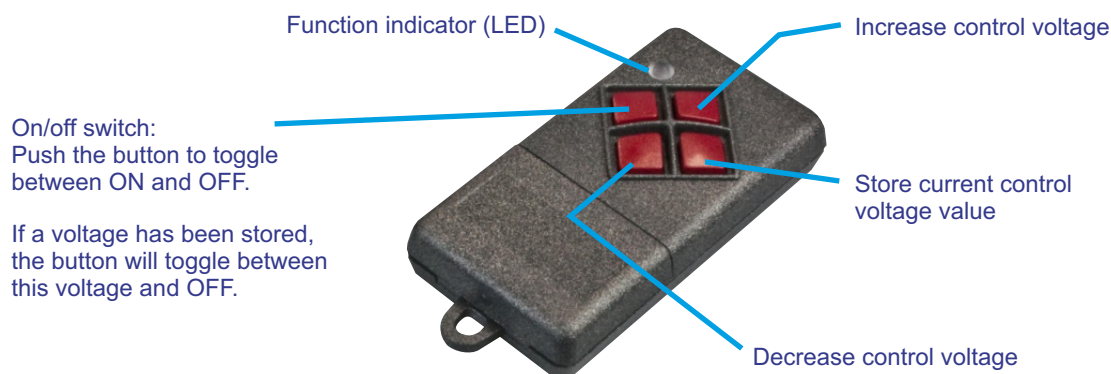
Prior to commissioning the system, the mains cable must be connected to a mains socket. Alternatively, the cable can be shortened and connected to a mains lead using suitable connectors.

Connect the output cables of the receiver module to the device to be controlled. Now the radio receiver is ready for operation.

To ensure adequate reception, place the receiver module at the intended mounting location and operate the remote control from the desired position. Check whether the LED on the receiver module lights up. If not, slightly change the position of the receiver until sufficient reception is ensured. Then fix the receiver module in this position with two screws.

### 8. Operation

When the supply voltage is switched on, the red LED on the receiver module will light up briefly. Now the control voltage at the receiver output can be adjusted using the buttons on the remote control:



An output voltage value can be stored and retrieved. This value will automatically be retrieved when the mains voltage is switched on.

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### 9. Changing the remote control address (possible from software version 0.05)

Data transmission between the remote control and controller is by radio. The radio signals have a certain range, which may vary depending on ambient influences. If there are multiple receivers within this range, they will all react to the radio signals, i.e. separate control of individual receivers is not possible. On the other hand, the modules may miss control signals due to ambient influences. Hence, if common control is desired, only one radio receiver module should be used with the 0–10 V control line connected to the systems to be controlled.

To be able to control multiple radio receiver modules separately, the pre-set address on the remote control can be changed. Each radio receiver module only reacts to one defined remote control address.

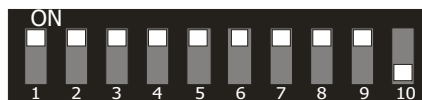
Factory default address:



**The remote control address can only be reprogrammed when there are at least two remote controls available.**

Proceed as follows to define a new remote control address:

1. Disconnect the radio receiver module from the supply voltage.
2. Set the following address on the first remote control:



3. Set the second remote control to the desired address.
4. Connect the radio receiver module to the supply voltage.  
The following steps must be carried out within 10 seconds after connecting the supply voltage:
5. Successively press the top, bottom, left and right button on the first remote control. The LED on the receiver will light up briefly to confirm each pressing of a button. Pushing the wrong button will abort the programming sequence, so that you will have to start all over again.  
After pressing all four buttons, the programming mode is active. This is indicated by a flashing LED on the receiver.
6. Take the second remote control and keep any button pressed for at least 3 seconds. The LED on the receiver will light up briefly and then switch off. The new address is now programmed.

### 10. Troubleshooting

Problem	Possible cause	Remedy
The function indicator on the remote control does not light up when pushing the buttons	- Remote control battery is empty	→ Replace battery
	- Battery was inserted incorrectly	→ Insert battery correctly
The receiver does not react when pushing the buttons although the function indicator on the remote control lights up	- Position of the remote control selector switches is incorrect (see 6.)	→ Adjust the switch positions (see section 6.)
	- Distance between remote control and receiver is too large	→ Reduce distance between remote control and receiver