Operating instructions

1 Safety instructions

Electrical devices may only be mounted and connected by electrically skilled persons.

Serious injuries, fire or property damage possible. Please read and follow manual fully.

Danger of electric shock. Always disconnect before carrying out work on the devise or load. In so doing, take all the circuit breakers into account, which support dangerous voltages to the device and or load.

These instructions are an integral part of the product, and must remain with the end customer.

2 Device components

Figure 1: Device components

(1) FM insert
(2) Frame
(3) Radio button
(4) Status LED

3 Function

Intended use
- Manual and radio-controlled operation of electrically-driven Venetian blinds, shutters and awnings
- Operation with suitable radio transmitters
- Mounting on venetian blind insert (accessories)

Product characteristics
- Positioning of the blind/shutter via scene request
- Position for sun protection and twilight
- Status feedback to radio transmitter
- Blind/shutter running time can be saved
- Status indicator via LED
Can be set with eNet server:
- Slat change-over time/fabric-stretching time
- Change-over-time for direction change
- Running direction invertible
- Operation locks
- Deactivating extension evaluation
- Position for sun protection, twilight, lock-out protection and wind alarm

If settings are changed with the eNet server, operation and signalling could vary from what is described here.

The parameter list is in the Internet in the documentation for this device.

Supplementary functions with eNet server:
- Update of the device software
- Reading of error memory

**Behaviour after mains voltage return**
The response after mains voltage return can be configured with the eNet server. Default setting: no action.

### 4 Operation

**Moving the Venetian blind**
- Press top or bottom button for longer than one second.
  The blind/shutter moves in the desired direction to the end position or stops when the button is pressed again.
  The status LED (4) lights up as long as the blind/shutter is activated.

**Adjusting the slats**
- Press top or bottom button for less than one second.
  A moving blind/shutter is stopped and a stationary blind/shutter is briefly activated.

### 5 Information for electrically skilled persons

#### 5.1 Fitting and electrical connection

**DANGER!**
Electrical shock when live parts are touched.
Electrical shocks can be fatal.

Before carrying out work on the device or load, disengage all the corresponding circuit breakers. Cover up live parts in the working environment.

**Connecting and fitting the device**
To ensure good transmission quality, keep a sufficient distance from any possible sources of interference, e.g. metallic surfaces, microwave ovens, hi-fi and TV systems, ballasts or transformers.

The flush-mounted insert is correctly fitted and connected (see instructions for flush-mounted insert).
- Fit radio button (3) and frame (2) on flush-mounted insert (1).
- Switch on mains voltage.
- Perform commissioning.
5.2 Commissioning

DANGER!
Electrical shock when live parts are touched.
Electrical shocks can be fatal.
During commissioning, cover the parts carrying voltage on radio transmitters and actuators and in their surrounding area.

The button can also be commissioned with eNet server as an alternative to the commissioning described here.

Prerequisite for scenes and positioning movements is that the moving times of the connected blind/shutter in the actuator are saved.

Saving blind/shutter running time

Optionally, the blind/shutter running time can be saved directly on the radio button or with a connected transmitter.

- Press top ▲ button for longer than one second and wait until the blind/shutter is in the upper end position and the status LED (4) switches off.
- Press bottom ▼ button for longer than one second.
The blind/shutter moves in the lower end position direction.
- Before the blind/shutter reaches the lower end position, press the button over entire surface and keep it pressed.
The blind/shutter remains stopped while the button is pressed, but continues to move after 4 seconds.
- As soon as the blind/shutter has reached the lower end position, release the button and within the next 4 seconds press it again over the entire surface for at least one second.
The running time is saved. The blind/shutter moves back to the upper end position.

The change-over-time of the slats for the venetian blind and time/fabric-stretching time for awnings can only be saved using the eNet server.

Connecting with radio transmitter

Load is switched off.

- Press button over entire surface for longer than 4 seconds.
The status LED flashes after 4 seconds. The button is in programming mode for approx. 1 minute.
- Switch radio transmitter to programming mode (see radio transmitter instructions).
- Trigger telegram on the radio transmitter.
The status LED lights up for 5 seconds.
The button is connected to the radio transmitter. The button and radio transmitter exit the programming mode automatically.

If the status LED of the button flashes 3 times at 1-second intervals for approx. 5 seconds, then the programming operation was not successful. All the memory locations in the actuator or radio transmitter are occupied.

Scene buttons must be connected separately.

Disconnecting connection to a radio transmitter

- Carry out the same steps as when connecting (see Connecting to radio transmitter).
The status LED flashes quickly for 5 seconds. The button is disconnected from the radio transmitter. The button and radio transmitter exit the programming mode automatically.

If there several connections or scene buttons for a radio transmitter, all connections must be disconnected individually.

Resetting button to the default setting

All connections to radio transmitters are disconnected and parameters are reset to default setting.
The connections in the radio transmitters are preserved and must be deleted separately.
Load is switched off.

- Press button over the entire surface for at least 20 seconds.
  The status LED flashes after 4 seconds. After 20 seconds the status LED flashes faster.
- Release button and press briefly once again within 10 seconds.
  The status LED flashes more slowly for approx. 5 seconds.
  The button is reset to default setting.

6 Appendix

6.1 Technical data
Ambient temperature
Minimum actuation time in operating mode
Venetian blind
Roller shutter
Moving time
Running time default setting
Radio frequency
Transmitting range in free field
Transmission capacity
Receiver category

6.2 Parameter list
The device parameters can be changed with the eNet server:

Settings window
Device settings

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Setting options, Basic setting</th>
<th>Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual commissioning</td>
<td>On, Off</td>
<td>Enables manual commissioning for all device channels. In the &quot;Off&quot; setting, the device cannot be reset to the factory setting.</td>
</tr>
<tr>
<td>Allow extension unit operation</td>
<td>On, Off</td>
<td>Prevents operation via wired extensions.</td>
</tr>
</tbody>
</table>

Settings, channel

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Setting options, Basic setting</th>
<th>Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual commissioning</td>
<td>On, Off</td>
<td>Blocks manual commissioning for the device channel. In the &quot;Off&quot; setting, the device cannot be reset to the factory setting.</td>
</tr>
<tr>
<td>Operating mode</td>
<td>Roller shutter</td>
<td>Venetian blind</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td></td>
<td>A rolling shutter or an awning is controlled for which the Fabric stretching function is required.</td>
<td>A Venetian blind is controlled.</td>
</tr>
</tbody>
</table>

| Local Operation | On, Off  | Basic setting: On | Blocks the output for operation using the button. |

<table>
<thead>
<tr>
<th>Behaviour on voltage return</th>
<th>No change</th>
<th>Configured value</th>
<th>Defines the behaviour of the output after voltage return.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic setting: No change</td>
<td>RMD design: Bus voltage return</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Configured venetian blind position</th>
<th>0 ... 100 %</th>
<th>Basic setting: 0 %</th>
<th>If the value &quot;Configured position&quot; is entered for the parameter &quot;Behaviour after voltage return&quot;, then the blind/shutter position set here is approached.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Configured slat position</th>
<th>0 ... 100 %</th>
<th>Basic setting: 0 %</th>
<th>If the value &quot;Configured position&quot; is entered for the parameter &quot;Behaviour after voltage return&quot;, then the slat position set here is approached.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Manual saving of the scene values</th>
<th>On, Off</th>
<th>Basic setting: On</th>
<th>Disables the saving of the current Venetian blind position as scene value in an actuator for a command via a transmitter.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Behaviour after the end of the disabling function</th>
<th>no change</th>
<th>Last value</th>
<th>Behaviour of the output when a block is removed.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Down up</td>
<td>Basic setting: No change</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Priority, lock-out protection</th>
<th>0...4</th>
<th>Basic setting: 1</th>
<th>Specifies the priority for recalling and removing a scene of type Lock-out protection for the channel.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Priority, restraint</th>
<th>0...4</th>
<th>Basic setting: 2</th>
<th>Specifies the priority for recalling and removing a scene of type Restraint for the channel.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Priority, wind alarm</th>
<th>0...4</th>
<th>Basic setting: 3</th>
<th>Specifies the priority for recalling and removing a scene of type Wind alarm for the channel.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Priority, sun protection</th>
<th>0...4</th>
<th>Basic setting: 0</th>
<th>Specifies the priority for recalling and removing a scene of type Sun protection for the channel.</th>
</tr>
</thead>
</table>
### Priority, twilight

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic setting</td>
<td>0...4</td>
<td>Specifies the priority for recalling and removing a scene of type Twilight for the channel.</td>
</tr>
</tbody>
</table>

### Slat change-over time

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic setting</td>
<td>0 ms ... 10 sec</td>
<td>Absolute time for changing-over Venetian blind slats. The fabric stretching time can also be set here for the Awning operating mode.</td>
</tr>
</tbody>
</table>

### Running time

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic setting</td>
<td>1 ... 600 sec</td>
<td>Absolute time which the blind/shutter requires from the top to the bottom end position. The entry is essential if scene or position movements are to occur.</td>
</tr>
</tbody>
</table>

### Minimum change-over time

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic setting</td>
<td>300 ms ... 10 sec</td>
<td>Minimum interruption time when changing directions. Increasing the minimum change-over time will cause less wear on the motors.</td>
</tr>
</tbody>
</table>

### Invert movement direction

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic setting</td>
<td>On, Off</td>
<td>Inverts the activation of the relay outputs. During inverted operation, the relay outputs &quot;Up&quot; and &quot;Down&quot; should be activated in reverse. This is required, for example, for controlling skylights.</td>
</tr>
</tbody>
</table>

### Operating hours up

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic setting</td>
<td>0...65535</td>
<td>The time is counted during which the load is physically switched on (relay contact closed). This parameter can be reset to &quot;0&quot;, for example after exchanging the load. The Reset button is used to reset the meter to &quot;0&quot;. The device must be programmed to apply the change.</td>
</tr>
</tbody>
</table>

### Operating hours down

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic setting</td>
<td>0...65535</td>
<td>The time is counted during which the load is physically switched on (relay contact closed). This parameter can be reset to &quot;0&quot;, for example after exchanging the load. The Reset button is used to reset the meter to &quot;0&quot;. The device must be programmed to apply the change.</td>
</tr>
</tbody>
</table>

### Information window

During channel selection in the Information window, the following settings can be made or values displayed.

<table>
<thead>
<tr>
<th>Display value</th>
<th>Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position value, venetian blind</td>
<td>The position value of the Venetian blind can be changed.</td>
</tr>
</tbody>
</table>
Position value, slat  The position value of the slat can be changed.

Restraint  Display of forced position status.

Lock-out protection  Display of the lock-out protection status.

Operating hours UP  Display of the operating hours in the UP direction since the last restart in the Settings window.

Operating hours DOWN  Display of the operating hours in the DOWN direction since the last restart in the Settings window.

ℹ️ The value can be updated using the arrow next to the display values.

### 6.3 Accessories

Combinable with all motor control inserts from the Venetian blind management.

### 6.4 Conformity

Albrecht Jung GmbH & Co. KG hereby declares that the radio system type Art. No. FM..5232.. corresponds to the directive 2014/53/EU. You can find the full article number on the device. The complete text of the EU Declaration of Conformity is available under the Internet address: www.jung.de/ce

### 6.5 Warranty

The warranty follows about the specialty store in between the legal framework as provided for by law.

**ALBRECHT JUNG GMBH & CO. KG**
Volmestraße 1
58579 Schalksmühle
GERMANY

Telefon: +49 2355 806-0
Telefax: +49 2355 806-204
kundencenter@jung.de
www.jung.de