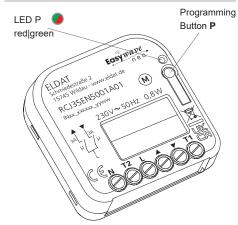
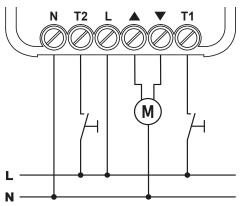
EN RCJ35 Flush-mounted receiver 230V motor potential-loaded

Models



RCJ35EN5001A01

Wiring diagram



Wire cross-sections

Only wires with a cable cross-section of 0.5 mm^2 to 2.5 mm^2 shall be connected. The stripping length of the connecting wires is 6 to 7 mm.

Technical Details

Frequency: Radiated power:	868.30 MHz 6.38 mW
Modulation:	FSK
Coding:	Easywave neo POTA
Device type:	motor control
Power supply:	230 VAC, 50 Hz
Input:	2 external buttons
Output:	2 potential-loaded relay
	contacts (normally open)
Power consumption:	0.4W standby
	0.8W max. w/o load
Maximum contact load	
- resistive load $\cos \varphi = 1.0$	5.0A / 1,150 VA
- inductive load $\cos \varphi = 0.8$	3.0A/ 690VA
Operating temperature:	-20 °C to +45 °C
Dimensions (W/L/H):	43.0/42.0/17.5mm
Weight:	31g

Scope of Delivery

Flush mounted receiver RCJ35, operating manual

Intended Use

The device may only be used to control tubular motors and only indoors! It is operated using Easywave radio transmitters or external buttons. The manufacturer will not be liable for damage caused by improper or inappropriate use.

Safety Advice

Before installing the device, carefully read through this operating manual! Failing to observe these instructions may result in fire or other hazards.

 The electrical installation may only be performed by an authorised and qualified electrician.

- The load current circuit on which the device is operated must be protected by a circuit breaker switch in accordance with EN60898-1 (tripping characteristic B or C, max. 5 A rated current).
- We will not accept any liability for personal injury or damage to property caused by failure to observe the operating instructions and in particular the safety advice!
- Observe the applicable laws, standards and regulations as well as the manufacturer's instructions for the devices to be operated!
- Have faulty units checked by the manufacturer!
- Do not open the unit housing!
- Do not make any unauthorized alterations or modifications to the unit!

Function

Using the bidirectional flush-mounted receiver RCJ35, a tubular motor can be controlled via Easywave transmitters or via two button inputs. 32 transmission codes can be programmed into the receiver.

The RCJ35 is equipped with operating modes

UP/DOWN, UP/STOP/DOWN and SEQUENCE. The "slat adjustment" function is also available as an option, whereby the motor is controlled in DEAD MAN mode for the first 2 seconds of transmitter actuation and only then switches to selfretaining.

The runtime of the motor can be set separately for each movement direction. The runtime is 90 seconds each ex-factory.

The integrated POTA (Programming Over The Air) remote programming function can be used to reprogram an already installed and no longer accessible receiver. A detailed POTA programming manual is available on our website:

https://www.eldat.de/pota_en.pdf

or you can request support from our customer service.

Push-button inputs T1 and T2

The RCJ35 has two push-button inputs (T1 and T2), which have to be connected to L.

In the factory state, the button inputs operate in the UP/DOWN 2-button operation mode without slat adjustment. The external buttons can be programmed in a different operating mode or deleted at any time. This is done in the same way as programming Easywave transmitters.

If an external push-button is deleted, it operates again in the ex-factory operating mode.

Button input T1 behaves like a transmitter button with button code A; button input T2 behaves like button code B.

In 1-button and 2-button operation, the movement command is carried out by briefly pressing the connected buttons.

In 3-button operation, the buttons or switches must remain pressed for the desired period of movement. As long as a button input is active, no transmitter commands are accepted in the 3-button operation.

Operation

Briefly press the programming button **P** to begin programming mode for the required operation type. Any Easywave transmitter can then be programmed under this operation type. Each transmitter can be assigned to its own operating mode. A separate operation type can be assigned to each transmitter / transmitter button. For local operation, 2 external buttons can be connected.

2-button-operation

In this operating mode, movement commands are triggered by 2 related transmitter buttons. The movement is stopped by pressing the button for the opposite direction. Only one transmitter button must be programmed, the code for the associated button is assigned automatically.

3-button-operation

In 3-button operation, movement commands and the stop command are each triggered by a separate transmitter button. This operating mode is therefore particularly suitable for central control and the use of repeaters.

A transmitter with at least three associated buttons is required. Only one of these transmitter buttons must be programmed into the receiver, the code for the corresponding buttons is assigned automatically.

1-button-operation

Using a single transmitter button, move and stop commands are triggered in a defined sequence each time it is pressed.

A transmitter with four buttons (A, B, C, D) could therefore be used to control, e.g. four different devices.

Timeout

If no button is pressed within 30 seconds, the RCJ35 automatically switches to operation mode. The settings are not saved.

Operating modes

2-button-operation

UP/DOWN

Transmission code A or C Roller shutter UP Transmission code B or D Roller shutter DOWN STOP with opposite direction button optionally with slat adjustment

3-button-operation

UP/STOP/DOWN

Roller shutter UP
Roller shutter STOP
Roller shutter DOWN

optionally with slat adjustment

1-button-operation

SEQUENCE

Transmission code A/B/C/D

The roller shutter executes movement commands one after another:

 $UP \rightarrow STOP \rightarrow DOWN \rightarrow STOP \rightarrow UP \rightarrow ...$



SETTING UP THE RECEIVER

The receiver must be installed and commissioned by a qualified electrician in a commercially available flush-mounted installation box.

- 1. Switch off the power supply.
- Connect the supply voltage and the tubular motor to be controlled according to the wiring diagram. Observe the applicable electrical regulations!
- Switch on the power supply again and transfer the coding of the transmitter buttons to the receiver (see "Program transmitters").
- 4. Seal the flush-mounted installation box with the corresponding cover.



The cable length for connecting external buttons must not exceed 3 meters.

Make sure there is no interference with the wireless connection! Do not mount the device in a distribution box, in metal casings or in direct proximity to large metal objects.

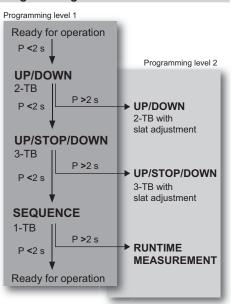
PROGRAMMING

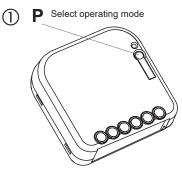
Program transmitters

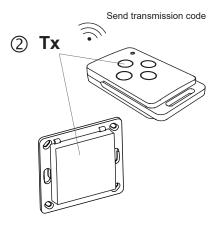
The RCJ35 only responds to programmed Easywave transmitters. To program a transmitter, set the RCJ35 to the programming mode for the desired operating mode and then press the transmitter button to be programmed or, if necessary, a button connected to the T1/T2 button input. Up to 32 transmission codes can be programmed. If an already programmed transmitter is programmed again, the previous operation mode is overwritten by the new selection. A button input occupies a memory location as soon as it is programmed into another than the default operating mode.

	eratio ess l	on outton]	Indication	Note
UP/D	ow	N 2-TB	00000	
1	Ρ	1x briefly	LED P flashes red	Operating mode UP/DOWN selected
2	Тх	Transmitter button 1x briefly	LED P lights up 2 seconds red	Transmission code is programmed. When the LED turns off, the receiver is ready for operation.
UF	P/DC	DWN 2-TB	00000	with slat adjustment
1	P P	1x briefly 1x long	LED P flashes red LED P flashes green	Operating mode UP/DOWN Operating mode UP/DOWN + slat adjust- ment selected
2	Тх	Transmitter button 1x briefly	LED P lights up 2 seconds green	Transmission code is programmed. When the LED turns off, the receiver is ready for operation.
UP/S	TOF	P/DOWN 3-TB	00000	
1	Ρ	2x briefly	LED P flashes red	Operating mode UP/STOP/DOWN selected
2	Тх	Transmitter button 1x briefly	LED P lights up 2 seconds red	Transmission code is programmed. When the LED turns off, the receiver is ready for operation.
UF	P/ST	OP/DOWN 3-TB	00000	with slat adjustment
1	P P	2x briefly 1x long	LED P flashes red LED P flashes green	Operating mode UP/STOP/DOWN Operating mode UP/STOP/DOWN + slat adjustment selected
2	Тх	Transmitter button 1x briefly	LED P lights up 2 seconds green	Transmission code is programmed. When the LED turns off, the receiver is ready for operation.
SEQ	UEN	ICE 1-TB	00000	
1	Ρ	3x briefly	LED P flashes red	Operating mode SEQUENCE selected
2	Тх	Transmitter button 1x briefly	LED P lights up 2 seconds red	Transmission code is programmed. When the LED turns off, the receiver is ready for operation.
-	JNTI EAS	ME UREMENT	0000	
1	P P	3x briefly 1x long	LED P flashes red LED P flashes alter- nately red green	Operating mode SEQUENCE selected start RUNTIME MEASUREMENT (see page 3)

Programming structure







A programming process can be cancelled by briefly pressing the **P** programming button several times. Once the LED turns off, the receiver returned to standby.

EXPLANATION

🔵 off	O lights up		
o flashes	lashes quickly		

Press button

briefly (<2s) = Press button for less than 2 seconds **long** (>2s) = Press button longer than 2 seconds

Operation

1-TB = 1-button operation

- 2-TB = 2-button operation
- 3-TB = 3-button operation

PROGRAMMING

Measuring the runtime

The runtime of the RCJ35 outputs can be set individually for both directions. This protects the end position switches of a connected motor and enables the targeted approach of positions when controlled by a server (e.g. APC01).

Each movement command received is carried out for the currently set runtime. This runtime applies to all programmed transmitters, even if the transmitters were already programmed before a measurement. The maximum runtime that can be set is approx. 1.8 hours.

To be able to carry out a runtime measurement, at least one transmitter must be programmed into the RCJ35. Start the runtime measurement with the roller shutter completely open. Then, using a programmed transmitter, move the roller shutter to both end positions and give a STOP command as soon as the roller shutter has reached an end position (regardless of whether the roller shutter has already stopped independently). The more precisely you send the STOP command when the end positions are reached, the more precisely positions can be approached later with a server (e.g. APC01).

You can repeat the measuring runs as often as you like as long as the runtime measurement is active. The last measured runtime for each direction is saved. If the runtime measurement was started with a transmitter, it must be completed with exactly the same transmitter. Other transmitters are ignored for the duration of the measurement.

The factory setting (restored after a reset) for the runtime is 90 seconds for both directions.

Operation [Press button]	Indication	Note
① P 3x briefly	LED flashes red	
P 1x long	LED P flashes alternately red green	start RUNTIME MEASUREMENT
② move to both end positions	LED P flashes alternately red green	Move the roller shutter to both end po- sitions using a programmed transmit- ter. Send a STOP command at both end positions! For each direction of travel, the last movement time between two STOP commands is measured.
③ P 1x long	LED P lights up 2 seconds green	Ends the runtime measurement and saves the values. When the LED turns off, the receiver is ready for operation.

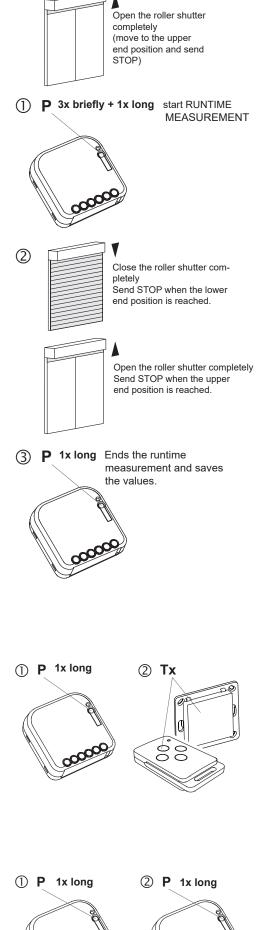
If an attempt is made to start the runtime measurement without at least one transmitter being programmed, the LED P flickers red for 4 seconds and the receiver switches back to operating mode.

The runtime measurement can be cancelled by briefly pressing the programming button P. This discards all currently measured values.

Deleting transmitters

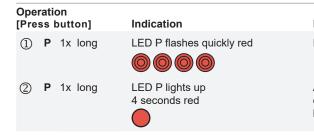
In delete mode, individual transmitters can be specifically deleted from the memory of the RCJ35.





Reset

Doing a RESET, the receiver will be set back to the factory settings. All programmed transmitters are deleted and the runtime for both directions is set to 90 seconds again.





All transmission codes have been deleted and the factory settings have been restored.

BI-DIRECTIONAL FUNCTIONS (Easywave neo)

In order to be able to use bidirectional functionalities, a server (e.g. APC01) can be programmed into the RCJ35. The available functions are automatically detected, so no specific operation type needs to be selected when programming a server. Program the server into the receiver according to the instructions in the respective server application by adding an ELDAT actuator as an "Easywave neo" device. After it is programmed, the server receives feedback about each switching operation performed, even if this is triggered by another transmitter or manually via the external buttons on the RCJ35. The current state of the receiver is therefore always displayed in the associated application.

If the server is to be used to move to specific positions of a roller shutter, a runtime measurement must be carried out in advance.

Program server

Add an actuator in the Easywave app as an Easywave neo device and follow the instructions in the app. Only one server can be programmed into the receiver. Any server that may have already been programmed will be overwritten.

	eration ess button]	Indication	Note	
1	Start the program	mming process via the serve	er application.	
2	P 1x briefly	LED P flashes red	Receiver in programming mode any operating mode possible	

③ Complete the programming process via the application.

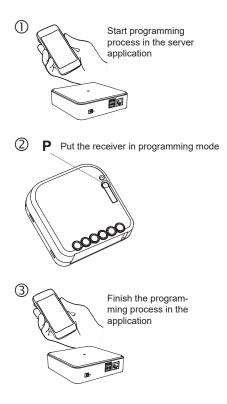


Once a server is programmed to the RCJ35, an acknowledgement for each switching operation is transmitted via radio. If the server is not in use, delete it from the receiver to prevent unnecessary radio transmissions.

Delete the server

A server can be removed from the RCJ35 by deleting the relevant device in the server application. To delete the server, the receiver must be powered and within range of the server. As an alternative to deleting it via the app, the server can also be deleted by resetting the receiver.

① Delete the receiver or relevant Easywave neo actuator in the server application, while the receiver is powered and within range of the server.



GENERAL INFORMATION

Disposal

Waste electrical products should not be disposed of with household waste!

Dispose of the waste product via a collection point for electronic scrap or via your specialist dealer.

Put the packaging material into the recycling bins for cardboard, paper and plastics.



We will remedy defects on the device based on material or production errors or exchange the device within the statutory warranty period.

Any unauthorized tampering with, or modifications to, the product shall render this warranty null and void.

Conformity

Hereby, ELDAT EaS GmbH declares that the radio equipment type RCJ35 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.eldat.de

Customer Service

If the device does not work properly despite proper handling or in case of damage, please contact the manufacturer or your retailer.

ELDAT EaS GmbH

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