eNet radio blinds actuator 1-gang mini
Art. No. : FMJ50700UP

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.

For parallel connection of several motors to an output it is essential to observe the corresponding instructions of the manufacturers, and to use a cut-off relay if necessary. The motors may be destroyed.

Risk of injury. Use the device only for controlling Venetian blind and roller shutter motors or awnings. Do not use it to switch other loads.

Use only venetian blind motors with mechanical or electronic limit switches. Check the limit switches for correct adjustment. Observe the specifications of the motor manufacturers. Device can be damaged.

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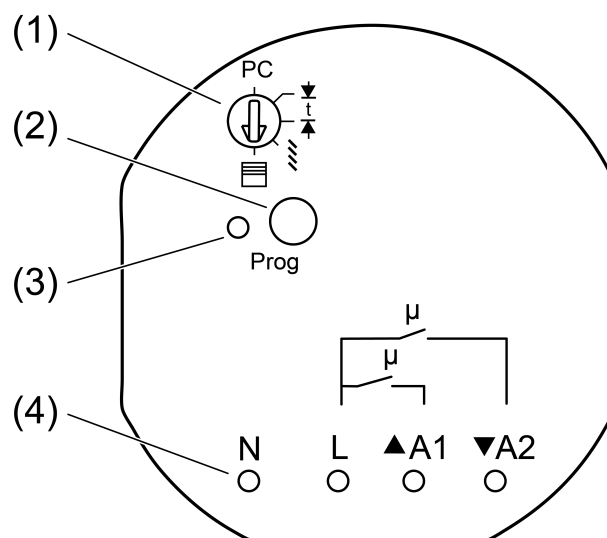
2 Device components

Figure 1: Front view

(1) Operating mode switch
(2) Button **Prog**
(3) Status LED
(4) Measuring points for voltage measurement, terminals rear-mounted

3 Function

Intended use

- Controlling electrically driven Venetian blinds, rolling shutters and awnings

- Operation with suitable eNet radio transmitters
- Mounting in appliance box according to DIN 49073 with a suitable cover
- Installation in surface-mounted housing or panel-mounted housing (accessories) for suspended ceilings

Product characteristics

- Operating mode switch for switch-over to blind actuator, shutter actuator or parameterisation via eNet server
- Positioning of the blind/shutter via scene request
- Positions for sun protection and twilight can be saved
- Status feedback to radio transmitter
- Switchable output with **Prog** button
- Blind/shutter running time can be saved
- Slat change-over time can be saved
- Fabric-stretching for awnings
- Status indicator via LED

Can be set with eNet server:

- Change-over-time for direction change
- Running direction invertible
- Operation locks
- Position for sun protection, twilight, lock-out protection and wind alarm
- ⓘ When operating with the eNet Server, operation and signalling could vary from what is described here.

Supplementary functions with eNet Server:

- Fully encrypted radio transmission (AES-CCM) from eNet Server software version 2.0
- Update of the device software
- Repeater function
- 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

Operation is with radio transmitters, please observe the radio transmitter instructions.

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.

Mounting and connecting actuator

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.
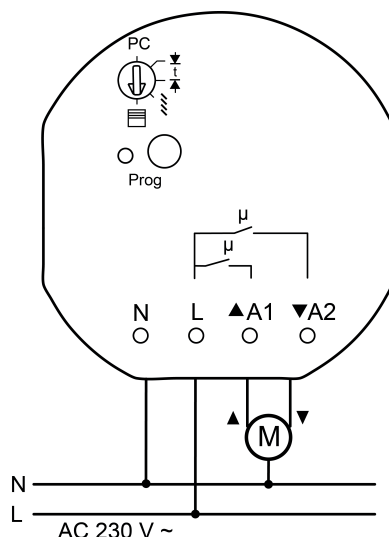
Figure 2: Connection example

- Connect load as shown in the connection example (figure 2).
- Insert the actuator in the appliance box in such a way that the **Prog** button and status LED are visible.
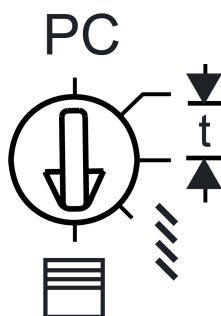

Figure 3: Operating mode switch

Switch position	Function
PC	Operating mode and parameter set with eNet server.*)
▾t	Commissioning - determine running time
▴t	Commissioning - determine slat time
⦚	Blind operating mode
▤	Operating mode rolling shutter, awning

*)   If the operating mode switch is turned from the position **PC** to another operating mode, the parameters are set to the default setting. The settings made with the eNet Server will be lost.

- Set the operating mode switch.
- Switch on mains voltage.
- ⓘ The load can be switched by briefly pressing the Prog button.
  Status LED lights up: output switched on
  Status LED off: output switched off
- Perform commissioning.

ⓘ In installation positions that are not easily accessible, turn the operating mode switch to position **PC** after commissioning and performing a function test. Subsequent changes to the device settings can thus be carried out with the aid of the eNet Server without involving excessive installation work.

▪ Mount the cover.

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 actuator 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 for rolling shutters

The operating mode switch (figure 3) is in the Venetian blind ⸹ or rolling shutter ▤ position.

▪ Turn the operating mode switch (1) to the ▲ t position until the blind/shutter reaches the upper end position.

▪ Turn operating mode switch to the ▼t position.

The blind/shutter moves downwards.

▪ When the lower end position is reached, turn the operating mode switch to the ▤ position.

The running time is saved and the blind/shutter moves to the upper end position.

Saving blind/shutter running time for blind

The operating mode switch (figure 3) is in the Venetian blind ⸹ or rolling shutter ▤ position.

▪ Turn the operating mode switch (1) to the ▲ t position until the blind/shutter reaches the upper end position.

▪ Turn operating mode switch to the ▼t position.

The blind/shutter moves downwards.

▪ When the lower end position is reached, turn the operating mode switch to the ▲ t position.

▪ When the slats have been fully changed over, turn the operating mode switch to the ⸹ position.

The running times are saved and the blind/shutter moves to the upper end position.

Saving the awning running time

The operating mode switch (figure 3) is in the Venetian blind ⸹ or rolling shutter ▤ position.

▪ Turn the operating mode switch (1) to the ▲ t position until the blind/shutter reaches the upper end position.

▪ Turn operating mode switch to the ▼t position.

▪ For awnings without fabric-stretching function: When the extended lower end position is reached, turn the operating mode switch to the ▲t position. As soon the fabric is hanging taut, turn the operating mode switch to the ▤ position.

▪ For awnings with their own fabric-stretching function: When the extended lower end position is reached, turn the operating mode switch to the ▤ position.

The running times are saved and the blind/shutter moves to the upper end position.

Connecting actuator to radio transmitters

Load is switched off.

▪ Press the **Prog** button for longer than 4 seconds.

The blind/shutter starts.

The status LED flashes after 4 seconds and the blind/shutter stops. The actuator 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 actuator is connected to the radio transmitter. The actuator and radio transmitter exit the programming mode automatically.

ⓘ If the status LED of the actuator 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 actuator to radio transmitters).

The status LED of the actuator flashes quickly for 5 seconds.

The actuator is disconnected from the radio transmitter. The actuator 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 the device to the factory setting

All connections to radio transmitters are disconnected and parameters are reset to default setting. If the operating mode switch is on **PC**, the rolling shutter operating mode is set.

ⓘ The connections in the radio transmitters are preserved and must be deleted separately.

Load is switched off.

- Press the **Prog** button for at least 20 seconds.

The blind/shutter starts.

The status LED flashes after 4 seconds and the blind/shutter stops. The status LED flashes faster after 20 seconds.

- Release **Prog** button and press briefly once again within 10 seconds.

The status LED flashes more slowly for approx. 5 seconds.

The device is reset to default setting.

6 Appendix

6.1 Technical data

Rated voltage	AC 230 V ~
Mains frequency	50 / 60 Hz
Ambient temperature	-25 ... +70 °C
Minimum actuation time in operating mode	
Venetian blind	0.1 s
Roller shutter	0.3 s
Minimum switching current AC	100 mA
Contact type	µ
Standby power	max. 0.5 W
Running time	1 ... 600 s
Running time default setting	120 sec
Slat adjusting time	0 ... 10 s
Connected load	
Motors	1000 W
Connection	
single stranded	0.75 ... 4 mm²
Finely stranded with conductor sleeve	0.75 ... 2.5 mm²

Dimensions Ø×H	53×28 mm
Radio frequency	868.0 ... 868.6 MHz
Transmission capacity	max. 20 mW
Transmitting range in free field	typ. 100 m
Receiver category	2

6.2 Parameter list

The device parameters can be changed with the eNet server:

Device and channels

Parameters	Setting options, Basic setting	Explanations
Function	Venetian blind, unused, basic position: Venetian blind	Venetian blind The channel is integrated for the "Venetian blind" central function in the **eNet SMART HOME app**. Unused The channel is not displayed in the **eNet SMART HOME app** and is disabled for use in the commissioning interface.
Operating mode	Roller shutter Venetian blind Awning Basic setting: Roller shutter	Roller shutter A rolling shutter or an awning is controlled for which the Fabric stretching function is required. Venetian blind A Venetian blind is controlled. Awning An awning is controlled for which the Fabric stretching function is required.

Advanced device settings

Parameters	Setting options, Basic setting	Explanations
Manual commissioning	On, Off Basic setting: On	Disables manual commissioning for all device channels. In the "Off" setting, the device cannot be reset to the factory setting.
Repeater mode	On, Off Basic setting: Off	In addition to its other functions, the device can be used as a repeater. In the "On" setting, the device repeats all the received telegrams.

Channel settings

Parameters	Setting options, Basic setting	Explanations

Operating hours up	0...65535 Basic setting: Current value	The time is counted during which the load is physically switched on (relay contact closed). This parameter can be reset to "0", for example after exchanging the load. The Reset button is used to reset the meter to "0". The device must be programmed to apply the change.
Operating hours down	0...65535 Basic setting: Current value	The time is counted during which the load is physically switched on (relay contact closed). This parameter can be reset to "0", for example after exchanging the load. The Reset button is used to reset the meter to "0". The device must be programmed to apply the change.

Extended channel settings

Parameters	Setting options, Basic setting	Explanations
Operating mode	Roller shutter Venetian blind Awning Basic setting: Roller shutter	See Device and channels.
Manual commissioning	On, Off Basic setting: On	Blocks manual commissioning for the device channel. In the "Off" setting, the device cannot be reset to the factory setting.
Local Operation	On, Off Basic setting: On	Blocks the output for operation using the button.
Running time	1 ... 600 sec Basic setting: 120 s	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.
Slat change-over time Fabric-stretching time	0 ms ... 10 sec 300 ms … 10 s Basic setting: 0 ms / 300 ms	Absolute time for changing-over Venetian blind slats. The fabric stretching time can also be set here for the Awning operating mode.
Minimum change-over-time	300 ms ... 10 sec Basic setting: 1 s	Minimum interruption time when changing directions. Increasing the minimum change-over time will cause less wear on the motors.

Invert movement direction	On, Off Basic setting: Off	Inverts the activation of the relay outputs. During inverted operation, the relay outputs "Up" and "Down" should be activated in reverse. This is required, for example, for controlling skylights.
Behaviour on voltage return	No change Configured value Basic setting: No change	Defines the behaviour of the output after voltage return. RMD design: Bus voltage return
Configured venetian blind position	0 ... 100 % Basic setting: 0 %	If the value "Configured position" is entered for the parameter "Behaviour after voltage return", then the blind/shutter position set here is approached.
Configured slat position	0 ... 100 % Basic setting: 0 %	If the value "Configured position" is entered for the parameter "Behaviour after voltage return", then the slat position set here is approached.
Behaviour after the end of the disabling function	no change Last value Down up Basic setting: No change	Behaviour of the output when a block is removed.
Manual saving of the scene values	On, Off Basic setting: On	Disables the saving of the current Venetian blind position as scene value in an actuator for a command via a transmitter.
Priority, lock-out protection	0...4 Basic setting: 1	Specifies the priority for recalling and removing a scene of type Lock-out protection for the channel.
Activate lock-out protection blind position	0 ... 100 % Basic setting: 0 %	Defines the behaviour of the output on activating the lock-out protection.
Activate lock-out protection slat position	0 ... 100 % Basic setting: 0 %	Defines the slat position of the output on activating the lock-out protection. Only visible when the Venetian blind operating mode is set.
Deactivate lock-out protection blind position	0 ... 100 % Basic setting: 0 %	Defines the behaviour of the output on deactivating the lock-out protection. Only visible when the priority for the lock-out protection is 0.
Deacitvate lock-out protection slat position	0 ... 100 % Basic setting: 0 %	Defines the behaviour of the output on deactivating the lock-out protection. Only visible when the priority for lock-out protection is 0 and the Venetian blind operating mode is set.

Priority, restraint	0...4 Basic setting: 2	Specifies the priority for recalling and removing a scene of type Restraint for the channel.
Activate force operation blind position	0 ... 100 % Basic setting: 0 %	Defines the behaviour of the output on activating the forced operation.
Recall forced operation slat position	0 ... 100 % Basic setting: 0 %	Defines the slat position of the output on activating forced operation. Only visible when the Venetian blind operating mode is set.
Deactivate force operation blind position	0 ... 100 % Basic setting: 0 %	Defines the behaviour of the output on deactivating the forced operation. Only visible when the priority for the forced operation is 0.
Deacitvate forced operation slat position	0 ... 100 % Basic setting: 0 %	Defines the slat position of the output on deactivating forced operation. Only visible when the priority for the forced operation is 0 and the Venetian blind operating mode is set.
Priority, wind alarm	0...4 Basic setting: 3	Specifies the priority for recalling and removing a scene of type Wind alarm for the channel.
Activate wind alarm blind position	0 ... 100 % Basic setting: 0 %	Defines the behaviour of the output on activating the wind alarm.
Recall wind alarm slat position	0 ... 100 % Basic setting: 0 %	Defines the slat position of the output on activating the wind alarm. Only visible when the Venetian blind operating mode is set.
Deactivate wind alarm blind position	0 ... 100 % Basic setting: 0 %	Defines the behaviour of the output on deactivating the wind alarm. Only visible when the priority for the wind alarm is 0.
Deacitvate wind alarm slat position	0 ... 100 % Basic setting: 0 %	Defines the slat position of the output on deactivating the wind alarm. Only visible when the priority for the wind alarm is 0 and the Venetian blind operating mode is set.
Priority, sun protection	0...4 Basic setting: 0	Specifies the priority for recalling and removing a scene of type Sun protection for the channel.
Activate sun protection blind position	0 ... 100 % Basic setting: 100 %	Defines the behaviour of the output on activating the sun protection.

Recall sun protection slat position	0 ... 100 % Basic setting: 100 %	Defines the slat position of the output on activating the sun protection. Only visible when the Venetian blind operating mode is set.
Deactivate sun protection blind position	0 ... 100 % Basic setting: 0 %	Defines the behaviour of the output on deactivating the sun protection. Only visible when the priority for the sun protection is 0.
Deacitvate sun protection slat position	0 ... 100 % Basic setting: 0 %	Defines the slat position of the output on deactivating the sun protection. Only visible when the priority for the sun protection is 0 and the Venetian blind operating mode is set.
Priority, twilight	0...4 Basic setting: 0	Specifies the priority for recalling and removing a scene of type Twilight for the channel.
Activate twilight blind position	0 ... 100 % Basic setting: 100 %	Defines the behaviour of the output on activating the twilight function.
Activate twilight slat position	0 ... 100 % Basic setting: 100 %	Defines the slat position of the output on activating the twilight function. Only visible when the Venetian blind operating mode is set.
Deactivate twilight blind position	0 ... 100 % Basic setting: 0 %	Defines the behaviour of the output on deactivating the twilight function. Only visible when the priority for the twilight function is 0.
Deacitvate twilight slat position	0 ... 100 % Basic setting: 0 %	Defines the slat position of the output on deactivating the twilight function. Only visible when the priority for the twilight function is 0 and the Venetian blind operating mode is set.

Information window

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

Display value	Explanations
Position value, venetian blind	The position value of the Venetian blind can be changed.
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. |

6.3 Accessories

Mounting adapter for mini housing   Art. No. FM-EBG
eNet server for rail mounting   Art. No. ENET-SERVER

6.4 Conformity

Albrecht Jung GmbH & Co. KG hereby declares that the radio system type
 Art. No. FMJ50700UP
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.

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