

ledix



2-channel radio flush receiver ROP-03



Mounting in a Ø60
junction box



Mounting
indoor only



Co-operation
with EXTRA FREE
transmitters

ROP-03 receiver is designed to carry out simple control functions in the low-voltage installations from 10 ÷ 14 V DC. In connection with EXTRA FREE system transmitters it enables the realisation of the switch on/switch off function, the monostable mode, the bistable and time modes. The receiver is recommended for use with LED diode lighting.
Characteristic features:

- cooperation with wireless EXTRA FREE system transmitters,
- independent control of up to two receivers in the following modes: switch on/switch off, monostable, bistable, time,
- 2 relay potential free outputs (NO) with a maximum capacity of 5 A for 250 V AC,
- wide operation range (up to 230 m outdoors),
- small dimensions - suitable for mounting in a typical Ø60 junction box,
- low power consumption in the standby mode (0.15 W) - the receiver is used to a continuous operation.

zaMeL CET

Cet Lighting Sp. z o.o.

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10 ÷ 14 V DC / 0,7 W; IP20

weight: 36 g



CET Lighting Sp. z o.o. declares that the equipment complies with the principal requirements and other applicable rules of the RTTE Directive.



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

Declaration of Conformity is on www.ledix.pl

ROP-03 ENG Ver. 01

zaMeL CET

10 ÷ 14 V DC

2-channel radio flush receiver

ledix

ROP-03

DESCRIPTION

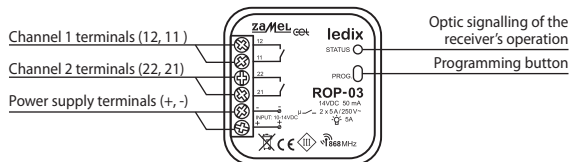
ROP-03 receiver is designed to carry out simple control functions in the low-voltage installations from 10 ÷ 14 V DC. This device in connection with any wireless EXTA FREE (www.extafree.pl) system transmitter enables the realisation of the switch on / switch off function, the monostable mode, the bistable and time modes. The receiver is recommended for use with LED diode lighting. ROP-03 device has two potential free (NO) relay outputs with a maximum capacity of 5 A for 250 V AC. Small dimensions of the casing allow for a direct mounting of the receiver in the Ø60 mm junction box. The product belongs to the ECOLINE group and is characterised by low power consumption. The features of the controller:

- cooperation with wireless EXTA FREE system transmitters,
- realisation of the control function in low voltage installations including LED diode lighting,
- two output relays (dry contacts),
- the possibility of independent control of two circuits,
- multiplicity of operation modes: switch on / switch off, monostable, bistable, time,
- wide operation range (up to 230 m outdoors),
- a possibility to increase the operation range by using RTN-01 retransmitter,
- operation is optically signalled,
- low power consumption in the standby mode (0.15 W) - a device designed for continuous operation.

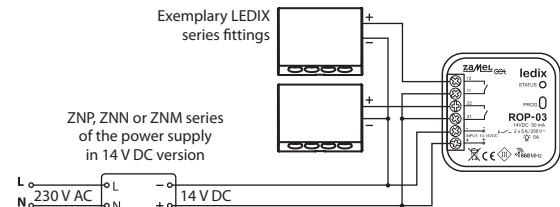
TECHNICAL DATA

Nominal supply voltage:	10 ÷ 14 V DC
Nominal power consumption:	0,7 W
Number of channels:	2
Maximum current in the channel:	5 A / 250 V AC
Relay contacts parameters:	2xNO 5 A/250 V AC1 1250 VA
Modes:	Switch on/switch off, Monostable, Bistable, Time
Control:	EXTA FREE system transmitters
Radio transmission:	868,32 MHz
Transmission method:	One-way without confirmation
Coding:	Yes – transmission with addressing
Maximum number of transmitters:	32
Range:	Up to 230 m in the open area
Time adjustment:	1 s ÷ 18 h
Ambient temperature range:	-10 ÷ +55 °C
Mounting:	In a Ø60 junction box
Casing protection degree:	IP20
Protection class:	III
Dimensions:	47,5 x 47,5 x 20 mm
Weight:	36 g
Reference standard:	PN-EN 60669; PN-EN 60950; PN-EN 61000

APPEARANCE



DIAGRAM



MAXIMUM CURRENT CAPACITY:



MOUNTING

CAUTION! The device is designed for single-phase installation and must be installed in accordance with standards valid in a particular country. 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.

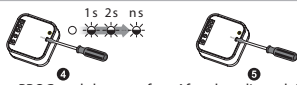
1. Disconnect power supply by the phase fuse, the circuit-breaker or the switch-disconnector combined to the proper circuit.
2. Check if there is no voltage on connection cables by means of a special measure equipment.
3. Connect the power supply to 230 V AC.
4. Connect the output cables with appropriate receiver's cables in accordance with the connection diagram.
5. Mount the controller in the Ø60 junction box.
6. Switch on the power supply from the mains.
7. Add selected transmitters to the receiver (description in the TRANSMITTERS' PROGRAMMING section) and check if they work properly.

TIME PROGRAMMING



Press PROG push-button of ROP-03 device for a longer time till LED red diode switches on (constant signal). Next release the PROG push-button. Wait (for about 5 seconds) till LED red diode switches on (first signal pulsates, next the signal is constant)

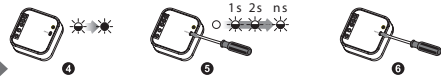
for
CHANNEL 1



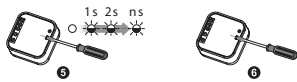
Press PROG push-button of ROP-03 device and then release it. LED red diode switches off and then switches on (signal pulsates). Every LED diode pulse equals 1 second

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



Wait for the third time (about 5 seconds) until LED red diode switches on (first signal pulsates, next the signal is constant)



Press PROG push-button of ROP-03 device and then release it. LED red diode switches off and then switches on (signal pulsates). Every LED diode pulse equals 1 second

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 for each channel.

RADIO TRANSMITTERS DELETION



Press PROG push-button of ROP-03 device for a longer time.



After 5 seconds LED red diode switches on (the signal pulsates) and then it switches off.



Release the push-button in ROP-03 - MEMORY IS DELETED.

OPERATION

The device can operate in five modes for every channel:



MONOSTABLE

the relay operates only while pressing transmitter's push-button.



BISTABLE

(one push-button) the device changes the relay status cyclically always after pressing the same push-button.



SWITCH ON

the device switches on after pressing the push-button.



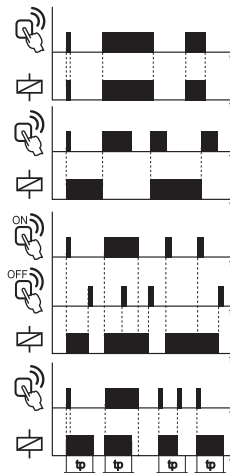
SWITCH OFF

the device switches off after pressing the push-button.



TIME

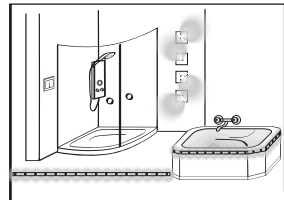
the device switches off according to the adjusted time (t_p), but it may be switched off before the adjusted time finishes. Default settings - 15 seconds.



CAUTION! The adjusted time can not be deleted.

APPLICATION

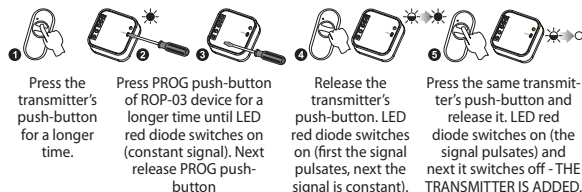
The application presents how to use LEDIX series fittings and ROP-03 radio receiver. LEDIX TICO fittings are connected to OUT1 output. A hermetic LED strip and a flexible LED strip are connected to OUT2 output. OUT1 and OUT2 outputs are switched on / switched off by means of the double NO dry contact (normally open) cooperating with RNP-02 flush battery transmitter. Time mode can be realised from every output which means that the light switches off automatically after a adjusted time is finished. Each output can be controlled independently.



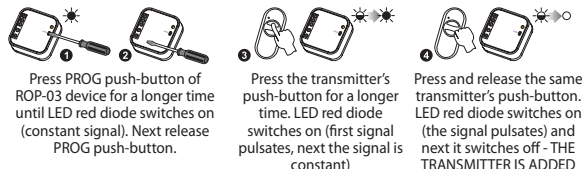
RADIO TRANSMITTERS PROGRAMMING - CHANNEL 1

An exemplary programming procedure with the use of P-257/2 remote control. The procedure for the rest of radio EXTA FREE transmitters is analogous. **CAUTION: Every transmitter can cooperate with ROP-03 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.**

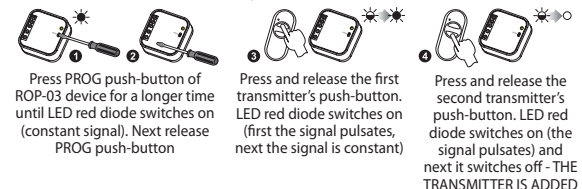
MONOSTABLE mode:



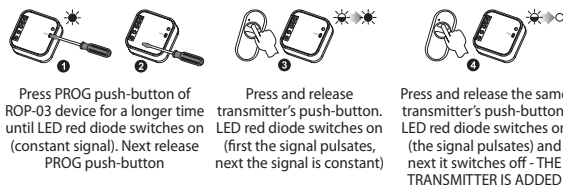
BISTABLE mode:



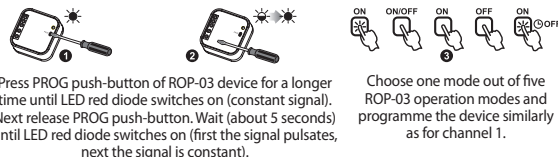
SWITCH ON/SWITCH OFF mode (two push-buttons):



TIME mode (one push-button):



RADIO TRANSMITTERS PROGRAMMING - CHANNEL 2



CAUTION:

For the monostable mode press the remote control push-button before pressing PROG push-button.

OPERATION TABLE

Symbol	RNK-02	RNK-04	P-256/8	P-257/2	P-257/4	RNM-10	RNP-01	RNP-02	RNL-01	RTN-01	RCR-01	RT-01	RXM-01	P-260
ROP-03	200	200	250	200	200	250	180	180	180	200	180	180	250	-

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: bricks: from 10 to 40 %, wood and plaster: from 5 to 20 %, 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.