Models

LED red|green 🔴🟢
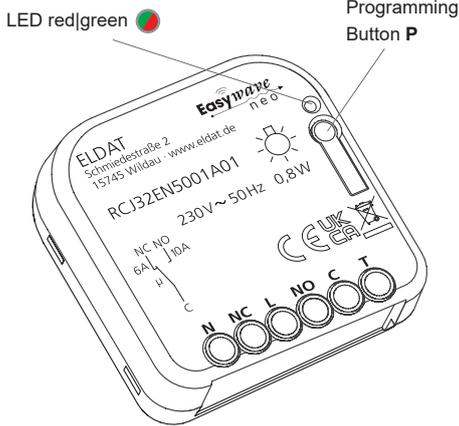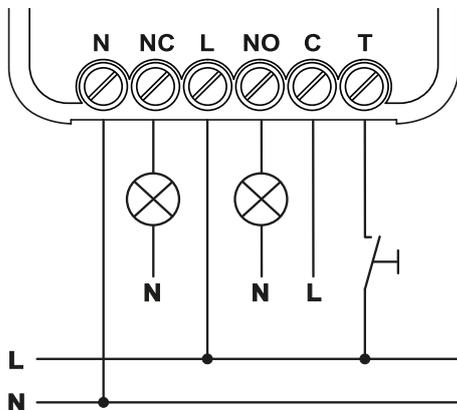
Programming Button **P**

RCJ32EN5001A01

Wiring diagram

N NC L NO C T

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:	switch
Power supply:	230 V AC, 50 Hz
Input:	1 external button
Output:	1 potential-free relay contact (changeover)
Power consumption:	0.3 W standby 0.8 W max. w/o load
Maximum contact load:	
- resistive load cosφ = 1.0	NO: 10A / 2,300 VA NC: 6A / 1,380 VA
- inductive load cosφ = 0.8	NO: 3A / 690 VA NC: 2A / 460 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 RCJ32, operating manual

Intended Use

The device may only be used indoors as a radio receiver in connection with mains voltage devices. It is operated using Easywave radio transmitters or an external button.

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 RCJ32 flush-mounted receiver is used to alternately switch an electrical device ON and OFF using a radio transmitter or an external button.

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

32 transmission codes can be programmed into the receiver.

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 input T

The RCJ32 has a push-button input (T), which has to be connected to **L**.

When in factory mode, the push-button input works in the ON/OFF 1-button operation mode (see „Operating modes").

The external button can be programmed in other operating modes or deleted at any time. This is done in the same way as programming Easywave transmitters.

If the external button is deleted from memory, it returns to the ON/OFF 1-button operation mode.

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

If the 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 DEADMAN 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.

It is not possible to use the push-button input in the LOGIC operating mode!

Operation

Briefly press button **P** to begin programming mode for the required operation type. Any Easywave transmitter can then be programmed under this operation type.

A separate operation type can be assigned to each transmitter / transmitter button. For local operation, one external button 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 second 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

If no button is pressed within 30 seconds, the RCJ32 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.

LOGIC

All programmed transmission codes are linked in accordance with an AND/OR logic.

> **OR** linkage
> If **one** of the programmed transmitters transmits an ON telegram (A/C), the receiver switches ON.

> **AND** linkage
> If **all** programmed transmitters which have previously transmitted an ON telegram (A/C) have transmitted an OFF telegram (B/D), the receiver switches OFF.

This operating mode is subordinate to all other operation types! This means that any command from a transmitter under another operation type will reset this operation type!

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 button).

TIMER   adjustable, retriggerable

The receiver switches ON and automatically OFF again after the set time (factory setting: 7 minutes). Any transmission code A/B/C/D can be used. Pressing the transmission button again before the timer finishes extends the switching time again to the set time. The TIMER function can be set by the user in a range from 1 second to 30 hours (see "Set TIMER").

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. 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 and in direct proximity to large metal objects.
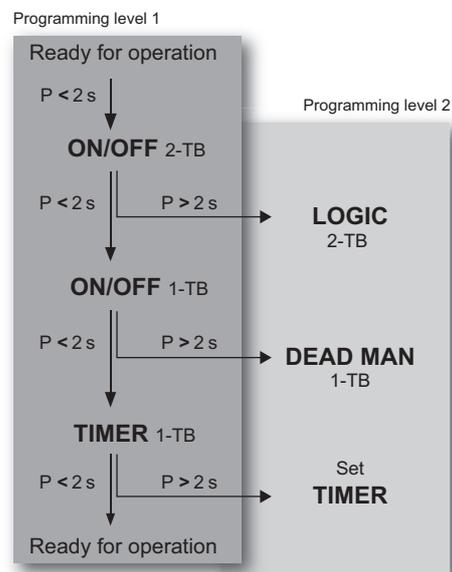
PROGRAMMING

Program transmitters

The RCJ32 only responds to programmed Easywave transmitters. In order to program a transmitter, activate the programming mode for the required operation type, then press the transmitter button to be programmed. If an already programmed transmitter is programmed again, the previous operation type is overwritten by the new selection. Up to 32 transmission codes can be programmed.
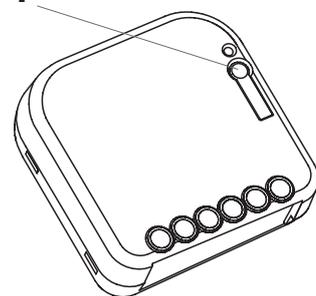
The external button uses up one memory slot, as soon as it gets programmed into another than the default operation mode.

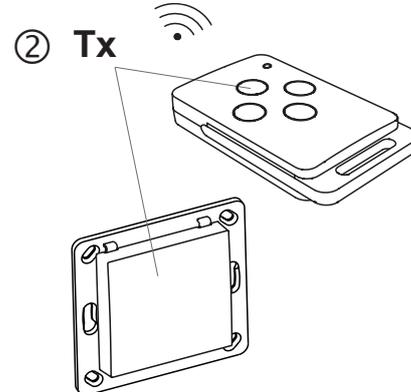| Operation [Press button]			Indication	Note
ON/OFF 2-TB			🔴⚪🔴⚪🔴⚪	
①	P	1x briefly	LED P flashes red	Operating mode **ON/OFF** 2-TB selected
②	Tx	Transmitter button 1x briefly	LED P lights up 2 seconds red	Transmission code is programmed. When the LED turns off, the receiver is ready for operation.
LOGIC 2-TB			🟢⚪🟢⚪🟢⚪	
①	P P	1x briefly 1x long	LED P flashes red LED P flashes green	Operating mode ON/OFF 2-TB Operating mode **LOGIC** 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 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 P	2x briefly 1x long	LED P flashes red LED P flashes green	Operating mode ON/OFF 1-TB 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.
TIMER 1-TB			🔴🔴🔴⚪🔴🔴🔴⚪	
①	P	3x briefly	LED P flashes red	Operating mode **TIMER** 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.
Set TIMER			🟢	(default setting: 7 minutes)
①	P P	3x briefly 1x long	LED P flashes red LED P lights up green	Operating mode TIMER selected set **TIMER** (see page 3)

Programming structure

Programming level 1

Ready for operation

P < 2 s ↓

ON/OFF 2-TB

P < 2 s ↓   P > 2 s →

Programming level 2

LOGIC 2-TB

ON/OFF 1-TB

P < 2 s ↓   P > 2 s →

DEAD MAN 1-TB

TIMER 1-TB

P < 2 s ↓   P > 2 s →

Set **TIMER**

Ready for operation

① **P** Select operating mode

Send transmission code

② **Tx**

☝ 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

LED indications
⚪ off   ⚪ lights up
◉ flashes   ◎ 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

Symbols
⧗ waiting time

Set TIMER

The user can set individual switching times for the TIMER function. Doing so, the base time measured during setting of the TIMER is multiplied by the selected multiplier. The maximum base time is 30 seconds, the measurement stops automatically after this. The programmed switching time applies to all transmitters programmed in the TIMER operation mode, even if they have already been programmed before the setting of the TIMER. The TIMER is set to 7 minutes by default.

Operation

[Press button]	Indication	Note
① **P** 1. 3x briefly 2. 1x long	LED P flashes red LED P lights up green 🟢	Operating mode TIMER selected **Set TIMER**
② **P** 1x briefly	LED P flashes alternately red|green 🔴🟢🔴🟢	Start base time measurement between 1 and 30 seconds
③ ⏳ 1 to 30 s	LED P flashes alternately red|green 🔴🟢🔴🟢	Wait for required base time (30 seconds max)
④ **P** briefly 1 to 6 times within 5 s	LED P flashes green	Stop base time measurement and select wanted multiplier.
	1x briefly 🟢⚪🟢⚪	Multiplier 1 selected
	2x briefly 🟢🟢⚪🟢🟢⚪	Multiplier 10 selected
	3x briefly 🟢🟢🟢⚪🟢🟢🟢⚪	Multiplier 60 selected
	4x briefly 🟢🟢🟢🟢⚪🟢🟢🟢🟢⚪	Multiplier 600 selected
	5x briefly 🟢🟢🟢🟢🟢⚪🟢🟢🟢🟢🟢⚪	Multiplier 1,800 selected
	6x briefly 🟢🟢🟢🟢🟢🟢⚪🟢🟢🟢🟢🟢🟢⚪	Multiplier 3,600 selected
⑤ ⏳ Wait 5 s	LED P lights up 2 seconds green 🟢	The measured base time is multiplied with the selected multiplier and saved as the new switching time for the TIMER function.

① P — Select operating mode "**Set TIMER**"
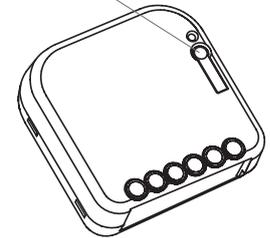
② P — Start base time measurement

③ ⏳ — Wait for wanted base time (1-30 s)

④ P **1x to 6x** — Select multiplier

⑤ ⏳ — Wait 5 seconds

Conversion table

Base time [sec.]	Multiplier					
	1	**10**	**60**	**600**	**1,800**	**3,600**
1	0:00:01	0:00:10	0:01:00	0:10:00	0:30:00	1:00:00
2	0:00:02	0:00:20	0:02:00	0:20:00	1:00:00	2:00:00
3	0:00:03	0:00:30	0:03:00	0:30:00	1:30:00	3:00:00
4	0:00:04	0:00:40	0:04:00	0:40:00	2:00:00	4:00:00
5	0:00:05	0:00:50	0:05:00	0:50:00	2:30:00	5:00:00
6	0:00:06	0:01:00	0:06:00	1:00:00	3:00:00	6:00:00
7	0:00:07	0:01:10	0:07:00	1:10:00	3:30:00	7:00:00
8	0:00:08	0:01:20	0:08:00	1:20:00	4:00:00	8:00:00
9	0:00:09	0:01:30	0:09:00	1:30:00	4:30:00	9:00:00
10	0:00:10	0:01:40	0:10:00	1:40:00	5:00:00	10:00:00
11	0:00:11	0:01:50	0:11:00	1:50:00	5:30:00	11:00:00
12	0:00:12	0:02:00	0:12:00	2:00:00	6:00:00	12:00:00
13	0:00:13	0:02:10	0:13:00	2:10:00	6:30:00	13:00:00
14	0:00:14	0:02:20	0:14:00	2:20:00	7:00:00	14:00:00
15	0:00:15	0:02:30	0:15:00	2:30:00	7:30:00	15:00:00
16	0:00:16	0:02:40	0:16:00	2:40:00	8:00:00	16:00:00
17	0:00:17	0:02:50	0:17:00	2:50:00	8:30:00	17:00:00
18	0:00:18	0:03:00	0:18:00	3:00:00	9:00:00	18:00:00
19	0:00:19	0:03:10	0:19:00	3:10:00	9:30:00	19:00:00
20	0:00:20	0:03:20	0:20:00	3:20:00	10:00:00	20:00:00
21	0:00:21	0:03:30	0:21:00	3:30:00	10:30:00	21:00:00
22	0:00:22	0:03:40	0:22:00	3:40:00	11:00:00	22:00:00
23	0:00:23	0:03:50	0:23:00	3:50:00	11:30:00	23:00:00
24	0:00:24	0:04:00	0:24:00	4:00:00	12:00:00	24:00:00
25	0:00:25	0:04:10	0:25:00	4:10:00	12:30:00	25:00:00
26	0:00:26	0:04:20	0:26:00	4:20:00	13:00:00	26:00:00
27	0:00:27	0:04:30	0:27:00	4:30:00	13:30:00	27:00:00
28	0:00:28	0:04:40	0:28:00	4:40:00	14:00:00	28:00:00
29	0:00:29	0:04:50	0:29:00	4:50:00	14:30:00	29:00:00
30	0:00:30	0:05:00	0:30:00	5:00:00	15:00:00	30:00:00

Converted seconds with multiplier to time (hours:minutes:seconds)

👆 The base time measurement (point ③) is automatically canceled after 60 seconds. Cancelling the TIMER setting is NOT possible at any other point!
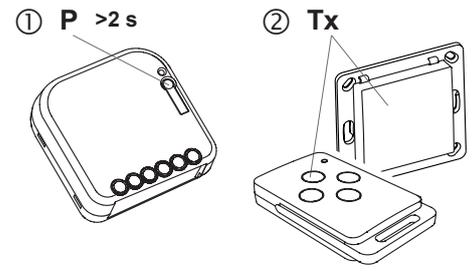
PROGRAMMING

Deleting transmitters

In delete mode, individual transmitters can be specifically deleted from the memory of the RCJ32.

Operation [Press button]		Indication	Note
① **P**	1x long	LED P flashes quickly red ◎◎◎◎	Receiver in delete mode.
② **Tx**	1x briefly	LED P lights up 2 seconds red ●	Transmitter has been deleted.

① **P** >2 s　② **Tx**

Reset

Doing a RESET, the receiver will be set back to the factory settings. All programmed transmitters are deleted and the TIMER is set to 7 minutes.

Operation [Press button]		Indication	Note
① **P**	1x long	LED P flashes quickly red ◎◎◎◎	Receiver in delete mode.
② **P**	1x long	LED P lights up 4 seconds red ●	All transmission codes have been deleted and the factory settings have been restored.

① **P** >2 s　② **P** >2 s
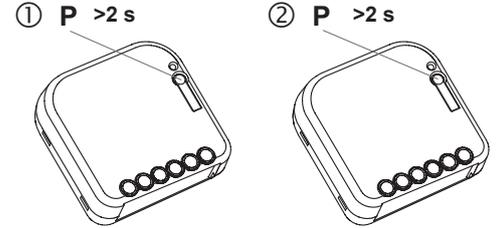
BI-DIRECTIONAL FUNCTIONS (Easywave neo)

In order to be able to use bidirectional functionalities, a server (e.g. APC01) can be programmed into the RCJ32. 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 on the RCJ32. 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.	

① Start programming process in the server application

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

③ Finish the programming process in the application

⚠ Once a server is programmed to the RCJ32, 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.
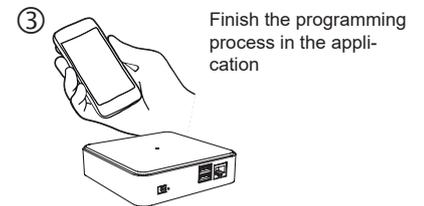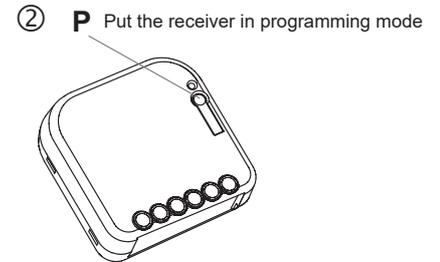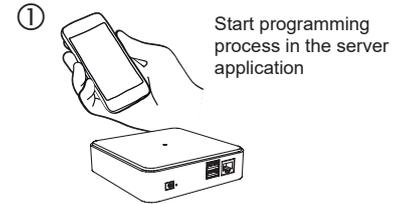
Delete the server

A server can be removed from the RCJ32 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.

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 RCJ32 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.

UKCA CE