

**EN DuoFern Manual Transmitter Standard - Instruction manual**

Item no.: 3248 03 61 (1-channel) / 3232 03 64 (4-channel) / 3248 03 66 (6-channel)

---



|  |    |  |    |
|--|----|--|----|
| This manual... ..  | 3  | Manual operation of actuators with several channels .....                  | 22 |
| Hazard symbols.....  | 3  | Controlling blinds and dimmers in jog mode .....                           | 23 |
| Symbols and depictions used .....  | 4  | Switching jog mode on and off .....  | 23 |
| Safety instructions .....  | 5  | Switching the automatic function on/off<br>(for item no. 3232 03 64) ..... | 24 |
| Intended use .....   | 6  | Deleting all settings (reset).....   | 26 |
| General view / operating buttons.....  | 7  | Technical specifications .....   | 27 |
| Rear side of device .....  | 8  | Battery replacement .....  | 28 |
| Brief description of the DuoFern Manual Transmitter<br>Standard .....        | 9  | Simplified EU declaration of conformity .....                              | 30 |
| Initial commissioning.....   | 11 |  |    |
| Logging on DuoFern end units<br>(for item no. 3232 03 64 / 3248 03 66) ..... | 12 |  |    |
| Logging on DuoFern end units<br>(for item no. 3248 03 61) .....              | 14 |  |    |
| Logging off DuoFern end units .....  | 16 |  |    |
| Activating the "Purge" function .....  | 17 |  |    |
| End point setting.....   | 18 |  |    |
| Reversal of rotation direction .....   | 20 |  |    |

describes how to use the DuoFern Manual Transmitter Standard.

- ◆ Please read this manual through completely and follow all the safety instructions.
- ◆ This manual is part of the product. Please store it in an easily accessible place.
- ◆ When passing the DuoFern Manual Transmitter Standard on to a third party, this manual must be passed on as well.
- ◆ Damage resulting from non-compliance with this manual and the safety instructions will void the warranty. We assume no liability for any consequential damage.



## **Hazard symbols**

---



The following hazard symbols are used in this manual:

---



### **Danger area / dangerous situation**

---

| Depiction   | Description                       |
|---|-----------------------------------|
| 1.<br>2.  | Procedures                        |
| ◆   | Itemisation                       |
| 1) or a)  | List                              |
|  | Useful information                |
|  | Please read the respective manual |

**Incorrect use leads to an increased risk of injury.**

- ◆ Never use defective or damaged devices.
- ◆ Check the DuoFern Manual Transmitter Standard is intact. Consult our service department in the event that you discover damage.
- ◆ Children must not play with the DuoFern Manual Transmitter Standard.
- ◆ Never use the DuoFern Radio System and its components for the remote control of devices and systems with safety-relevant requirements or where there is an increased accident risk. Applications of this kind require additional safety equipment.

Only use the DuoFern Manual Transmitter Standard for the remote control of roller shutters and electrical appliances (e.g. lighting).

**Operating conditions**

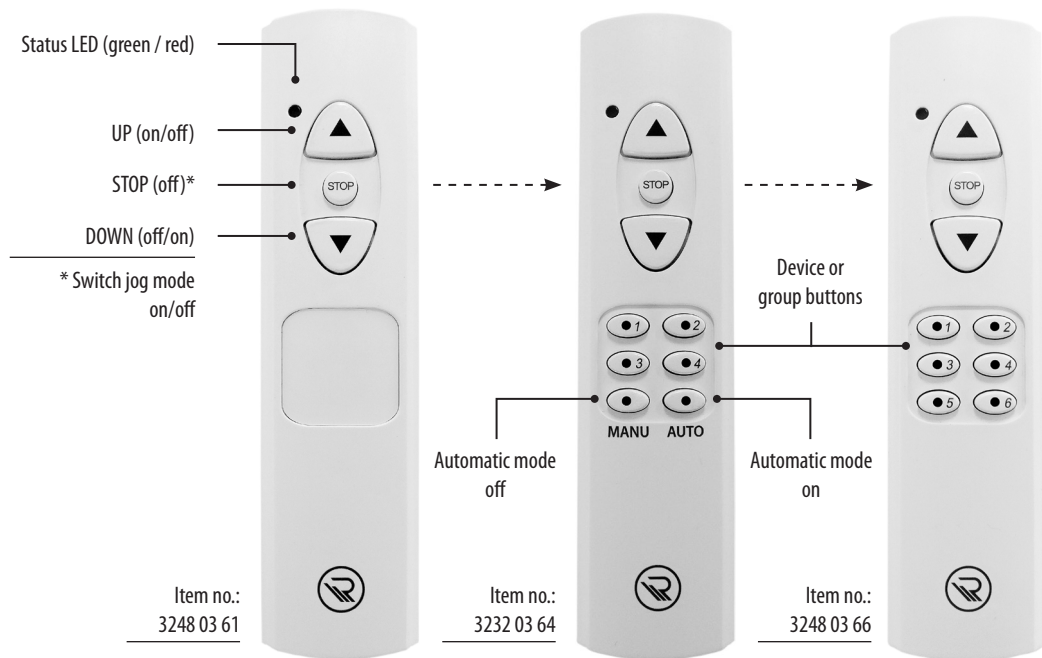
Only use the DuoFern Manual Transmitter Standard in dry rooms.



Radio systems that transmit on the same frequency can cause interference.

**Dangers in the case of improper use**

Using the DuoFern Manual Transmitter Standard for any other purpose than previously mentioned is not permissible.



Item no.:

3248 03 61 / 3232 03 64 / 3248 03 66

Type plate (example)  
for item no. 3248 03 66

Space for notes

Fixing screw

Connect  
buttonDisconnect  
button

Log-on mode

1 x



Reversal of rotation direction

2 x



Purge function

Hold for 5 s



1 x

Log-off mode



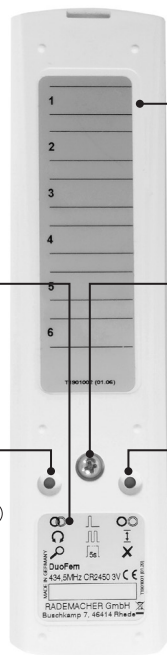
2 x

End point setting



Hold for 5 s

Reset





The DuoFern radio system enables, bidirectional data exchange between the various participants of a radio network. All control commands from a DuoFern transmitter are confirmed by the DuoFern receivers.

You can use the DuoFern Manual Transmitter Standard to manually operate different DuoFern devices remotely (e.g. RolloTron Comfort/Standard DuoFern or DuoFern actuators for lighting).

### **Command buttons (UP / STOP / DOWN)**

You can use the three command buttons, UP (on/off)/STOP (off)/DOWN (off/on), to send the manual control commands to the logged-on DuoFern end units, see page 22.

### **Command buttons (AUTO / MANU) (only for item no. 3232 03 64)**

The AUTO and MANU command buttons can be used to switch the automatic function of the logged-on DuoFern end units off (MANU) or on (AUTO), see page 24 / 25.

### **Device or group buttons (only for item no. 3232 03 64 / 3248 03 66)**

DuoFern manual transmitters 3232 03 64 and 3248 03 66 have 4 or 6 device or group buttons, which you can allocate to any DuoFern end unit (see page 27). In this way, single and group control of different devices is possible (see page 13).

**Connect button**

You can perform the following functions with the "Connect" button:

- ◆ Log-on mode                      Log DuoFern end units on to the manual transmitter.
- ◆ Reversal of rotation direction      Change the rotation direction of the tubular motor or switch between the device and lighting function.
- ◆ Purge                              Delete the connection between the manual transmitter and actuators that are no longer available.

**Disconnect button**

You can perform the following functions with the "Disconnect" button:

- ◆ Log-off mode                      Log DuoFern end units off from the manual transmitter.
- ◆ End point setting                  Set the end points of electronic RADEMACHER tubular motors.
- ◆ Reset                              Reset to the factory settings.

**Status LED**

The bi-coloured status LED (red/green) shows whether the DuoFern end units have received and confirmed the control signal.



The battery is factory-fitted in the battery compartment together with a separating film.

Pull the separating film out to the right with some force as shown. It is not necessary to loosen the screw on the back of the housing first.



## Logging on DuoFern end units (for item no. 3232 03 64 / 3248 03 66)

EN

In order to operate a DuoFern end unit with the DuoFern Manual Transmitter Standard, this must be logged on to the respective DuoFern end unit.

Use a thin object that is not too sharp to press the "Connect" button.

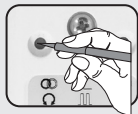
1.



**Switch the desired DuoFern end unit or DuoFern actuator to log-on mode.**

(See the corresponding operating manual)

2.

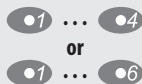


1 x

**Switch the DuoFern Manual Transmitter Standard to log-on mode.**

In order to do so, briefly press the "Connect" button.

3.



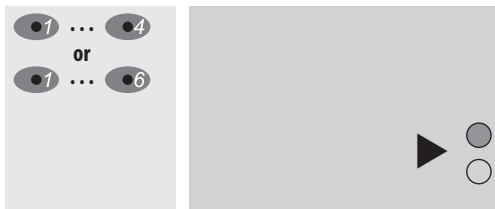
60 seconds

**The LEDs on all device or group buttons light up.**

- ◆ A fully allocated group button does not light up.
- ◆ Log-on mode remains active for 60 seconds.



4.



**Press the desired device button that you subsequently want to use to select the device.**

### **Observe the status LED**

Green: Log-on was successful.

Red: The button is already fully allocated.

5.

**1. ... 4.**

**Repeat points 1 to 4 in order to log on the next device or the next actuator.**

### **The following applies for devices with multiple channels:**

- ◆ If a device has multiple channels (e.g. DuoFern Universal Actuator), you must select a group button for each channel.
- ◆ For devices with multiple channels, the device automatically jumps to point 3 until all channels have been processed.
- ◆ You must press the stop button if you do not want to allocate a channel or want to skip a channel.

### **Logging on a device several times**

You can also log on a device several times, for example, to realise single and group control:

- ◆ RolloTron Standard DuoFern 1 on button 1
- ◆ RolloTron Standard DuoFern 2 on button 2
- ◆ RolloTron Standard DuoFern 3 on button 3
- ◆ RolloTron Standard DuoFern 1/2/3 on button 4

Observe the maximum possible number of devices per button (see page 27).



## Logging on DuoFern end units (for item no. 3248 03 61)

EN

No device or group buttons can be selected or pressed on the DuoFern Manual Transmitter Standard 3248 03 61. The logged-on actuators are automatically allocated to the only existing group.


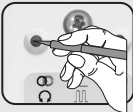





During the log-on process for DuoFern actuators with several channels, all channels in the group are always logged on to the DuoFern Manual Transmitter Standard 3248 03 61 (1 group).



## Logging on DuoFern end units (for item no. 3248 03 61)

EN

- |    |   |  |   |
|----|---|--|---|
| 1. |  |  | <b>Switch the desired DuoFern end unit or DuoFern actuator to log-on mode.</b><br>(See the corresponding operating manual)      |
| 2. |  | 1 x   | <b>Switch the DuoFern Manual Transmitter Standard to log-on mode.</b><br>In order to do so, briefly press the "Connect button". |
| 3. |   | <br> | <b>Observe the status LED</b><br>Green: Log-on was successful.<br>Red: The button is already fully allocated                    |
| 4. |   |  | <b>Points 1 and 2 must be repeated for every actuator.</b>  |



## Logging off DuoFern end units

EN

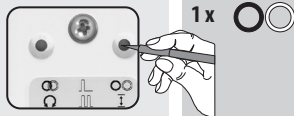
1.



**Switch the desired DuoFern end unit to log-off mode.**

(See the corresponding operating manual)

2.



**Switch the DuoFern Manual Transmitter Standard to log-off mode.**

In order to do so, briefly press the "Disconnect button".

3.



**When the log-off has been successfully completed, the status LED turns green.**

The DuoFern end unit has been logged off from all device or group buttons.



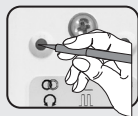


## Activating the “Purge” function

EN

This function logs off all of the logged-on DuoFern end units that no longer react. This could be necessary, for example, with a faulty device that can no longer be logged off as described above.

1.



1 x 

**Press and hold the “Connect button” for approx. 5 seconds until the status LED flashes red.**

The DuoFern Manual Transmitter Standard now sends a control signal to all logged-on DuoFern end units. The devices that do not confirm the signal are automatically deleted.

### **Observe the status LED**



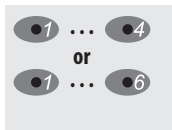
|               |                             |
|---------------|-----------------------------|
| Flashing red: | Purge mode is still active. |
| Green:        | The purge was successful.   |

You can use this function to subsequently set or correct the end points of Rademacher electronic tubular motors from the year 2000 onwards.

## Conditions for the end point setting:

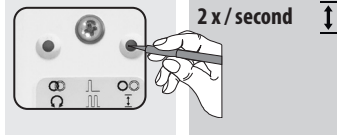
- ◆ The end point setting can only be performed if **only one device (actuator)** is logged on to the selected group. If more than one participant is logged on to the selected group, the function is blocked.
- ◆ The end point setting is possible for DuoFern radio tubular motors.
- ◆ The end point setting is possible for RADEMACHER electronic tubular motors from the year 2000 onwards that are controlled with a correctly installed DuoFern actuator.
- ◆ The end point setting is not possible for tubular motors connected in parallel.
- ◆ The function is automatically cancelled if no button is pressed for approx. 30 seconds.

1.



Select the desired DuoFern end unit.

2.










Activate the “End point setting” function.

In order to do so, press the “**Disconnect button**” twice in short succession within one second.



## End point setting

**EN**

|     |   |   |
|-----|---|---|
| 3.  |   | <b>The status LED flashes green (approx. 2 x per second) on successful activation.</b>  |
| 4.  |    | <b>Set the upper end point.</b><br>Keep the button pressed until the desired end point is reached.  |
| 4.1 |    | <b>Release the button as soon as the upper end point is reached.</b>  |
| 5.  |    | <b>Set the lower end point.</b>   |
| 5.1 |    | <b>Release the button as soon as the lower end point is reached.</b>  |
| 6.  |    | <b>Cancel the end point setting.</b><br>The manual transmitter returns to normal operating mode (regular flashing of the status LED is terminated). |



## Reversal of rotation direction

EN

You can use this function to subsequently set or correct the rotation direction of connected tubular motors.

### Alternative use of the reversal of rotation direction:

#### Switch between the lighting and device function

In the case of universal actuators for lighting or devices (e.g. DuoFern Universal Actuator or Socket Actuator), reversing the rotation direction switches between the lighting and device function.



The reversal of rotation direction or switching between the lighting and device function can only be performed if **only one device (actuator)** is logged on to the selected group. If more than one participant is logged on to the selected group, the function is blocked.

Not all devices support the reversal of rotation direction function or switching between the lighting and device function. You should therefore check in the operating manual of the respective device whether the function is available.

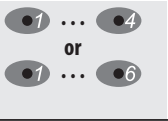
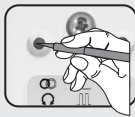


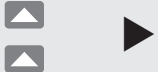
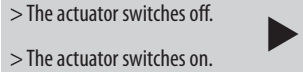
#### The following applies for the manual transmitter 3248 03 61:

If a multichannel actuator is logged on (e.g. DuoFern Universal Actuator), the reversal of rotation direction or the switching between the lighting and device function is always applied to both channels.



## Reversal of rotation direction

EN

|  |   |  |  |
|--|---|--|--|
| 1.   |  |  | Select the desired DuoFern end unit.   |
| 2.   |  | 2 x / second    | <b>Activate the "Reversal of rotation direction" function.</b><br>In order to do so, press the <b>"Connect button"</b> twice in short succession within one second.  |
| 3.   |   |  | <b>If successfully activated, the tubular motor connected to the actuator confirms this by starting up for a short time.</b><br><b>In the case of universal actuators, the lighting / device switches on or off briefly to confirm the activation.</b> |
|  |  |  <ul style="list-style-type: none"><li>&gt; The actuator switches off.</li><li>&gt; The actuator switches on.</li></ul> | <b>How to determine whether the lighting or device function is active:</b><br>The lighting function is activated.<br>The device function is activated.   |



## Manual operation of actuators with several channels

**EN**

During the log-on process for actuators with several channels, all channels in the group are always logged on to the DuoFern Manual Transmitter Standard 3248 03 61 (1 group). The operation of individual channels is therefore not possible with these manual transmitters.

|    |  |  |  |
|----|--|--|--|
| 1. |  |  | <b>Press the desired device or group button (where applicable).</b>  |
| 2. |  |  | <b>Open the roller shutter or switch the appliance on/off</b>  |
| 3. |  |  | <b>Stop the roller shutter or switch off the appliance</b>   |
| 4. |  |  | <b>Close the roller shutter or switch the appliance off/on</b>   |
|    |  |  | <b>Observe the status LED</b><br><div><div> Red      The control signal is sent.</div><div> Green      Confirmation is received.</div></div> |



## Controlling blinds and dimmers in jog mode

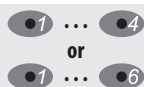
EN

- Function:**
- ◆ If the UP or DOWN button is pressed **briefly** in jog mode, a **jog command** is sent. This enables the easy adjustment of Venetian blind slats as the motor only runs briefly.
  - ◆ When used in combination with dimmers, jog mode increases or decreases the brightness by 10%.
  - ◆ If you **press and hold** the UP or DOWN button (> 1/2 second), the normal UP and DOWN signals are sent. Jog mode can be switched on and off separately for each group, where applicable.



## Switching jog mode on and off

1.

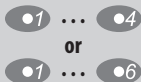


Select the desired group with the corresponding group button.

2.



Press and hold the STOP button for approx. 10 seconds.

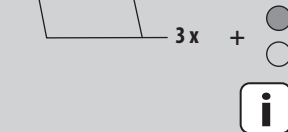


**Observe the button LED and status LED:**

The LED for the selected group button flashes three times and the status LED lights up:

Green (Jog mode has been switched on).

Red (Jog mode has been switched off).



Actuators that do not support jog mode ignore jog commands.



## Switching the automatic function on/off (for item no. 3232 03 64)

EN

You can also switch the automatic function of the logged-on DuoFern end units on or off with the DuoFern Manual Transmitter 4-channel Auto /Manual. If the automatic function is switched off in the DuoFern end units, only manual commands are executed. The end units no longer respond to, for example, automatic time and sun shading commands.

### **The automatic wind function also remains active when the automatic function is switched off.**

Wind commands are safety commands and DuoFern end units respond to wind commands even when automatic mode is switched off (provided that the automatic wind function of the end units is activated).





## Switching the automatic function on/off (for item no. 3232 03 64)

EN

1.



Select the desired group with the corresponding group button.

2.



AUTO

or



MANU

1 x (> 0.5 seconds)

Press the AUTO button for > 0.5 seconds to **switch on** the automatic function for all the devices in the active group.

or

1 x (> 0.5 seconds)

Press the MANU button for > 0.5 seconds to **switch off** the automatic function for all the devices in the active group.

### Pay attention to the LEDs

The LEDs on the group/device buttons and the Auto/Manu buttons light up green for a few seconds.



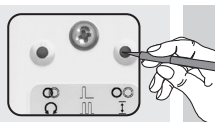
The status LED briefly lights up red and then green for a few seconds when confirmation is received.



## Deleting all settings (reset)

EN

1.



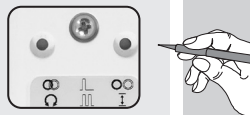
5 seconds



**Press and hold the "Disconnect button" for approx. 5 seconds until the status LED flashes red.**

The status LED flashes red.

2.



**Release the "Disconnect button" as soon as the status LED lights up red continuously.**

All settings in the DuoFern Manual Transmitter Standard are deleted.

|                                   |  |
|-----------------------------------|--|
| Transmission frequency:           | 434.5 MHz  |
| Transmission power:               | max. 10 mW   |
| Range:                            |  |
| - Outdoors:                       | approx. 100 m                                      |
| - Indoors:                        | approx. 30 m (depending on the building structure) |
| Supply voltage:                   | 3 V  |
| Battery type:                     | CR2450   |
| - Service life 1:                 | approx. 2 years with 5 actuations per day          |
| - Service life 2:                 | approx. 5 years, standby                           |
| Max. number of groups:            |  |
| - Item no. 3248 03 61:            | 1 (48 devices)                                     |
| - Item no. 3232 03 64:            | 4 (max. 8 devices per group)                       |
| - Item no. 3248 03 66:            | 6 (max. 8 devices per group)                       |
| Max. number of devices:           |  |
| - Item no. 3248 03 61/3248 03 66: | 48   |
| - Item no. 3232 03 64:            | 32   |
| Permissible ambient temperature:  | + 5 °C to + 40 °C                                  |
| Dimensions (L x W x H):           | 140 x 43 x 18 mm                                   |
| Weight:                           | 70 g   |

For devices containing one or more button/coin-cell batteries, the following safety instructions must be observed:



**If the coin-cell battery is swallowed, it can cause severe internal burns and death within just 2 hours.**

- ◆ Children must not replace batteries.
- ◆ Do not swallow the battery, risk of acid burns.
- ◆ Store the new and used batteries out of the reach of children. If the battery compartment does not close securely, stop using the product and keep it away from children. If you believe that batteries may have been swallowed or made their way into any part of the body, seek medical advice immediately.



#### **Risk of fire and explosion**

- ◆ There is a risk of fire or explosion if the battery is replaced with an incorrect type. In addition, replacing a battery with an incorrect type can override a safety device.
- ◆ Throwing a battery into a fire or hot oven or mechanically crushing or cutting a battery can lead to an explosion.



When the battery is almost empty, the status LED flashes red when you operate the DuoFern Manual Transmitter Standard.

- 1. The battery compartment is located on the back of the DuoFern Manual Transmitter Standard.**
- 2. Use a screwdriver to release the back of the housing and lift it up carefully.**
- 3. Slide the battery out sideways.**

When inserting the battery, pay attention to the correct polarity.  
**The plus connector (+) of the battery must be at the top.**



RADEMACHER Geräte-Elektronik GmbH hereby declares that the DuoFern Manual Transmitter Standard complies with the Directive **2014/53/EU (Radio Equipment Directive)**.

The full text of the declaration of conformity is available at the following website:

[www.rademacher.de/ce](http://www.rademacher.de/ce)

### Warranty terms and conditions

---

Information about the warranty conditions of our products can be found on our homepage.

### Disposal

---



This labelling indicates that this product must not be disposed of along with other household waste throughout the EU. To avoid potential damage to the environment or human health through uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your old device, please use the return and collection systems or contact the retailer where the product was purchased. They can recycle the product in an environmentally friendly manner.



**RADEMACHER**  
Geräte-Elektronik GmbH  
Buschkamp 7  
46414 Rhede (Germany)