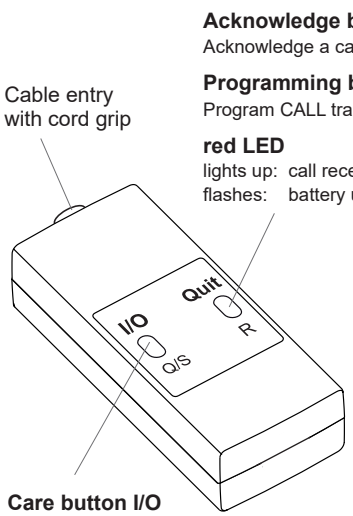
EN RCL07 Call receiver with external programming

Model



Acknowledge button Quit
Acknowledge a call

Programming button R
Program CALL transmitters

red LED
lights up: call received
flashes: battery undervoltage

Care button I/O
Activate or deactivate CARE function

Programming button Q/S
Program ACKNOWLEDGE and CARE transmitters

green LED
lights up: RCL07 ready for operation
flashes: CARE function active

RCL07E5002B30	868.30 MHz
RCL07E6002B30	916.50 MHz

Technical details

Frequency:	868.30 MHz
Modulation:	FSK
Coding:	Easywave
Power supply:	12-24 V AC 12-32 V DC
Max. current consumption:	10 mA / 45 mA Load*)
Output:	2 potential-free relay contacts (1 CO and 1 NO)
Max. contact rating **AC** (Ω)	
max. switching voltage:	120 V AC
max. switching current:	1 A
max. switching power:	62 W
Max. contact rating **DC**	
max. switching voltage:	50 V DC
max. switching current:	1 A
max. switching power:	30 W
Operating temperature:	-20 °C to +60 °C
Degree of protection:	IP54
Dimensions (w/l/h):	35 / 80 / 20 mm
Weight:	38.0 g
Connecting cable:	Ø 5 mm

*) Both relays are switched.

Scope of delivery

Call receiver RCL07, operating instructions

Intended use

The device may only be operated with safety extra low voltage (SELV) and may only be used as a radio control for switching devices with safety extra low voltage (SELV). All information on the maximum contact load refers to resistive loads. If an inductive load (e.g. motor) is connected, the maximum contact load is reduced depending on cos ϕ.

The manufacturer shall not be liable for any damage caused by improper or non-intended use.

Safety advice

Before using the device, carefully read through the operating instructions!

- Observe the permissible supply voltage and the maximum contact load of the switching outputs! The specified maximum values for switching voltage, switching current and switching power must not be exceeded!
- Have faulty radio controls checked by the manufacturer!
- Do not make any unauthorized alterations or modifications to the receiver!

Functions

The RCL07 call receiver has two channels. Channel 1 (CH1) is used for signalling incoming calls.

If the RCL07 receives an undervoltage telegram, channel 2 (CH2) switches for one second.

The following applications can be realized with this:

CALL Function

When the RCL07 receives the telegram from a CALL transmitter, channel 1 (CH1) switches according to the operating mode selected.

A maximum of 32 transmission codes for CALL transmitters can be programmed. Programming is carried out using the programming button **R** (see page 2).

During programming, the operating mode currently set on jumper **J2** is assigned to a transmitter:

PULSE **J2** Pos. 4 (4 3 2 1 □ □ □ □)
(1-button operation)
If a transmitter button **A/B/C/D** is pressed, the relay **CH1** switches for one second.

ON **J2** Pos. 3+4 (4 3 2 1 □ □)
(1-button operation)
If a transmitter button **A/B/C/D** is pressed, the relay **CH1** switches permanently **ON**.
The relay CH1 can only be switched off, by acknowledging the call.

If an already programmed transmitter is programmed again, the previous operating mode will be overwritten with the currently selected one.

The operating mode PULSE is set by default.

ACKNOWLEDGE Function

While the ACKNOWLEDGE function is activated, incoming calls are additionally signalled by the red **QUIT** LED.

Acknowledgement is done using the **QUIT** button or an ACKNOWLEDGE transmitter. This resets the **QUIT** LED and the **CH1** relay.

A maximum of eight ACKNOWLEDGE transmitters can be programmed. The programming is done using the programming button **Q/S** (see page 2).

The function can be set with jumper **J1**:

activated: **J1** Pos. 1+2 (4 3 2 1 □ □)

deactivated: **J1** Pos. 1 (4 3 2 1 □ □ □)

If the ACKNOWLEDGE function is deactivated, no CALL display is shown and the button has no function.

The relay CH1 can only be reset by ACKNOWLEDGE transmitters.

The ACKNOWLEDGE function is deactivated by default.

CARE Function

If the CARE function is active, **all** calls will be ignored for 15 minutes.

After these 15 minutes, the CARE function is deactivated automatically, but can also be deactivated manually at any time.

The CARE function is activated or deactivated with a separate CARE transmitter or on the device using the button **I/O**.

activate (green LED flashes):
Button code **B** or **D** of a CARE transmitter
or
CARE button **I/O** (< 5 s)

deactivate (green LED lights up):
Button code **A** or **C** of a CARE transmitter
or
CARE button **I/O** < 5 s

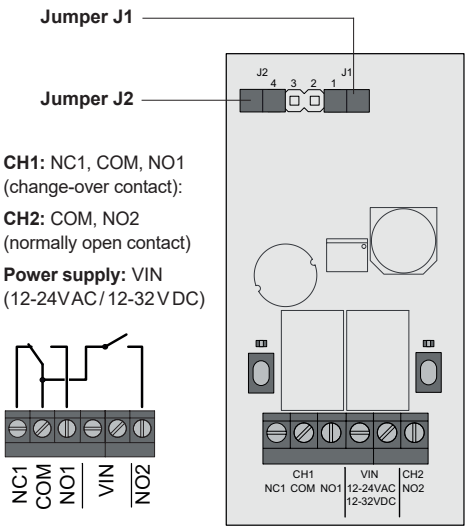
While the CARE function is active, the green LED flashes.

A maximum of eight CARE transmitters can be programmed. Programming is done using the programming button **Q/S** (see page 2).

Setting up the receiver

Ensure that the radio connection is unobstructed. Avoid installation in a distribution box, in enclosures made of metal, in the immediate vicinity of large metal objects, on or close to the floor.

1. Loosen the two screws on the back and open the enclosure.
2. Activate or deactivate the desired functions with the jumpers J1 and J2.
3. Connect the supply voltage and the safety extra-low voltage consumers to be switched.
   The polarity of the supply voltage V_{IN} does not need to be observed.
4. Screw the enclosure back together.
5. Transfer the coding of the transmitters to the receiver (page 2 'Programming').



PROGRAMMING

PROGRAM TRANSMITTERS

The RCL07 only responds to previously programmed Easywave transmitters.

To programme a transmitter, put the RCL07 into programming mode for the desired function and press the transmitter button to be programmed within 30 seconds.

For the CALL function, the operating mode currently set on jumper J2 is programmed along with the transmitter.

If the LED flickers for 4 seconds during the programming process, the memory for the selected function is full.

If a transmitter that has already been programmed is programmed again, the previous operating mode is overwritten with the newly selected one.

It is not possible to overwrite a programmed CARE or ACKNOWLEDGE transmitter with a CALL function and vice versa.

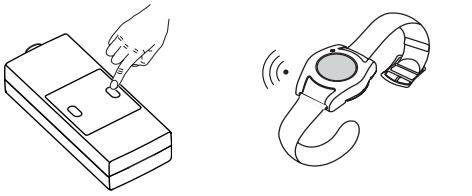
To do this, the respective transmitter button must first be deleted and then programmed again.

For transmitters with multiple buttons, the individual buttons can be divided between CALL, ACKNOWLEDGE and CARE functions as desired.

When the programming or delete mode is started, any pending calls are automatically acknowledged and the CH1 relay is reset.

Programming CALL transmitters

① **R** **<1,6 s** ② **Tx** **<1,6 s**

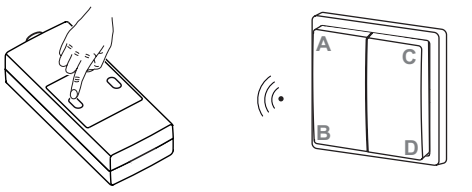


Operation [Press button]	RCL07 LED display	Note
① **R** **<1,6 s**	LED **R** flashes slowly (1x|pause|1x| ...)	Programming mode **CALL** transmitter
② **Tx** **<1,6 s**	LED **R** lights up for 2 s	Transmission code programmed as **CALL** transmitter

If the LED **R** flickers for 2 seconds during the programming process, the transmitter has already been programmed as an ACKNOWLEDGE or CARE transmitter.
If the LED **R** flickers for 4 seconds, the memory for **CALL** transmitters is full.

Programming ACKNOWLEDGE transmitters

① **Q/S** **>5 s** ② **Tx** **<1,6 s**



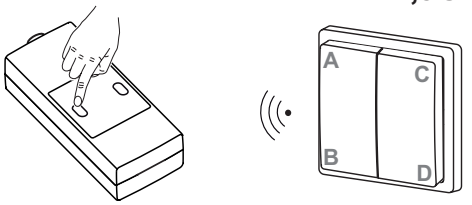
Operation [Press button]	RCL07 LED display	Note
① **Q/S** **>5 s**	LED **Q/S** flashes slowly (1x|pause|1x| ...)	Programming mode **ACKNOWLEDGE** transmitter
② **Tx** **<1,6 s**	LED **Q/S** lights up permanently	Transmission code programmed as **ACKNOWLEDGE** transmitter

If the **Q/S** LED flickers for 2 seconds during the programming process, the transmitter has already been programmed as a CALL transmitter.
If the **Q/S** LED flickers for 4 seconds, the memory for **ACKNOWLEDGE** transmitters is full.

Programming CARE transmitters

① **Q/S** **>5 s**

② **Q/S** **<1,6 s** ③ **Tx** **<1,6 s**



Operation [Press button]	RCL07 LED display	Note
① **Q/S** **>5 s**	LED **Q/S** flashes slowly (1x|pause|1x| ...)	Programming mode ACKNOWLEDGE transmitter
② **Q/S** **<1,6 s**	LED **Q/S** flashes in cycles of 2 (2x|pause|2x| ...)	Programming mode **CARE** transmitter
③ **Tx** **<1,6 s**	LED **Q/S** lights up permanently	Transmission code programmed as **CARE** transmitter

If the **Q/S** LED flickers for 2 seconds during the programming process, the transmitter has already been programmed as a CALL transmitter.
If the **Q/S** LED flickers for 4 seconds, the memory for the **CARE** transmitter is full.

Q/S Programming button **Q/S**
R Programming button **R**
Tx Transmitter button

PROGRAMMING

DELETING TRANSMITTERS

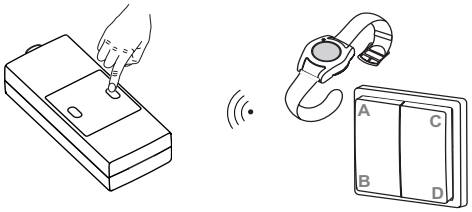
To prevent the RCL07 from responding to previously programmed transmitters, they must be deleted from the receiver.

Deletion can be done for each transmitter individually or **all** programmed transmitters can be deleted at the same time.

In the delete mode for individual transmitters, no distinction is made between CALL, CARE and ACKNOWLEDGE transmitters.

Delete individual transmitters

① **R** **>1,6 s** ② **Tx** **<1,6 s**

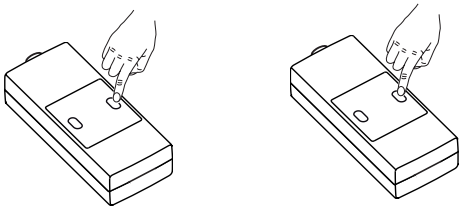


Operation [Press button]		RCL07 LED display	Note
① **R**	**>1,6 s**	LED **R** flashes quickly	The receiver is ready for deleting transmitters for 30 seconds. To cancel, briefly press the **R** button 1x (<1.6 s).
② **Tx**	**<1,6 s**	LED **R** lights up for 2 s	Press the transmitter button to be deleted. The transmission code is deleted and the RCL07 switches to operating mode.

When attempting to delete an transmitter that has not been programmed, the LED **R** flickers for 2 seconds.

Delete all transmitters

① **R** **>1,6 s** ② **R** **>1,6 s**



① **R**	**>1,6 s**	LED **R** flashes quickly	The receiver is ready for deleting transmitters for 30 seconds. To cancel, briefly press the **R** button 1x (<1.6 s).
② **R**	**>1,6 s**	LED **R** lights up for 4 s	All transmitters have been deleted and the RCL07 switches to operating mode.

R Programming button **R**
Tx Transmitter button

TRANSMITTER TYPES

All functions of the RCL07 (page 1 'Functions') can be switched using the buttons on the device as well as by radio. To be able to switch the various functions on and off by radio, an Easywave transmitter must be programmed into the RCL07 in the corresponding operating mode (page 2 'Programming').

The following transmitter types are available for programming:

CALL transmitters

- Trigger the CALL function on the RCL07. Relay CH1 is switched according to the selected operating mode and the red LED **Quit** lights up if the ACKNOWLEDGE function is activated.
- Do not trigger a CALL if the CARE function is active!
- Battery undervoltage is monitored if supported by the transmitter.
- A maximum of 32 CALL transmitters can be programmed in total.

ACKNOWLEDGE transmitters

- Acknowledge pending calls on the RCL07.
- Switch off the red LED **Quit** when a CALL is pending and the ACKNOWLEDGE function is active.
- Resets the relay CH1 when a CALL is pending (even when the ACKNOWLEDGE function is deactivated).
- No monitoring of battery undervoltage.
- A maximum of 8 ACKNOWLEDGE transmitters can be programmed.

CARE transmitters

- Switch on the CARE function by briefly pressing transmitter button B or D for a maximum of 15 minutes.
- Can switch off the CARE function manually before the 15 minutes have elapsed by briefly pressing transmitter button A or C.
- The green LED flashes when the CARE function is active.
- No monitoring of battery undervoltage.
- A maximum of 8 CARE transmitters can be programmed.

BATTERY UNDERVOLTAGE

If the battery capacity of a programmed CALL transmitter with battery control function is low, the transmitter sends an undervoltage data telegram. The relay channel 2 (CH2) is switched for approx. one second and the red **Q/S** LED flashes to signal the undervoltage.

If the RCL07 receives an undervoltage data telegram while the ACKNOWLEDGE function is active, the undervoltage is only displayed on the device after a possible call has been acknowledged.

Now change the battery of the last call transmitter used. If the RCL07 receives two telegrams in succession from this transmitter without an undervoltage data message, the receiver resets the undervoltage display automatically.

The undervoltage display can also be reset by briefly pressing the **Quit** button (even if the ACKNOWLEDGE function is deactivated).

GENERAL INFORMATION

Waste electrical products are not to 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

Within the statutory warranty period, we undertake to rectify free of charge by repair or replacement any product defects arising from material or production faults.

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

Conformity

ELDAT EaS GmbH hereby declares that the radio equipment type RCL07 is in compliance with Directives 2014/53/EU and 2017/745/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.

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