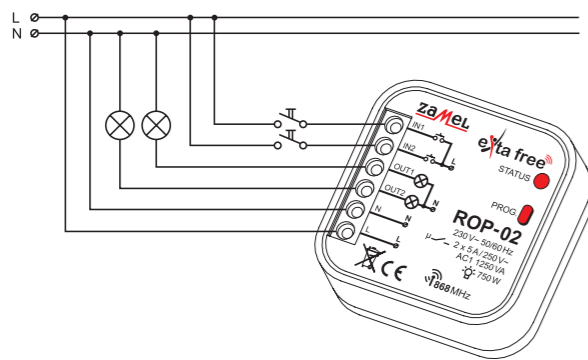


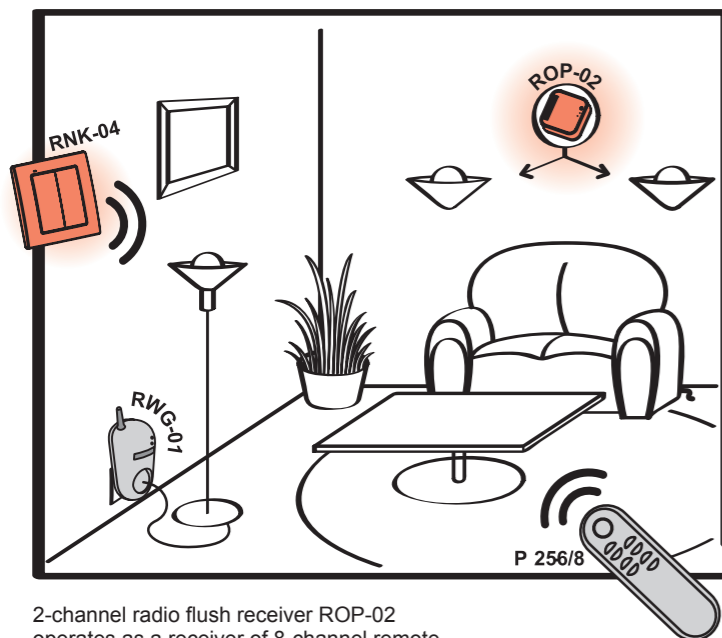
CONNECTION



CAPACITY



APPLICATION



2-channel radio flush receiver ROP-02 operates as a receiver of 8-channel remote controller P-256/8 and of 4-channel button radio transmitter RNK-04 (light sources switch on/switch off control). The above mentioned transmitters can also control operation of radio lighting switch RWL-01 and remote control socket RWG-01.



The ZAMEL company devices which are characterised with this sign can cooperate with each other.

WARRANTY CARD

There is 24 months guarantee on the product

- ZAMEL provides a two-year warranty for its products.
- The ZAMEL warranty does not cover: a) mechanical defects resulting from transport, loading / unloading or other circumstances b) defects resulting from incorrect installation or operation of ZAMEL products; c) defects resulting from any changes made by CUSTOMERS or third parties, to products sold or equipment necessary for the correct operation of products sold; d) defects resulting from force majeure or other aleatory events for which ZAMEL is not liable; e) power supply (batteries) to be equipped with a device in the moment of sale (if they appear);
- All complaints in relation to the warranty must be provided by the CUSTOMER in writing to the retailer after discovering a defect.;
- ZAMEL will review complaints in accordance with existing regulations.;
- The way a complaint is settled, e.g. replacement of the product, repair or refund, is left to the discretion of ZAMEL.
- Guarantee does not exclude, does not limit, nor does it suspend the rights of the PURCHASER resulting from the discrepancy between the goods and the contract.

Salesman stamp and signature, date of sale

ROP-02 MOUNTING

- Disconnect power supply by the phase fuse, the circuit-breaker or the switch-disconnector combined to the proper circuit.
- Check if there is no voltage on connection cables by means of a special measure equipment.
- Connect the cables with the terminals in accordance with the installing diagram.
- Install ROP-02 device in installation cable box.
- Switch on the power supply from the mains.

RNK-04 FUNCTIONING, MOUNTING

By pressing the button, the transmitter sends a signal with 868,32 MHz frequency which controls EXTA FREE receivers. **Device programming procedure (adding a transmitter to a receiver's memory) is described in particular EXTA FREE manual instructions.** The device range (up to 250 m depending on a receiver) can be increased by means of a re-transmitter or few RTN-01 retransmitters. The device can be mounted in any place by means of double-sided adhesive tape or wall plugs 5 x (3 x 30) mm.

Mounting by means of wall plugs:

- Remove the button - to do it press the button on one side, and on the other side put a screwdriver into a slot and lift up the button.
- Find a place on the wall to mount the transmitter, make two holes corresponding mounting holes from the transmitter's base.
- Set wall plugs in the holes.
- Fix the base by means of screwing screws into wall plugs.
- Place the button again.

BATTERY CHANGE
Battery discharge status is signalled by several LED red diode flashes during transmission time.

- Remove the button (mounting - point 1).
- By means of a screwdriver lever up the printed-circuit board releasing the bottom latch and remove it from the base.
- Remove the battery from the latch.
- Mount a new battery. Watch battery polarisation marked on the latch. Wrong battery mounting may cause device damage.
- Put the removed printed-circuit board back in the base.
- Put back the button.

CAUTION: While changing the battery, it is suggested to press any of the buttons for about 5 seconds before putting it into a latch. Next press transmission button several times to check its operation. If the transmitter does not work properly repeat the battery change procedure.

RZB-04 WIRELESS CONTROL SET - LIGHTING, 2-CHANNEL

MANUAL INSTRUCTION



ZAMEL Sp. z o.o.



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DESCRIPTION

Radio flush receivers are used both as elements in mounting in flush and surface installation cable boxes and as an actuator built directly in lighting fitting casings and other receivers). ROP-02 enables operation in 5 different modes (switching on, switching off, monostable mode, bistable mode, time mode).

FEATURES

- complete set of wireless control (4-channel button radio transmitter RNK-04 and 2-channel radio flush receiver ROP-02).
- 2 output relays (dry contacts 230V AC),
- lighting, heating operation control, other receivers control,
- easy flush installation Ø60 mm,
- 5 operation modes: switching on, switching off, monostable mode, bistable mode, time mode (switch off delay),
- wide operation range (up to 200 m),
- operation is optically signalled,
- low current consumption, possibility of constant operation,
- possibility of increasing operation range by means of RTN-01 retransmitter.



CAUTION! The device is designed for single-phase installation and must be installed in accordance with standards valid in a particular country. The device should be connected according to the details included in this operating manual. Installation, connection and control should be carried out by a qualified electrician staff, who act in accordance with the service manual and the device functions.

In case of casing dismantling an electric shock may occur, and the guarantee is lost then. Before installation make sure the connection cables are not under voltage. The cruciform head screwdriver 3,5 mm should be used to instal the device. Improper transport, storage, and use of the device influence its wrong functioning.

It is not advisable to instal the device in the following cases: if any device part is missing or the device is damaged or deformed. In case of improper functioning of the device contact the producer.



The symbol means selective collecting of electrical and electronic equipment. It is forbidden to put the used equipment together with other waste.

TECHNICAL DATA

	RNK-04	ROP-02
Input (supply) terminals:	-	L, N
Input rated voltage:	3 V DC (CR2032 battery)	230 V AC
Battery life:	3 + 5 years	-
Input voltage tolerance:	-	-15 + +10 %
Nominal frequency:	-	50 / 60 Hz
Nominal power consumption:	-	0,39 W („stand-by” mode) / 0,69 W operation mode 1 channel / 1,09 W operation mode 2 channels
Number of operation modes:	-	5
Number of channels:	4	2
Transmission:	radio 868,32 MHz	
Coding way:	unidirectional	
Coding::	addressing transmission	
Maximum number of remote controls:	-	32
Range:	up to 250 m in the open area	
Time adjustment:	-	1 sec+ 18 hours (every 1 sec)
Optic signalling of transmitter's operation:	LED red diode	
Input terminals:	-	IN1, IN2
Transmitter's input (supply) terminals:	-	OUT1, OUT2 (voltage contacts)
Relay contact parameters:	-	2NO 5A/ 250V AC AC1 1250 VA
Number of terminal clamps:	-	6
Section of connecting cables:	-	up to 2,5 mm ²
Ambient temperature range:	-10 + +55 °C	
Operating position:	free	
Casing mounting:	wall plugs, double-sided adhesive tape	installation cable box Ø60 mm
Casing protection degree:	IP20 (EN 60529)	
Protection level:	III	II
Overvoltage category:	-	II
Pollution degree:	-	2
Surge voltage:	-	1 kV (EN 61000-4-5)
Dimensions:	90 x 80 x 11,5 mm	47,5 x 47,5 x 20 mm
Weight:	0,038 kg	0,039 kg
Reference standard:	ETSI EN 300 220-1, ETSI EN 300 220-2	EN 60669, EN 60950, EN 61000

APPEARANCE

Input terminals (IN1, IN2)

Output terminals (OUT1, OUT2)

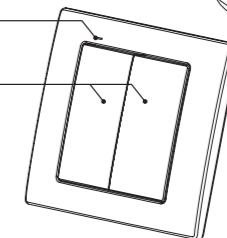
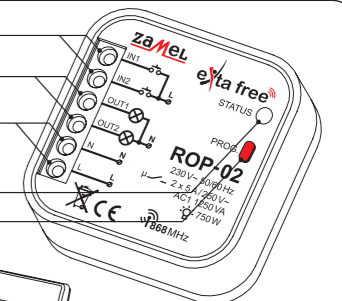
Input (supply) terminals (L, N)

Optic signalling of receiver's operation

Programming push-button

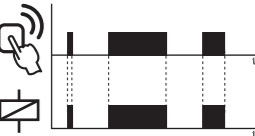
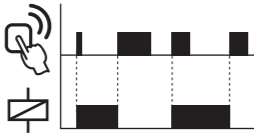
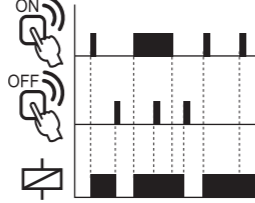
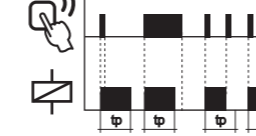
Optic signalling of transmitter's operation

Push-buttons




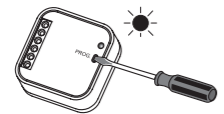

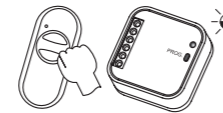
ROP-02 OPERATION

ROP-02 can operate in five modes for every channel:

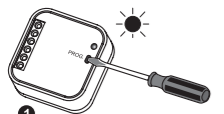


<p>ON MONOSTABLE the relay operates only while pressing transmitter's push-button.</p> 	<p>ON/OFF BISTABLE (one push-button) the device changes relay status cyclically always after pressing the same push-button.</p> 	<p>ON SWITCH ON the device switches on after pressing the push-button.</p> <p>OFF SWITCH OFF the device switches off after pressing the push-button.</p> 	<p>ON TIME the device switches on according to the adjusted time (tp), but it may be switched off before adjusted time finishes. Default settings - 15 seconds.</p> <p>CAUTION! Adjusted time can not be deleted.</p> 
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RADIO TRANSMITTERS PROGRAMMING - CHANNEL 1

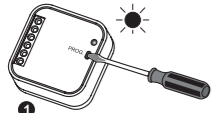


MONOSTABLE mode:

- 1  Press transmitter's push-button for a longer time.
- 2  Press PROG push-button of ROP-02 device for a longer time until LED red diode switches on (constant signal). Next release PROG push-button.
- 3  Release transmitter's push-button. LED red diode switches on (first signal pulsates, next the signal is constant).
- 4  Press the same transmitter's push-button and release it. LED red diode switches on (the signal pulsates) and next it switches off - THE TRANSMITTER IS ADDED.

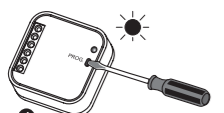


BISTABLE mode:

- 1  Press PROG push-button of ROP-02 device for a longer time until LED red diode switches on (constant signal). Next release PROG push-button.
- 2  Press the transmitter's push-button for a longer time. LED red diode switches on (first signal pulsates, next the signal is constant).
- 3  Release transmitter's push-button. LED red diode switches on (the signal pulsates), next the LED red diode switches off - it means the TRANSMITTER IS ADDED.

SWITCH ON/SWITCH OFF mode (two push-buttons):



- 1  Press PROG push-button of ROP-02 device for a longer time until LED red diode switches on (constant signal). Next release PROG push-button.
- 2  Press and release transmitter's first push-button. LED red diode switches on (first signal pulsates, next the signal is constant).
- 3  Press and release the second transmitter's push-button. LED red diode switches on (the signal pulsates) and next it switches off - THE TRANSMITTER IS ADDED.

TIME mode (one push-button):

- 1  Press PROG push-button of ROP-02 device for a longer time until LED red diode switches on (constant signal). Next release PROG push-button.
- 2  Press PROG push-button of ROP-01 device and then release it. LED red diode switches on (first signal pulsates, next the signal is constant).
- 3  Press and release the same transmitter's push-button. LED red diode switches on (signal pulsates) and then switches off - THE TRANSMITTER IS ADDED.

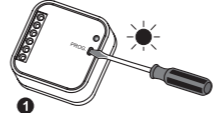

An exemplary programming procedure with the use of P-257/2 remote controller. The procedure for the rest of radio EXTA FREE transmitters is analogous. **CAUTION: Every transmitter can cooperate with ROP-02 in a different mode, depending on how they were added to the device. One transmitter can be added during one programming cycle. Full memory is signalled with pulsating LED red diode.**

RADIO TRANSMITTERS PROGRAMMING - CHANNEL 2


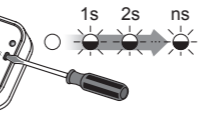
- 1  Press PROG push-button of ROP-02 device for a longer time until LED red diode switches on (constant signal). Next release PROG push-button. Wait (for about 5 seconds) till LED red diode switches on (first signal pulsates, next the signal is constant).
- 2  Choose one of ROP-02 five operation modes and programme the device in the same way as for channel 1.

CAUTION: For the monostable mode, press the button on the remote before pressing PROG push-button.




TIME PROGRAMMING

- 1  Press PROG push-button of ROP-02 device for a longer time till LED red diode switches on (constant signal). Next release PROG push-button. Wait (for about 5 seconds) till LED red diode switches on (first signal pulsates, next the signal is constant).
- 2  Wait again (for about 5 seconds) till LED red diode switches on (first signal pulsates, next the signal is constant).

for CHANNEL 1

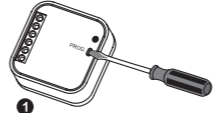

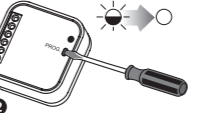
- 3  Press PROG push-button of ROP-02 device and then release it. LED red diode switches off and then switches on (signal pulsates). Every LED diode pulse equals 1 second.
- 4  After the adjusted time is finished (the number of LED red diode flashes) press PROG push-button and then release it - TIME IS ADDED.

for CHANNEL 2

- 5  Wait again - third time (for about 5 seconds) till LED red diode switches on (first signal pulsates, next the signal is constant).
- 6  Press PROG push-button of ROP-02 device and then release it. LED red diode switches off and then switches on (signal pulsates). Every LED diode pulse equals 1 second.
- 7  After the adjusted time is finished (the number of LED red diode flashes) press PROG push-button and then release it - TIME IS ADDED.

Maximum time is 18 hours.

RADIO TRANSMITTERS DELETION

- 1  Press PROG push-button of ROP-02 device for a longer time.
- 2  After 5 seconds LED red diode switches on (signal pulsates) and then it switches off.
- 3  Release the push-button in ROP-02 - MEMORY IS DELETED.

COOPERATION AND OPERATING RANGE

Symbol	ROP-01	ROP-02	ROB-01	SRP-02	SRP-03	RWG-01	RWL-01	ROM-01	ROM-10	RDP-01	RTN-01
RNK-02	180 m	200 m	200 m	200 m	200 m	250 m	180 m	250 m	250 m	180 m	250 m
RNK-04	180 m	200 m	200 m	200 m	200 m	250 m	180 m	250 m	250 m	180 m	250 m
P-256/8	230 m	250 m	250 m	250 m	250 m	300 m	200 m	300 m	300 m	230 m	300 m
P-257/4 (2)	180 m	200 m	200 m	200 m	200 m	250 m	180 m	250 m	250 m	180 m	250 m
RNM-10	230 m	250 m	250 m	250 m	250 m	300 m	200 m	300 m	300 m	230 m	300 m
RNP-01	160 m	180 m	180 m	180 m	180 m	200 m	160 m	200 m	200 m	160 m	200 m
RNP-02	160 m	180 m	180 m	180 m	180 m	200 m	160 m	200 m	200 m	160 m	200 m
RNL-01	160 m	180 m	180 m	lack*	lack*	200 m	160 m	200 m	200 m	160 m	200 m
RTN-01	200 m	200 m	200 m	200 m	200 m	250 m	200 m	250 m	250 m	200 m	250 m
RCR-01	160 m	180 m	180 m	lack*	lack*	200 m	160 m	200 m	200 m	160 m	200 m
RTI-01	160 m	180 m	180 m	180 m	180 m	200 m	160 m	200 m	200 m	160 m	200 m
RXM-01	230 m	250 m	250 m	250 m	250 m	300 m	200 m	300 m	300 m	230 m	300 m

* - 1-channel transmitters do not cooperate with roller blind controllers.

CAUTION: The given range concerns open area - an ideal condition without any natural or artificial obstacles. If there are some obstacles between a transmitter and a receiver, it is advisable to decrease the range according to: wood and plaster: from 5 to 20 %, bricks: from 10 to 40 %, reinforced concrete: from 40 to 80 %, metal: from 90 to 100 %, glass: from 10 to 20 %. Over- and underground medium and high electrical power lines, radio and television transmitters, GSM transmitters set close to a device system have also a negative influence on the range.