# digiLUX 1.0

USERS MANUAL

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## Dear Customer! Thank you for purchasing digital dusk switch

## digiLUX 1.0

Please become familiar with content of this instruction manual and follow its content.

### digiLUX 1.0

It is a device easy to assemble and operate, which operates independently or as a supplement of digital astronomic programmers (such as CPA-3.0, CPA-3.1, CPA-4.0). It allows for accurate switch on/off of the lighting system in accordance with threshold settings, programmed individually by the user.

#### Basic technical data:

-	detector measuring range	0÷1500 Lx
-	threshold value resolution	1 Lx
_	number of control outputs	1

- current-carrying capacity of the output 8(16)A/230V (relay)

230V +10/-20% 50Hz

- imensions dł/szer/wys 52/58/90 (3 modules)

- sensor IP-56, digiLUX IP-20

- operating temperature range -30/+50°C

The device automatically recognizes any connected counter and checks whether it is operational. In the event of any faults or lack of the device, the display will show the information in the form of a pulsating zero and the keyboard will be blocked. The executive relay remains in its last location. Otherwise, the display shows the current value of the lighting system

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intensity. If the limit value of 1500 Lx is surpassed, the result starts pulsating. It means that the current result of the measurement is higher than the aforementioned limit value.

The digital relay switches on/off the lighting system in accordance with values of the thresholds (P1 and P2) set by the user.



#### **FACTORY SETTTINGS!**

P1=20 Lx - level on which the lighting system is switched on. P2=25 Lx - level on which the lighting system is switched off.

If the lighting system intensity drops below the threshold P1, a dot visible at the right side of the display starts pulsating. It means that from this moment on 1 minute will elapse after which the relay will be switched on. The status of switching on of the relay is signalled by constant lighting of the dot.

#### CHANGE OF VALUES OF THE THRESHOLDS P1 and P2

During the programming process the idle time (when buttons are inactive) should last shorter than 30 seconds. Otherwise the user exits the programming mode without saving the set values.

- 1. Press the button "P"
  - The display will show the symbol **P1** for approx. 1 second. It is the threshold of switching on of the lighting system expressed in Lx, in the case of which the executive relay is switched on. The dot signalizes the possibility to change the set parameter .
- Set the desired value from the range of 1 999 Lx with the buttons "+" or "-". Single pressing of the button ("+" or "-") changes the set value with ± 1 Lx, whereas keeping the button pressed for 3 seconds results in the change of the value at the pace of ±50 Lx/s.
- 3. Press again the button "P". The symbol P2 will appear on the display for 1 second. It is the threshold of switching off of the lighting system expressed in Lx, in the case of which the executive relay is switched off. The dot signalizes the possibility to change the set parameter.
- 4. Set the desired value from the range of 1 999 Lx with the buttons "+" or "-". Single pressing of the button ("+" or "-") changes the set value with ± 1 Lx, whereas keeping the button pressed for 3 seconds results in the change of the value at the pace of ±50 Lx/s. Of course, it is impossible to set the value lower than or identical with the one set for the threshold P1.
- 5. Pressing of the button "P" twice saves the values set earlier. The programming process is finished and the display shows the current intensity level expressed in Lx.

If due to any reasons, there will occur an error during the saving process, the display will show **Err** for approx. 3 seconds. It means that the currently set values have not been accepted and the procedure should be performed again.



#### NOTE!

Perform the procedure of setting of switch on/off thresholds (P1 and P2) particularly carefully. If the measuring detector is located in the field of lighting of the switched on light source, the user

should set an adequately bigger difference in values of the thresholds P1 and P2. Too small difference may cause that (after the light is switched on as the consequence of increase of the lighting intensity result) the source will be switched off due to surpassing of the value of the threshold P2. Such a situation may occur if the threshold values were set for example in the following manner: P1=1 Lx and P2=2 Lx, and the detector was placed in the field of the source light. Then it is safe to increase the threshold value with several Lxs. On the other hand, if the measuring detector is not located in the field of the source light, such settings are permissible

#### **READOUT OF THE THRESHOLD VALUES P1 and P2**

In order to read out the threshold values one should perform almost the same actions as during the change of their values.

- Press the button "P"
- The display will show the symbol P1 for approx. 1 second. It is the threshold of switching on of the lighting system expressed in Lx, in the case of which the executive relay is switched on. Then the display will show the digital value of the given threshold.
- 3. Press again the button "P". The symbol P2 will appear on the display for 1 second. It is the threshold of switching off of the lighting system expressed in Lx, in the case of which the executive relay is switched off. Then the display will show the digital value of the given threshold.
- 4. Press again the button "P". The display will show the current value of the light system intensity expressed in Lx. Hence, the difference consists not in modifying the set values but in taking a step further and pressing the button "P".



#### NOTE!

Pulsating of 0 (zero) on the display.

Zero pulsates on the display in two cases:

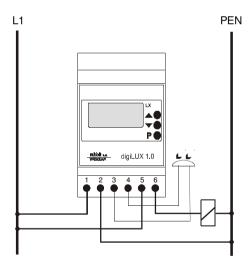
- a. lack of the connected measuring head,
- b. the measuring head is not lit with any light (Lx).

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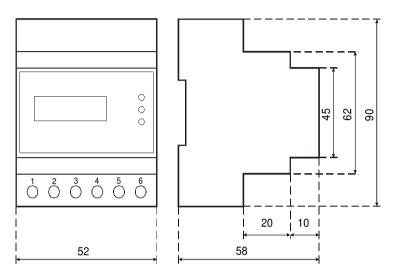
#### **MEASURING DETECTOR**

The measuring detector is placed within a waterproof shielding. In order to connect the central unit, unscrew the upper lid and by means of any two-core conductor connect the detector's clamps with the clamps (3) and (4) of the central unit. In such a case polymerisation of the connection is not important. The result of the measurement of the lighting system intensity shown on the display is presented as an average from the range of 4 seconds, the fact which significantly increases the measurement accuracy. Therefore, the measurement result is refreshed every four seconds.

#### **SCHEMA**



#### External dimensions of the controller:



#### ADDITIONAL INFORMATION



Rabbit declares, that product is designed and produced Rabbit declares, that product is designed an according to operation safety standardEN 60950-1.



Use of WEEE symbol (crossed out waste bin symbol) means, that this product must not be treated as household waste. After product operation finish it should be removed in separate, specially specified point. To obtain more precise information regarding recycling of this product, contact local authorities, waste utilization service supplier or seller of this product.

By assuring proper utilization you help protecting natural environment.