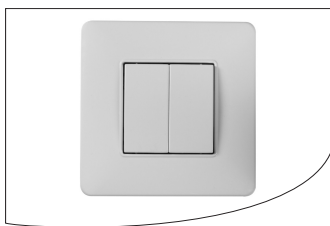


Operating and installation instructions



DuoFern Wall Controller

Item no.: 3216 02 21 / 3216 02 11



VBD 563-2 (10.12)

1. General safety instructions



The use of defective equipment can lead to personal injury and damage to property.

Never use defective or damaged equipment. Please contact our Customer Service department in this event.

2. Correct usage

Correct usage

Only use the DuoFern wall controller 3216 02 21 / 3216 02 11 for the remote control of:

- ◆ Shutters / Blinds
- ◆ Electrical consumers (for instance lighting)

Operating conditions

- ◆ Only use the DuoFern wall controller in dry rooms.
- ◆ The installation and operation of the DuoFern radio system and its components (e. g. DuoFern tubular motor actuator) is only permitted for systems and devices where a malfunction in the transmitter or receiver would not cause a danger to personnel or property or where this risk is already covered by other safety equipment.

3. Incorrect use

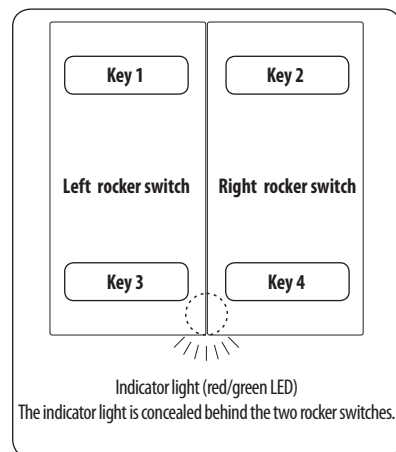
Never use the DuoFern radio system and its components for the remote control of appliances and systems with increased safety-relevant requirements or where there is an accident risk. This would require additional safety equipment. Observe the respective statutory regulations for the installation of such systems.

IMPORTANT

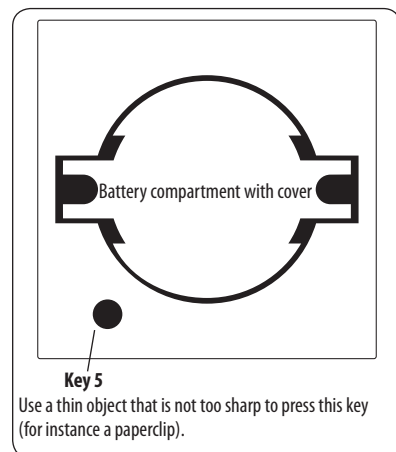
Do not install the DuoFern wall controller outside.

4. General view

Front of the keypad



Rear of the keypad



4.1 Functional description

Use the DuoFern wall controller to manually operate diverse DuoFern actuators remotely. To do so, connect the DuoFern wall controller to the required DuoFern network.

Use the two rocker switches to send manual control commands to the connected DuoFern actuators.

A bi-coloured indicator light shows whether the DuoFern actuators connected to the wall controller have received and confirmed the control commands. The indicator light is concealed behind the two rocker switches.

4.2. Two operating modes

1. Tubular motor mode

The following control commands are sent in Tubular motor mode: **UP/STOP/DOWN**



NOTE

Every DuoFern actuator reacts to these commands. Please additionally read the operating instructions for the DuoFern actuator.

2. Lighting/Devices mode

The following control commands are sent per rocker switch: **ON/OFF**

NOTE

- ◆ The DuoFern actuator is in Tubular motor mode when it leaves the factory.
- ◆ The individual channels of an actuator can be distributed to the two rocker switches in Lighting/Devices mode.
- ◆ Only the DuoFern actuators that support On/Off switching commands react to the Light/Devices mode (e. g. the DuoFern universal actuator or the DuoFern socket actuator.)

4.3 Assignment of control commands to the keys

Key	Tubular motor mode	Lighting/Devices mode
1	OPEN (▲)	ON (channel 1)
2	STOP	ON (channel 2)
3	DOWN (▼)	OFF (channel 1)
4	STOP	OFF (channel 2)
1 + 2 (5 sec)	Enable wall controller login mode	
1 + 4 (5 sec)	Switch over between Tubular motor mode and Lighting/Devices mode	
1 + 5 (5 sec)	Change direction of rotation	Switch over between lighting and devices function (channel 1)
2 + 3 (5 sec)	Clear up	
2 + 5 (5 sec)	---	Switch over between lighting and devices function (channel 2)
3 + 4 (5 sec)	Enable wall controller log off mode.	
5 (10 sec)	Reset	

4.4 Overview of models with number of controllable groups and DuoFern end devices

Item no.	Number of groups	Max. number of end devices
3216 02 21	1	32
3216 02 11		

5. Installation procedure

1. Perform all of the settings required with the keypad.

2. Select a suitable installation site.

The installation site should preferably be flat and free of dust.

3. Pull one of the two protective films from the double-sided adhesive strip and press the mounting frame onto the adhesive strip.

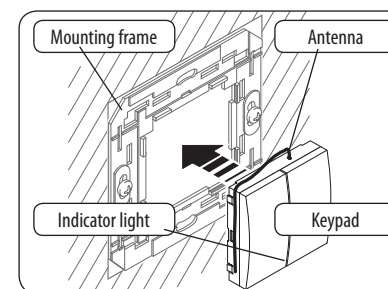
The mounting frame can also be screwed in place with two screws if need be.

4. Pull the second protective film from the double-sided adhesive strip and press it firmly onto the base surface.

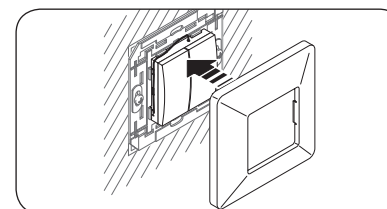
5. Press the keypad into the mounting frame until it clicks into place.

NOTE

- ◆ Fit the antenna, as shown in the Figure, to ensure the best possible reception.
- ◆ Avoid bending the antenna too far as it could otherwise break off.



6. Finally press the cover frame over the keypad. Take care that the antenna does not become caught and damaged. The DuoFern wall controller is now ready for operation.



6. Dismantling

1. Dismantle the wall controller in reverse order.

7. Login of DuoFern end devices

You must assign the wall controller to **every required** DuoFern actuator so that the DuoFern wall controller can control a DuoFern actuator.

You can login a maximum of 32 DuoFern actuators to the wall controller, for instance RolloTron Standard or Comfort DuoFern; DuoFern actuators (Tubular motor actuator or universal actuator) etc.

1. Switch the DuoFern actuator to Login mode (please refer to the corresponding operating instructions).

2. Switch the wall controller to Login mode.

- To do so, press keys 1 and 2 simultaneously and hold down for approx. 5 seconds.

3.a The wall controller is in Tubular motor mode (factory setting)

No further configuration is needed - all of the channels of an actuator are operated at the same time.

3.b The wall controller is in Lighting/Devices mode.

Every channel of the actuator must be assigned to a rocker switch. The indicator light will continue to show orange until all of the channels of an actuator are assigned.

Proceed as follows:

- Key 1 to operate the channel with the left rocker switch.
- Key 2 to operate the channel with the right rocker switch.
- Press key 3 or 4 in order not to operate the channel.

NOTE

Refer to the table in chapter 4.3. for the changeover between Tubular motor mode and Lighting/Devices mode.

3.c Pay attention to the indicator light:

- Green: Login was successful.
- Red: Login failed.

4. Login the next DuoFern actuator.

8. Log DuoFern actuators off


1. **Switch the desired DuoFern actuator to Log off mode.**
2. **Switch the wall controller to Log off mode: To do so, press keys 3 and 4 simultaneously and hold down for approx. 5 seconds.**
3. **Pay attention to the indicator light:**
Green: Log off was successful.
Red: Log off failed.

9. Reversal of direction of rotation

This function reverses the direction of rotation of tubular motors or switches the function of switching actuators.

NOTE

◆ The direction of rotation/reversal of function is only available if precisely one actuator is logged in on the key. With multichannel actuators, all of the channels logged in on the key are switched over.

◆  Not every actuator supports this functions, so please read in the relevant operating instructions for the actuator whether this function is available.

9.1 Reversing the direction of rotation (key 1)

1. **Press keys 1 and 5 simultaneously and hold down for approx. 5 seconds**
2. **The direction of rotation and function is changed on the actuator operated by key 1.**
3. **Pay attention to the indicator light:**
Green: The reversal of the direction of rotation was successful.
Red: The reversal of the direction of rotation failed.

9.2 Reversing the direction of rotation (key 2)

NOTE

This function is only available in Lighting/Devices mode

1. **Press keys 2 and 5 simultaneously and hold down for approx. 5 seconds.**
2. **The direction of rotation and function is changed on the actuator operated by key 2.**
3. **Pay attention to the indicator light:**
Green: The reversal of the direction of rotation was successful.
Red: The reversal of the direction of rotation was unsuccessful.

10. "Clear up" function

This function logs off all of the registered DuoFern actuators that are no longer reacting. This could be necessary with a faulty unit, for instance, that can no longer be logged off, as described previously in chapter 8.

NOTE

- ◆ All battery-operated DuoFern units are not/cannot be logged off in this way.
- ◆ Perform the „Reset (delete settings)“ function (cf. chapter 12) to log off all DuoFern actuators from the DuoFern wall controller.

10.1 Activate „Clear up“ function

1. **Ensure that you are in the radio range of all DuoFern actuators.**
2. **Press keys 2 and 3 simultaneously and hold down for approx. 5 seconds.**
3. **The DuoFern wall controller now transmits a control signal to all DuoFern actuators logged in.** The units that do not confirm the signal are automatically deleted.
4. **Pay attention to the indicator light:**
Green: Clear up was successful.
Red: Clear up was unsuccessful.

11. Manual operation

11.1 In Tubular motor mode

1. **Press key 1 (▲).**
Open the roller shutter or „switch on or off“ * the electrical consumer.
2. **Press „STOP“ keys 2 or 4**
Stop the roller shutter or switch off the electrical consumer.
3. **Press key 3 (▼).**
Close the roller shutter or „switch off or on“ * the electrical consumer.
4. **Pay attention to the indicator light:**
Green: The switching command has been performed successfully.
Red: The switching command has not yet ended or an error has occurred.

* depending on the function

11.2 In Lighting/Devices mode

Left rocker switch:

1. **Press key 1 „ON“ and switch on the electrical consumer.**
2. **Press key 3 „OFF“ and switch off the electrical consumer.**

Right rocker switch:

1. **Press key 2 „ON“ and switch on the electrical consumer.**
2. **Press key 4 „OFF“ and switch off the electrical consumer.**
3. **Pay attention to the indicator light:**

Green: The switching command has been performed successfully.

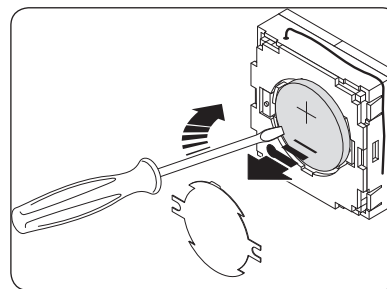
Red: The switching command has not yet ended or an error has occurred.

12. Deleting all settings (Reset)

1. **Press key 5 for approx. 10 seconds (with a paperclip, for instance).**
2. **All of the settings are deleted and the logged in DuoFern actuators are automatically logged off.**
Pay attention to the indicator light:
Red: Deletion of the settings was successful.
3. **Subsequently, the DuoFern wall controller will be reset to its delivery setting or to Tubular motor mode.**

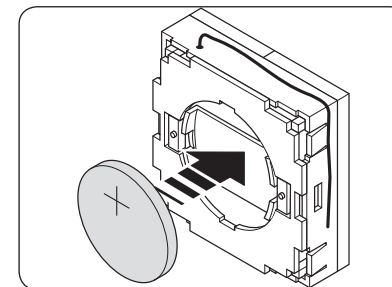
13. Battery replacement

1. **Pull the cover frame carefully from the keypad and then remove the keypad from the mounting frame.**
2. **Carefully remove the battery cover with a small screwdriver.**



13. Battery replacement

3. **Remove the battery from its compartment and replace it with a new battery of the same type. IMPORTANT**
When inserting the battery, pay attention to the correct polarity. The plus pole (+) of the battery must lie at the outside.



NOTE

Empty batteries are special waste and should not be disposed of with household waste.

14. Technical data

Supply voltage:	3 V DC
Battery type:	3 V / CR 2430
Battery life:	
- with normal use (depending on switching frequency)	up to 2 years
- in Standby:	with 5 actuations per day approx. 5 years
Transmitting power:	10 mW
Range:	
- in a building (depending on construction):	approx. 30 m
- outside:	approx. 100 m
Transmission frequency:	434.5 MHz
Max. number:	
- Groups:	1
- DuoFern end units:	32
Permissible ambient temperature:	+ 5 °C to + 40 °C
Dimensions:	
- Keypad (L x W x H):	40 x 40 x 18 (mm)
Weight:	70 g

15. CE Mark and EC Conformity

The present product complies with the requirements of the current European and national directives.



Conformity has been verified. The corresponding declarations and documentation are available on file at the manufacturer's premises.

16. Warranty conditions

RADEMACHER Geräte-Elektronik GmbH provides a 24-month warranty for new systems that have been installed in compliance with the installation instructions. All construction faults, material defects and manufacturing defects are covered by the warranty.

The following are not covered by the warranty:

- ◆ Incorrect fitting or installation
- ◆ Non-observance of the installation and operating instructions
- ◆ Improper operation or wear and tear
- ◆ External influences, such as impacts, knocks or weathering
- ◆ Repairs and modifications by third party, unauthorised persons
- ◆ Use of unsuitable accessories
- ◆ Damage caused by unacceptable excess voltage (e.g. stroke of lightning)
- ◆ Operational malfunctions caused by radio frequency overlapping and other such radio interference

RADEMACHER shall remedy any defects, which occur within the warranty period free of charge either by repair or by replacement of the affected parts or by supply of a new replacement unit or one to the same value. There is no general extension of the original warranty period by delivery of a replacement or by repair as per the terms of the warranty

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* 14 cents/minute from a German fixed line network operated by DT AG / Mobile charges max. 42 cents/minute (applies to Germany only)