ledix

SCAN

the technical data

Monochrome LED controller

SLR-01

ø60 Mounting in a Ø60 junction box

Mounting indoor only

SERIA F Co-operation with EXTA FREE transmitters

SLR-01 controller is designed for cooperation with light sources equipped with LED diodes and supplied with 10 ÷ 14 V DC. In connection with standard monochrome LEDIX fittings and with other LED diode products in cooperation with transmitters of EXTA FREE wireless control system the SLR-01 controller allows a function with switching on/switching off without necessity to lay the cabling for the switches. In addition a brightening/dimming is possible for LED lighting connected with SLR-01.

Characteristic features:

- the controller is designed to carry out simple functions connected with lighting control such as: switching on/ switching off, bistable mode, time mode, brightening/dimming.
- possibility for wireless control system (EXTA FREE transmitters) or wired control system (normally open contact),
- one transistor output (MOSFET) with maximum current capacity of 4 A,
- wide operation range (up to 230 m in the open area),
- small dimensions (easy mounting in a Ø60 junction box),
- low power consumption in the standby mode – controller is designed for continuous operation .

zamel

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10÷14 V DC / 0,22 W; IP20
weight: 25 g

III CE

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**

SLR-01 ENG Ver. 01

zamel

10÷14VDC

ledix

Monochrome LED controller

SLR-01

www.ledix.pl

DESCRIPTION

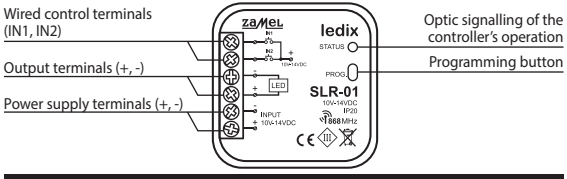
SLR-01 controller is designed for cooperation with monochrome LEDIX standard lamps and with other LED products supplied with 10÷14 V DC (monochrome tapes, LED strips and modules, LED lamps). The controller controls the functions: switching on/ switching off by means of one or two buttons, brightening/dimming and automatic switching off after a programmed time (with gradual dimming within 10 s).
The controller features:

- to control a standard monochrome LED fittings of the LEDIX system,
- to control other monochrome LED products supplied with 10÷14 V DC,
- to carry out the functions: switching on/ switching off, brightening/dimming, timer mode with turning off,
- radio control (transmitters of EXTA FREE system) or wired control system (inputs IN1, IN2),
- PWM output of the MOSFET transistor – maximum current capacity of 4 A,
- 9-bit fast PWM outputs allow the brighting/dimming function to be very fluent,
- low power consumption in the standby mode (0.25 W) – controller is designed for continuous operation (ECOLINE).

TECHNICAL DATA

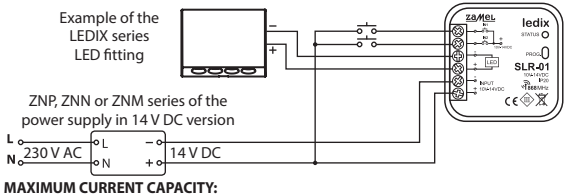
Nominal supply voltage:	10 ÷ 14 V DC
Nominal power consumption:	0,22 W
Number of channels:	1
Maximum current in the channel:	4 A
Controlling signal:	PWM 9-bit
Number of wired outputs:	2 (IN1, IN2)
Radio transmission:	868,32 MHz
Transmission method:	One-way without confirmation
Coding:	Yes – transmission with addressing
Maximum number of transmitters:	32
Range:	Up to 230 m in the open area
Time adjustment:	1 s ÷ 18 h
Number of connection terminals:	6
Maximum cross-section of connection cables:	Up to 2,5 mm^2
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:	25 g
Reference standard:	PN-EN 60669; PN-EN 61000

APPEARANCE



DIAGRAM

CAUTION! Nominal output voltage of the power supply (10÷14 V DC) and its nominal output power must be adjusted for LED light source connected to the controller.



MAXIMUM CURRENT CAPACITY:
Up to 40 W for LED diode products supplied with 10 V
Up to 48 W for LED diode products supplied with 12 V
Up to 56 W for LED diode products supplied with 14 V

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 cables to the appropriate control terminals in accordance with the connection diagram (in case of radio control only, it is not required to connect the cables to IN1, IN2 terminals).
5. Mount the controller in the Ø60 junction box.
6. Switch on the power supply from the mains.
7. Add selected transmitters to the controller (a description is in TRANSMITTERS' PROGRAMMING section) and check their proper functioning.

COOPERATION WITH RADIO MOTION SENSOR RCR-01

Mode 1 – only motion sensor

SLR-01 controller must be programmed in the time mode with a minimum time adjustment of 15 s. If the RCR-01 motion sensor detects motion in the detection field and sends a signal to the controller and the programmed time is counted from the beginning. LED light fitting is switched on so long as motion is detected in the detection zone of the RCR-01 sensor.

Press NAUKA push-button in RCR-01 and then release the button. Red LED diode switches on under the lens (constant signal)

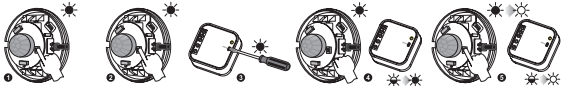
Press PROG push-button to enter the SLR-01 programming mode. The LED diode in the controller switches on (constant signal)

Press NAUKA push-button in RCR-01, and then release it. The LED diode in the controller switches on (first the signal pulsates, next the signal is constant)

Press NAUKA push-button in RCR-01 and then release the button. Red LED diode in the controller switches on (the signal pulsates) and then switches off - THE SENSOR IS ADDED. Wait until the LED red diode in RCR-01 switches off

Mode 2 – motion sensor with a twilight switch

SLR-01 controller must be programmed in the monostable mode. The RCR-01 motion sensor detects the motion in the detection field and sends „ON" signal to the controller. „OFF" signal will be sent 20 s after stopping of the motion in the detection zone.



Press NAUKA push-button in RCR-01 and then release it. Red LED diode will light switches on under the lens (constant signal)

Press again NAUKA push-button in RCR-01for a longer time

Press PROG push-button to enter the SLR-01 controller in the programming mode. The LED diode in the controller switches on (constant signal)

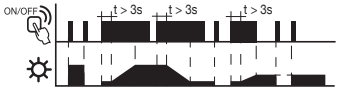
Release the NAUKA button in RCR-01. The LED diode in the controller will light up (first the signal pulsates, next the signal is constant)

Press NAUKA push-button in RCR-01 and then release the button. Red LED diode switches on in the controller (flashing signal) and then goes out – THE SENSOR IS ADDED. Wait until the LED diode in RCR-01 switches off

OPERATION - RADIO CONTROL

Switch ON/OFF with BISTABLE button of the transmitter + brightening/dimming function

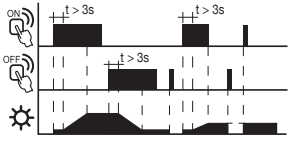
The controller changes the output function periodically after short pressing of the transmitter's push-button always the same. Holding the transmitter's push- button longer (>3s) starts the brightening function up to the maximum. The dimming function is available after releasing and holding of the transmitter's push-button.



Switch ON/ switch OFF with two push-buttons of the transmitter

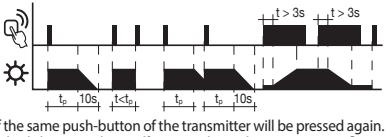
+ brightening/dimming function

The controller switches on the output after pressing of the push-button programmed as „ON" and switches off the output after pressing of the push-button programmed as „OFF". The brightening function is carried out by holding the button „ON" for a longer time (>3s). The dimming function is carried out by holding the button „OFF" for a longer time (>3s).



Time mode

The output is switched on after short pressing of the transmitter's button. The output switches off automatically if the programmed time is reached (1 s to 18 h) or if the same push-button of the transmitter will be pressed again. If the programmed time is reached then switching off is carried out during t=10 s as fluent slowly dimming. If the button will be released again when the dimming function is active, then the time will be counted from the beginning – time retrigable function.



FUNCTIONS WITH IN1 AND IN2 INPUTS

IN1 input – short applying „+" potential to IN1 input will start the switch on/switch off sequence. Longer (>3 s) applying „+" potential to IN1 input will start the brightening function up to maximum. Dimming function is available up to minimum when „+" potential is removed and again applied to IN1 input. The input is adapted for co-operation with pull-up switches

IN2 input – applying „+" potential to IN2 input activates superior switching on of the output of the SLR-01 controller. At the time the function for radio control is blocked. If applying „+" potential to IN2 input is removed the controller output is switched off and radio control function is unblocked. The input can be used for co-operation with voltage-free NC contact for example with twilight switch.

RADIO TRANSMITTERS PROGRAMMING

BISTABLE mode:

Press PROG push-button of SLR-01 device for a longer time until LED red diode switches on (constant signal). Next release PROG push-button

Press the transmitter's push-button for a longer time. LED red diode switches on (first signal pulsates, next the signal is constant)

Press and release the same transmitter's push-button. LED red diode switches on (the signal pulsates) and next it switches off - THE TRANSMITTER IS ADDED

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

Press PROG push-button of SLR-01 device for a longer time until LED red diode switches on (constant signal). Next release PROG push-button

Press and release the first transmitter's push-button. LED red diode switches on (first the signal pulsates, next the signal is constant)

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):

Press PROG push-button of SLR-01 device for a longer time until LED red diode switches on (constant signal). Next release PROG push-button

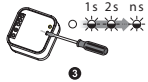
Press and release transmitter's push-button. LED red diode switches on (first the signal pulsates, next the signal is constant)

Press and release the same transmitter's push-button. LED red diode switches on (the signal pulsates) and next it switches off - THE TRANSMITTER IS ADDED

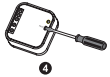
An exemplary programming procedure with the use of P-257/2 remote control. The procedure for the rest of radio EXTA FREE transmitters is analogous. **CAUTION: Every transmitter can cooperate with SLR-01 in a different mode, depending on how they were added to the device. One transmitter can be added during one programming cycle. Full memory is signalled with pulsating LED red diode.**

TIME PROGRAMMING

Press PROG push-button of SLR-01 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)



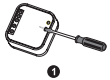
Press PROG push-button of SLR-01 device and then release it. LED red diode switches off and then switches on (signal pulsates). Every LED diode pulse equals 1 second



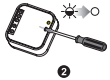
After the adjusted time is reached (the number of LED red diode flashes) press PROG push-button and then release it - TIME IS ADDED

Maximum time is 18 hours.

RADIO TRANSMITTERS DELETION



Press PROG push-button of SLR-01 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 SLR-01 - MEMORY IS DELETED.

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	RTI-01	RXM-01	P-260
SLR-01	180	180	230	180	180	230	160	160	160	200	160	160	230	-

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.