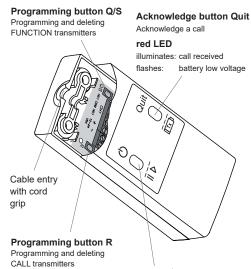
# RCL07 Call receiver with internal programming

#### Model



Function button

Activate/deactivate function

#### green LED

illuminates: RCL07 ready for operation

flashes: CARE function active off: MUTE function active

or

RCL07 without power supply

#### RCL07E5002C01

#### **Technical Details**

Frequency: 868.30 MHz
Modulation: FSK
Coding: Easywave
Power supply: 12-24 V DC

Current consumption:

12 V DC: 19 mA stand by/65 mA load \*) 24 V DC: 11 mA stand by/31 mA load \*) Max. contact rating: 30 V/1A/30 W Output: 2 potential-free

> relay contacts (1 CO and 1 NO)

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 unit 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).

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!

- Caution! Observe the permissible supply voltage and the max. contact rating!
- 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 signal 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 or PRIORITY transmitter, channel 1 (CH1) switches according to the operating mode selected.

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

When programming, each transmitter can be assigned one of the following operating modes:

PULSE 1-button operation

If a transmitter button A/B/C/D is pressed, the relay CH1 switches for one second.

ON/OFF 2-button operation

The relay **CH1** can be specifically switched **ON** or **OFF**. The transmitter buttons **A** or **C** switch **ON**, the transmitter buttons **B** or **D** switch **OFF**.

To change the operating mode of an already programmed transmitter, first delete the transmitter's transmission code and then program it again with the desired operating mode.

## **ACKNOWLEDGE Function**

When the ACKNOWLEDGE function is activated, the  ${\bf QUIT}$  LED will light up  ${\bf red}$  once a call is incoming.

The red LED switches off and channel CH1 is reset as soon as the incoming call has been acknowledged with the QUIT button or a programmed ACKNOWLEDGE transmitter.

A maximum of eight transmission codes can be

programmed. Programming is carried out using the internal programming button **Q/S** (page 2 "Programming FUNCTION transmitters").

The ACKNOWLEDGE function can be activated or deactivated by setting jumper  ${\bf J2}$  accordingly:

activated: J2 Pos. 4

4 3 2 1

deactivated: J2 Pos. 3+4

4 3 2 1

The ACKNOWLEDGE function is activated exfactory.

#### **CARE Function**

If the CARE function is activated, 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  $(\!\!\!\!\!^{\mbox{}})$  button.

activate (green LED flashes):

Button code **B** or **D** of a CARE transmitter **or** Function button () (>1.6s but <10s)

deactivate (green LED lights up/off):

Button code A or C of a CARE transmitter

or Function button () <5s

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

A maximum of eight CARE transmitters can be programmed. Programming is carried out using the internal programming button **Q/S** (page 2 'Programming FUNCTION transmitters').

#### **MUTE** function

The MUTE function enables unlimited muting of CALL transmitters.

As soon as the MUTE function is active, only calls from programmed PRIORITY transmitters are accepted. (Page 2 'Programming PRIORITY transmitters'). Calls from normal CALL transmitters are ignored.

The RCL07 can be muted either on the device itself or with a MUTE transmitter to be programmed separately (page 2 'Programming FUNCTION transmitters'):

MUTE the RCL07 (green LED off):

Button code **B** or **D** of a MUTE transmitter **or** Function button () >10 s

**Un-MUTE the RCL07** (green LED lights up): Button code **A** or **C** of a MUTE transmitter

or Function button () > 5 s

When the MUTE function is activated, the green LED is off. It is not possible to check the supply voltage in this state.

After a power interruption, the RCL07 is always un-muted.

To be able to use the MUTE function, it must first be enabled at jumper J1: 4 3 2 1

4 3 2 1

enabled: J1 Pos. 1-2

The MUTE function is disabled ex-factory.

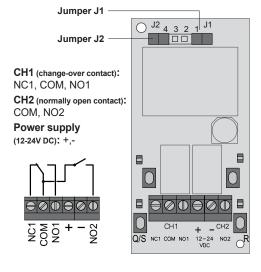
J1 Pos. 1

# Commissioning

disabled:

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.

- Loosen the two screws on the back and open the enclosure.
- 2. Activate or deactivate the desired functions with jumpers J1 and J2.
- Connect the supply voltage and the safety extra-low voltage consumers to be switched.
- 4. Transfer the coding of the transmitters to the receiver (page 2 'Programming').
- 5. Screw the enclosure back together.



# **PROGRAMMING**

## **PROGRAM TRANSMITTERS**

The RCL07 only responds to previously programmed Easywave transmitters.

To program a transmitter, switch the RCL07 to the programming mode for the desired operating mode or function and press the transmitter button to be programmed within 30 seconds.

A transmitter channel can only be used for one function at a time!

For example, it is not possible to use the upper rocker of a wall switch for a call and the lower rocker for acknowledgement. It is essential that two separate transmitters are used for this.

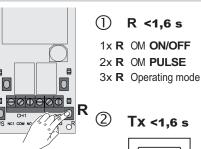
If the operating mode / function of a programmed transmitter is to be changed, it must be deleted first. Overwriting is not possible!

Operation [Press button] RCL07 LED display

Note

The CALL function can be triggered with PRIORITY transmitters when the MUTE function is active.

# **Programming CALL transmitters**



CALL transmitters are used to trigger the CALL function.

<1.6s LEDR flashes slowly (1x|Pause|1x| ...)

Programming mode OM ON/OFF selected

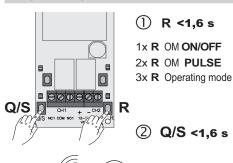
<1.6s LEDR flashes every 2 cycles (2x|Pause|2x| ...)

Programming mode OM PULSE selected

(2) Tx <1.6s LEDR lights up for approx. 4 s

Transmission code programmed as CALL transmitter.

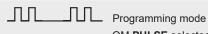
# **Programming PRIORITY transmitters**



<1.6s LEDR flashes slowly (1) R (1x|Pause|1x| ...)

Programming mode OM ON/OFF selected

<1.6s LEDR flashes every 2 cycles (2x|Pause|2x| ...)



OM PULSE selected

(2) Q/S <1.6s LEDR and Q/S flash in the cycle of the OM selected

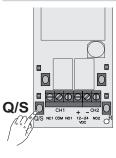
Programming mode **PRIORITY** transmitter



(3) Tx <1.6s LEDR lights up for approx. 4 s

Transmission code programmed as PRIORITY transmitter

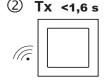
# **Programming FUNCTION transmitters**



(1) Q/S <1,6 s

1x Q/S ACKNOWLEDGE transmitter

2x Q/S CARE transmitter 3x Q/S MUTE transmitter 4x Q/S Operating mode



FUNCTION transmitters (de)activate the ACKNOWLEDGE, CARE or MUTE functions

(1) Q/S <1.6s LED Q/S flashes slowly (1x|Pause|1x| ...)

Programming mode ACKNOWLEDGE transmitter

Q/S <1.6s LED Q/S flashes every 2 cycles (2x|Pause|2x| ...)

\_\_/\/\\_

Programming mode **CARE** transmitter

Q/S <1.6s LED Q/S flashes every 3 cycles (3x|Pause|3x| ...)



Programming mode **MUTE** transmitter

(2) Tx <1.6s LEDQ/S lights up for approx. 4s

Transmission code programmed in the selected function

Q/S Programming button Q/S R Programming button **R** 

Тx Transmitter button OM Operating mode



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

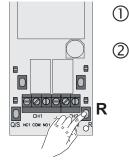
If an attempt is made to program a transmitter that has already been programmed again, there is no response on the RCL07. Delete the transmitter before programming it again.

# **PROGRAMMING**

#### **DELETING TRANSMITTERS**

			Operation [Press but		RCL07 LED display	Note
Deleting individual CALL / PRIORITY transmitters						
	① R	>1,6 s	① R	>1.6s	LED <b>R</b> flashes quickly	The receiver is ready for deleting CALL and PRIORITY transmitters for 30 seconds. To cancel, briefly press the <b>R</b> button 1x (<1.6 s).
	(6. <i>(6</i> .	<1,6 s	② Tx	<1.6s	LED <b>R</b> lights up for approx. 2s	Press the transmitter button to be deleted. The transmission code is deleted and the RCL07 switches to operating mode.
Q/S NC1 COM NO1		/ <del>-</del> )	If an attempt is made to delete an ACKNOWLEDGE, CARE or MUTE transmitter in this mode, there is no reaction on the RCL07.			

# **Deleting all CALL / PRIORITY transmitters**



R > 1.6 s

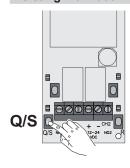
R > 1,6 s

(1) R >1.6s LEDR flashes quickly The receiver is ready for deleting CALL and PRIORITY transmitters for 30 seconds. To cancel, briefly press the R button 1x (<1.6 s).

② R >1.6s LEDR lights up for approx. 4s

All CALL and PRIORITY transmitters have been deleted and the RCL07 switches to operating mode.

# **Deleting individual FUNCTION transmitters**



Q/S > 1.6 s



1 Q/S >1.6s LED Q/S flashes quickly

The receiver is ready for deleting ACKNOWL-EDGE, CARE or MUTE transmitters for approx. 30 seconds. To cancel, briefly press the **Q/S** button 1x

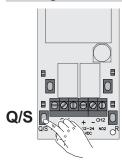
(<1.6 s).

(2) Tx <1.6s LEDQ/S lights up for approx. 2s

Press the transmitter button to be deleted. The transmission code is deleted and the RCL07 switches to operating mode.

If an attempt is made to delete a CALL or PRIORITY transmitter in this mode, there is no reaction on the RCL07.

# **Deleting all FUNCTION transmitters**



Q/S > 1.6 s

Q/S > 1,6s

(1) Q/S >1.6s LED Q/S flashes very quickly

The receiver is ready for deleting ACKNOWL-EDGE, CARE or MUTE transmitters for approx. 30 seconds.

To cancel, briefly press the Q/S button 1x (<1.6 s).

(2) Q/S >1.6s LED Q/S lights up for approx. 4 s All FUNCTION transmitters have been deleted

and the RCL07 switches to operating mode.

Q/S Programming button Q/S R Programming button R Tx Transmitter button OM Operating mode

# 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 when the ACKNOWLEDGE function is activated.
- Do not trigger a CALL if the CARE function is active!
- Do not trigger a CALL if the MUTE function is active!
- Battery undervoltage is monitored if supported by the transmitter.
- A maximum of 32 CALL and PRIORITY transmitters can be programmed in total. The distribution is as required.

#### **PRIORITY transmitters**

- Trigger the CALL function on the RCL07, even if the MUTE function is active. The other behaviour corresponds to that of CALL transmitters.
- 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 and PRIORITY transmitters can be programmed in total. The distribution is as required.

# **ACKNOWLEDGE** transmitters

- Acknowledge incoming calls on the RCL07 when the ACKNOWLEDGE function is active.
   The red LED Quit is switched off and channel 1 (CH1) is reset.
- Prerequisite: ACKNOWLEDGE function activated on jumper J2.
- No monitoring of the 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.
- You 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.
- Also possible when the MUTE function is activated.
- No monitoring of the battery undervoltage.
- A maximum of 8 CARE transmitters can be programmed.

#### **MUTE** transmitters

- Mute the RCL07 for an unlimited period of time by briefly pressing transmitter button B or D.
- Briefly pressing transmitter button A or C unmutes the RCL07 again.
- If the RCL07 is muted via the MUTE function, it will only respond to calls from PRIORITY transmitters. Calls from CALL transmitters are ignored in this mode. The green LED is off in this state, but flashes when the CARE function is active.
- Prerequisite: MUTE function activated on jumper J1.
- No monitoring of the battery undervoltage.
- A maximum of 8 MUTE transmitters can be programmed.

# **BATTERY UNDERVOLTAGE**

If the battery capacity of a programmed CALL or PRIORITY 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 LED flashes to signal the undervoltage.

If the RCL07 receives an undervoltage data telegram when the ACKNOWLEDGE function is activated, the undervoltage is only displayed on the device after the 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.

The undervoltage display can also be reset by briefly pressing the **Quit** button.

If a call is received at the same time, this is acknowledged first and the undervoltage display is reset when the **Quit** button is pressed a second time

# **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 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 Email: info@eldat.de