Models

LED red | green ●

Programming button **P**

RCJ34EN5002A01

Wiring diagram

N   T2   L   1   2   T1

L

N
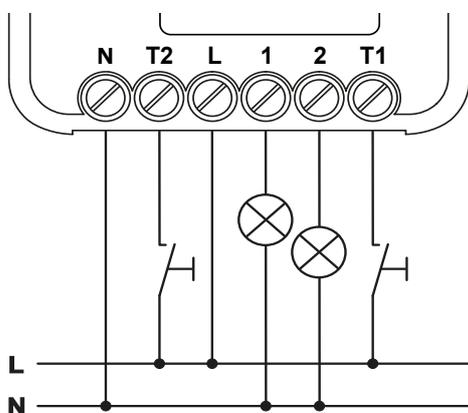
Wire cross-sections

Only wires with a cable cross-section of 0.5 mm² to 2.5 mm² shall be connected. The stripping length of the connecting wires is 6 to 7 mm.

Technical Details

Frequency:	868.30 MHz
Radiated power:	6.38 mW
Modulation:	FSK
Coding:	Easywave neo, POTA
Device type:	dual switch
Power supply:	230 V AC
Input:	2 external buttons
Output:	2 potential-loaded relay contacts (normally open)
Power consumption:	0.4 W standby
	0.79 W max. w/o load
Maximum contact load	
- resistive load	5A / 1,150 VA
- inductive load	3A / 690 VA
Operating temperature:	-20 °C to +45 °C
Dimensions (W/L/H):	43.0 / 42.0 / 17.5 mm
Weight:	approx. 31 g

Scope of delivery

Flush mounted receiver RCJ34, operating manual

Intended Use

The device may only be used indoors as a radio receiver to switch up to two mains voltage devices on and off. 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. 10 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

The RCJ34 flush-mounted receiver is used to switch two electrical devices ON and OFF by a radio transmitter or an external button.

The operating modes ON/OFF and DEAD MAN are available (see section "Operating modes").

32 Easywave transmission codes can be programmed into the receiver for each output.

The integrated POTA (Programming Over The Air) remote programming function can be used to reprogram an already installed and no longer accessible receiver. This function is handled separately for each output. A transmitter can therefore only set the output(s) into the remote programming mode in which it is programmed.

If a transmitter is programmed into both outputs, both outputs are set to remote learning mode at the same time and transmitters are programmed/deleted into both outputs at the same time. 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+T2

The RCJ34 has two push-button inputs T1 and T2, which have to be connected to L.

When in factory mode, the push-button inputs are operating in the ON/OFF 1-button operation mode, whereby push-button input T1 controls output 1 and push-button input T2 controls output 2.

The external buttons can be programmed in other operating modes or deleted at any time. This is done in the same way as programming Easywave transmitters. If an external button is deleted it returns to the ON/OFF 1-button operation mode.

The push-button inputs are handled like a transmitter button with the button code B and should always be used in 1-button operation.

If a push-button input is programmed in the ON/OFF 2-button operation mode, it can lock the output. As long as the push-button input is closed, the switching output remains switched off. Radio transmitters are ignored during this time.

If the push-button input is programmed in DEAD MAN operating mode, it switches the output ON as long as it is closed. However, radio transmitters can switch the output OFF again at any time.

Operation

Briefly press the P button (repeatedly), to begin programming mode for the required operation mode and the required output. Any Easywave transmitter can then be programmed in this operation mode. A separate operation mode can be assigned to each transmitter/transmitter button. For local operation, external buttons can be connected.

When in **2-button operation** (2-TB), transmitter buttons A and C switch ON. Transmitter buttons B and D switch OFF. Only one transmitter button must be programmed, as the code of the other button is automatically assigned.

In **1-button operation** (1-TB), each function is triggered with just one transmitter button. Each button must be programmed individually into the receiver, there is no automatic assignment.

Timeout [1]

If no button is pressed within 30 seconds, the RCJ34 automatically switches to operation mode. The settings are not saved.

Operating modes

2-button operation

ON/OFF

Transmission code A or C switches ON.
Transmission code B or D switches OFF.

1-button operation

ON/OFF

Each transmitter code A/B/C/D can switch ON and OFF alternately.

If the transmitter button is pressed for longer than 2 seconds, the output is switched OFF, regardless of its current state (status of switching is synchronized).

DEAD MAN

The output switches as long as the transmitter button is pressed, but for a maximum of 36 seconds (unlimited, when using external pushbutton).

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.
2. Connect the supply voltage and the devices to be controlled according to the wiring diagram. Observe the applicable electrical regulations!
3. Switch the power supply back on and program 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 and in direct proximity to large metal objects.

PROGRAMMING

Program transmitters

The RCJ34 only responds to programmed Easywave transmitters. To program a transmitter, use the **P** button to select the output to be switched and the desired operating mode. As soon as the LED flashes in the selected combination of rhythm and color, press the transmitter button to be programmed or the connected button input T1/T2.

A transmitter or external button can also be programmed into both outputs. If an already programmed transmitter is programmed into an output, the previous operating mode is overwritten with the newly selected one.

32 transmission codes can be programmed per output. Each button input occupies a memory location as soon as it is programmed in an operating mode. If the LED flashes quickly for four seconds when programming a transmitter, all memory slots of the respective output are occupied.

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

Operation [Press button]			Indication	Note
Output 1				
ON/OFF 2-TB			⊙○⊙○⊙○	
①	P	1x briefly	LED P flashes red	Operating mode **ON/OFF** 2-TB selected
②	Tx	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.
ON/OFF 1-TB			⊙⊙○⊙⊙○	
①	P	2x briefly	LED P flashes red	Operating mode **ON/OFF** 1-TB selected
②	Tx	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.
DEAD MAN 1-TB			⊙⊙⊙○⊙⊙⊙○	
①	P	3x briefly	LED P flashes red	Operating mode **DEAD MAN** selected
②	Tx	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.
Output 2				
ON/OFF 2-TB			⊙○⊙○⊙○	
①	P	1x briefly	LED P flashes red	Operating mode ON/OFF 2-TB (CH1)
	P	1x long	LED P flashes green	Operating mode **ON/OFF** 2-TB selected
②	Tx	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.
ON/OFF 1-TB			⊙⊙○⊙⊙○	
①	P	2x briefly	LED P flashes red	Operating mode ON/OFF 1-TB (CH1)
	P	1x long	LED P flashes green	Operating mode **ON/OFF** 1-TB selected
②	Tx	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.
DEAD MAN 1-TB			⊙⊙⊙○⊙⊙⊙○	
①	P	3x briefly	LED P flashes red	Operating mode DEAD MAN (CH1)
	P	1x long	LED P flashes green	Operating mode **DEAD MAN** selected
②	Tx	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.

① **P** Select operating mode

Output 1 (LED red)
P 1x <2 s → ON/OFF 2-TB
P 2x <2 s → ON/OFF 1-TB
P 3x <2 s → DEAD MAN

Output 2 (LED green)
P 1x <2 s + 1x >2 s → ON/OFF 2-TB
P 2x <2 s + 1x >2 s → ON/OFF 1-TB
P 3x <2 s + 1x >2 s → DEAD MAN

Send transmission code

② **Tx**
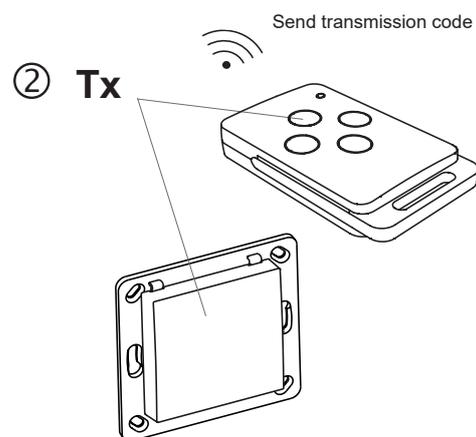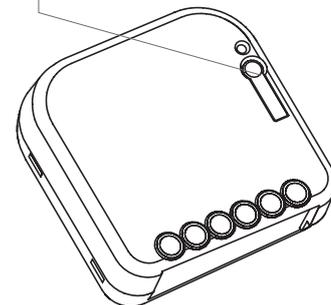
EXPLANATION

LED indications
○ off
◉ flashes
⬤ lights up
◎ flashes quickly

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

Operation
1-TB = 1-button operation
**2-TB** = 2-button operation

Deleting transmitters

In delete mode, individual transmitters or external buttons can be specifically deleted from the memory of the RCJ34. The delete mode is activated separately for each output. If a transmitter is programmed into both outputs, it can only be deleted from both outputs one after the other.

If an external button is deleted from all outputs, the button input then works again in the factory operating mode ON/OFF 1-TB of its associated output.

If the LED flashes quickly for two seconds during deletion, the transmitter in question was not programmed into the selected output. The receiver remains in delete mode.

	Operation [Press button]		Indication	Note	
Output 1	① P	1x long	LED P flashes quickly red ⊚⊚⊚⊚	Receiver in delete mode for output 1.	① P >2 s ② Tx
	② Tx	1x briefly	LED P lights up 2 seconds red 🔴	Transmitter has been deleted.	
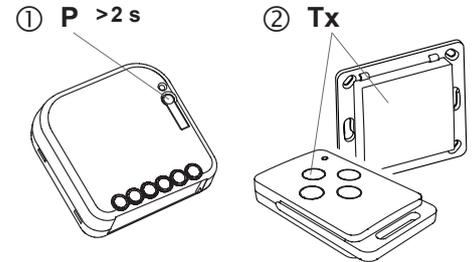
	Operation [Press button]		Indication	Note	
Output 2	① P	1x long	LEDP flashes quickly green ⊚⊚⊚⊚	Receiver in delete mode for output 2.	① P P >2s P <2s ② Tx
	P	1x briefly			
	② Tx	1x briefly	LED P lights up 2 seconds green 🟢	Transmitter has been deleted.	
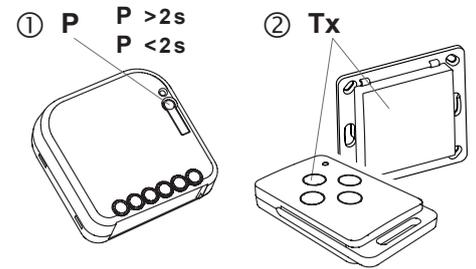
Reset

Doing a RESET, the receiver will be set back to the factory settings. All programmed transmitters are deleted and the button inputs are reset to the factory operating mode. The reset is always carried out for both outputs.

Operation [Press button]		Indication	Note	
① P	1x long	LED P flashes quickly red ⊚⊚⊚⊚	Receiver in delete mode.	① P >2s ② P >2s
② P	1x long	LED P lights up 4 seconds red 🔴	All transmission codes have been deleted and the factory settings have been restored.	
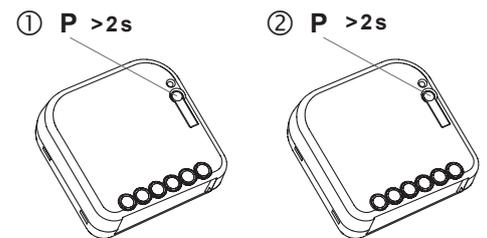
BI-DIRECTIONAL FUNCTIONS (Easywave neo)

In order to be able to use bidirectional functionalities, a server (e.g. APC01) can be programmed into the RCJ34. 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 button inputs on the RCJ34. The current state of the receiver is therefore always displayed in the associated application.

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.
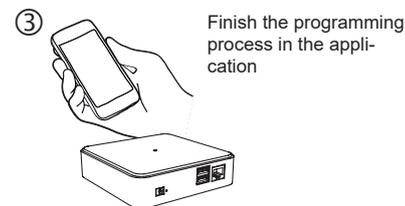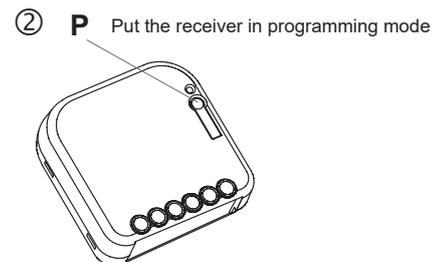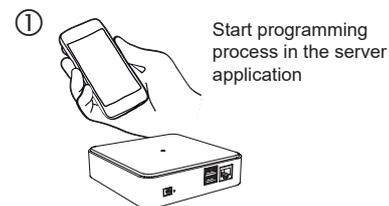
Operation

[Press button]	Indication	Note
① Start the programming process via the server 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 RCJ34, 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 server

A server can be removed from the RCJ34 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.

① Start programming process in the server application

② **P** Put the receiver in programming mode

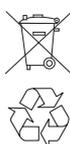③ Finish the programming process in the application

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.

Warranty

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 RCJ34 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
Schmiedestraße 2
15745 Wildau
Germany
Phone: +49 3375 9037-310
Internet: www.eldat.de
E-mail: info@eldat.de

UK CA C E