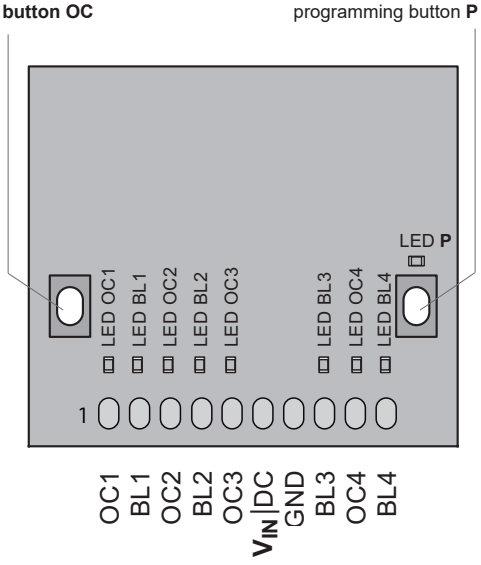
EN RCD21 Receiver module open-collector

4-channel version



RCD21E5004D1 without pin header
RCD21E5004D2 with pin header

Technical Details

Frequency:	868.30 MHz
Modulation:	FSK
Coding:	Easywave 32 Codes per output
Power supply:	3-30 V DC
Current consumption:	15 mA
Output:	4x open-collector (OC1 - OC4) 4x open-collector for BatteryLow (BL1-BL4)
Output load:	20 mA per OC
Operating Temperature:	-20°C to +55°C
Dimension (w/l/h):	35/31/3.5mm, pitch 2.54 mm
RCD21E5004D2	3.2 mm pin length

Function

The RCD21 is used for radio-controlled switching of electrical loads in the low voltage range. The operating modes ON/OFF 2-button and 1-button operation and the DEAD MAN control are available.

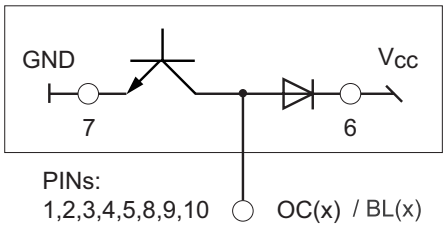
In each OC output 32 Easywave transmission codes can be programmed. A single transmitter code can be programmed into multiple outputs.

Are all OC outputs activated, a transmission code can be programmed in all outputs simultaneously, if it is not already programmed in one of the outputs.

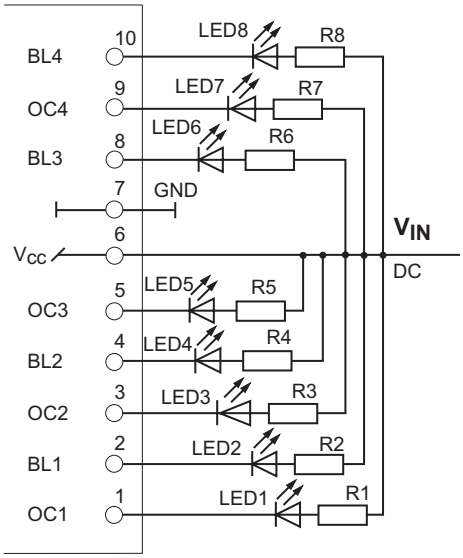
In the operating mode the LED of the switched output lights.

If the battery capacity of a programmed transmitter is low, it sends a low-voltage telegram (Battery Low (BL)). The corresponding BL output is switched on for 1 second. The corresponding BL LED illuminates for 1 second.

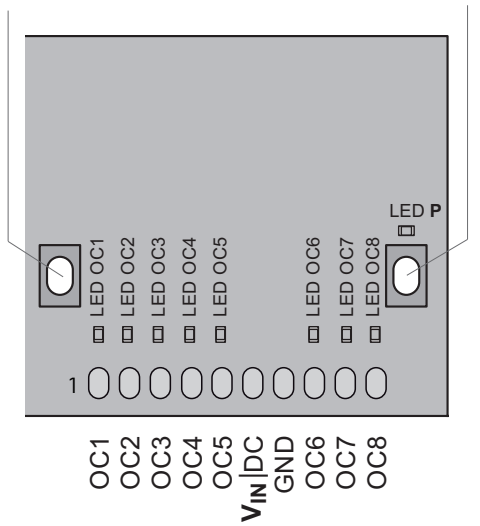
Output Stage OC(x)/BL(x)



Wiring example



8-channel version



RCD21E5008D1 without pin header
RCD21E5008D2 with pin header

Technical Details

Frequency:	868.3 MHz
Modulation:	FSK
Coding:	Easywave 32 Codes per output
Power supply:	3-30 V DC
Current consumption:	15 mA
Output:	8x open-collector (OC1-OC8)
Output load:	20 mA per OC
Operating Temperature:	-20°C to +55°C
Dimension (w/l/h):	35/31/3.5mm, RM2.54 mm
RCD21E5004D2	3.2 mm pin length

Function

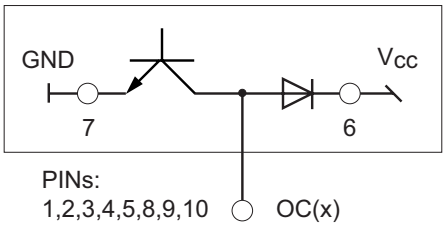
The RCD21 is used for radio-controlled switching of electrical loads in the low-voltage range. The operating modes ON/OFF 2-button and 1-button operation and the DEAD MAN control are available.

In each OC output 32 Easywave transmission codes can be programmed. A single transmitter code can be programmed into multiple outputs.

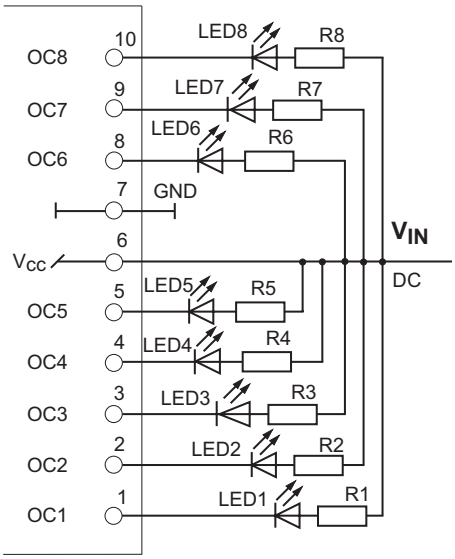
Are all OC outputs activated, a transmission code can be programmed in all outputs simultaneously, if it is not already programmed in one of the outputs.

In the operating mode the LED of the switched output lights.

Output Stage OC(x)



Wiring example



Operating modes

Operating mode (OM)	LED flashing
ON/OFF 2-button operation	
Transmission code A or C switches ON. Transmission code B or D switches OFF.	
ON/OFF 1-button operation	
Each transmitter code A/B/C/D can switch ON and OFF alternately.	
DEAD MAN 1-button operation	
Each transmitter code A/B/C/D switches as long as the transmitter button is pressed (max. 36 s).	

This transmitter button is then linked to the selected operating mode. (see chapter „Programming“).

Intended Use

This unit may only be used as a radio control system for low-voltage applications.

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!

Have faulty radio controls checked by the manufacturer!

Do not make any unauthorized alterations or modifications to the receiver!

Disposal

Waste electrical products and batteries must not be disposed of with household waste!

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

Dispose of used batteries in a recycling bin for batteries or via the specialist trade.

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.

Programming

Operation [press the button]		Indication	Comment *)
Select output		The active output is indicated by the corresponding LED OC.	When the OC button is pressed, all outputs are automatically switched OFFand the OC LED of the last used output lights up.
	button **OC**	LED **OC**(x) lights up	Press the button OC repeatedly until - the LED of the desired output light up, - all LEDs light up or - all LEDs are switched off.
Programming the transmission code			
select output	1. button **OC**	LED **OC**(x) lights up	The LED OC of the last used output lights up. Select the desired output by repeatedly pressing OC.
select operating mode	2. button **P** < 1.6 sec.	LED **P**	Press button P repeatedly until LED P flashes in time with the desired operating mode. The receiver is now in learning mode for 30 seconds.
programming transmission code	3. transmitter button	LED **P** lights up for 2 sec.	Press the transmitter button whose code is to be programmed. If the code has been programmed the LED P lights up for 2 sec. The selected operating mode is assigned to the learned transmission code; the receiver switches to operational readiness. In the „2 button operation“, the code of the corresponding button is also programmed in the process. If the LED P flashes during delete mode very rapidly for approx. 2 sec., the code to be deleted is not programmed. The receiver remains for approx. 30 sec. in the delete mode. If the LED P flashes rapidly for approx. 4 sec., all 32 memory locations are occupied. The receiver goes back to the operating mode.
Deleting specific transmission codes			
select output	1. button **OC**	LED **OC**(x) lights up	Select the output from which the transmitter should be deleted by repeatedly pressing OC. Select all OCs to delete channels from all outputs.
	2. button **P** > 1.6 sec.	LED **P** flashes rapidly	The receiver is for approx. 30 sec. in the delete mode.
deleting transmission code	3. transmitter button	LED **P** lights up for 2 sec.	Press the transmitter button whose code you want to delete. Once the transmitter code is deleted, LED P will illuminate for approx. 2 seconds, and the receiver will switch to standby mode. In „2-button operation,“ the code of the corresponding button will also be deleted. If LED P flickers for approx. 2 seconds during deletion, the button code to be deleted has not been programmed. The receiver will remain in delete mode for approx. 30 seconds.
Deleting all transmission codes of an output or all outputs (RESET)			
select output	1. button **OC**	LED **OC**(x) lights up	Select the output from which all transmission codes should be deleted by repeatedly pressing OC. Select all OC to delete all transmission codes from all outputs.
	2. button **P** > 1.6 sec.	LED **P** flashes rapidly	The receiver is now in delete mode for 30 seconds.
deleting transmission codes	3. button **P** > 1.6 sec.	LED **P** lights up for 4 sec.	Transmission codes deleted. The receiver switches to operational readiness.

*) Canceling the programming operation or delete operations is possible at any time, by pressing the button OC > 1.6 sec. or you can wait approx. 30 sec., until the receiver returns to the operating mode automatically.

Conformity

Hereby, ELDAT EaS GmbH declares that the radio equipment type RCD21 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

Service

If, despite correct handling, faults or malfunctions occur or if the product was damaged, please contact your retailer or the manufacturer.

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