



INTERACTIVE·HOME

## 1 REVIEW

LED lighting device is designed for automatic lighting of stairway steps at night.

## 2. DELIVERY SET

1. User manual	1
2. 16-channel controller	1
3. 8-channel expansion module (only in set "Professional 24" or "Professional 32")	1
4. Motion sensor with integrated light sensor	2
5. Remote light sensor	1
6. Set-up and connection kit	1

## 3. TECHNICAL SPECIFICATIONS

1. Quantity of channels (quantity of connected steps)	24 *
2. Power voltage	12 V
3. Maximum load current (1 step)	3 A
4. Light-sensitive	resistor in housing
5. Protection degree	IP22
6. Ambient temperature	- 10 ... + 50° C
7. Controller housing dimensions (with 8-channel module)	157 x 88 x 58 mm

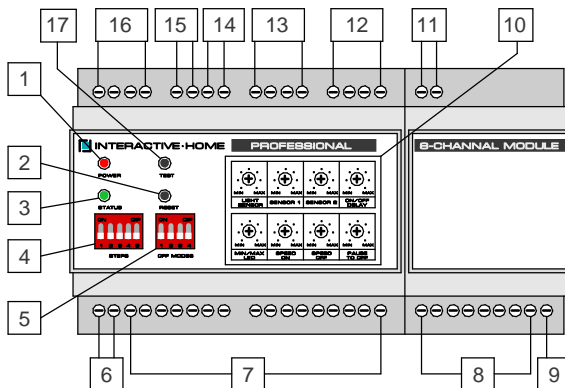
\* with 8-channel module

## 4. MAIN SYSTEM ADVANTAGES

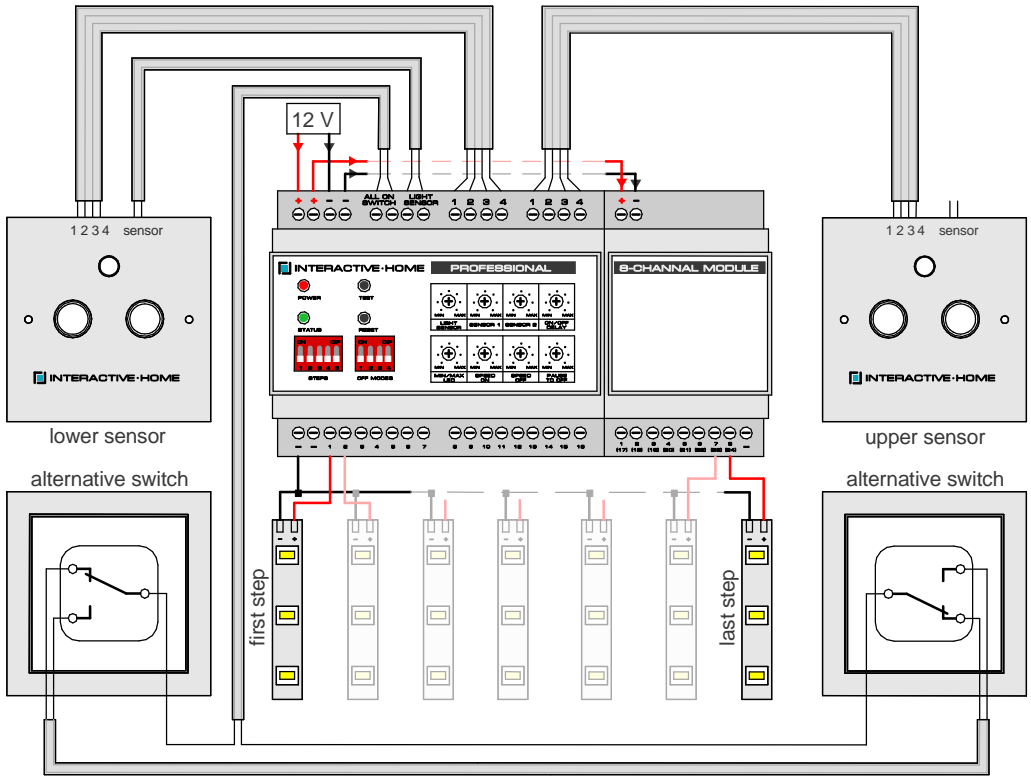
1. Small housing dimensions and its convenient mounting on DIN-rail in standard wiring built-in and external boxes.
2. Motion sensors in standard wiring boxes.
3. Integrated light sensors.
4. Convenient and understandable system setup.
5. "Pilot lighting" of the first and the last stairway steps.
6. Possibility of alternative switch turning on to control the lighting at any time of day, regardless of illumination.
7. System modularity.
8. Low power consumption.
9. Long service life of light-emitting-diode sources (strips and spot lights).
10. Easy mounting and operation.

## 5. CONTROLS AND CONTROLLER CONTACTS

1. 12V indication.
2. Restart button.
3. Light sensor status indication.
4. Selection of steps quantity.
5. Selection of animation mode.
6. Minus ("-") common output for 16 channels.
7. Plus ("+") channel outputs from 1 to 16.
8. Plus ("+") channel outputs from 17 to 24.
9. Minus ("-") common output for 8 channels.
10. Individual setups of operation modes.
11. 12V power of 8-channel module.
12. Outputs of upper motion sensor.
13. Outputs of lower motion sensor.
14. Outputs of light sensor.
15. Outputs of alternative switch.
16. 12V power of 16-channel module.
17. "Simulation of low sensor response" button (for convenient system setup).



## 6. CONNECTION SCHEME



### Connection procedure:

1. Carefully study the user manual prior to the connection execution.
2. Check the required tool availability.
3. Make the trial mounting prior to the equipment connection to ensure the system operability.
4. Select the installation place for the controller box (for example, under the stairways or in the switchboard room).
5. Install the controller box.
6. Installation of the controller:
  - 6.1 Connect the 16-channel module "Professional" and 8-channel module.
  - 6.2 Install the assembled module on DIN-rail.
7. Mount the aluminum profiles for LED strips.
8. Lay the cable (for example, 2 x 0,5) from the steps to the controller installation place.
9. Connect the LED strips to the laid wires with special connectors.
10. Installation of the motion sensors:
  - 10.1 Motion sensors should be obligatory installed at the beginning of the first and the last steps.  
Horizontal distance from the sensor to the step beginning is about 10cm and the vertical distance is about 10– 15cm.
  - 10.2 Lay the cable (for example, 6 x 0,35) to motion sensors. Install the box (outlet box) into the wall.
  - 10.3 Connect the sensors to the laid wires and controllers according to the connection scheme, numerical designation of contacts and color designation of wires.
11. Connect the light sensor (to be connected only in such place where "day – night" cycle is changed in the most correct way).
12. Insert the sensor into the outlet box. Install the sensor cover.

- 13. Connect the alternative switches according to the connection scheme.
- 14. Carefully check the proper connection.
- 15. Select the suitable power unit depending on the total power of the used LED strips.
- 16. Mount the power unit according to the connection scheme.

7. SYSTEM SETUP PROCEDURE

- Prior to the power supply to assembled system:
- 1. For the setup convenience one should unscrew the controls of individual parameter setup (see the pos.10 of the item 5 "Controls and controller contacts") to the left end position corresponding to the position "min".
  - 2. Set the quantity of steps in accordance with the data of table 1.

Table 1. Setup of steps quantity with "Steps" switch.

Steps quantity	Switch position	Steps quantity	Switch position	Steps quantity	Switch position	Steps quantity	Switch position
5		12		19*		26**	
6		13		20*		27**	
7		14		21*		28**	
8		15		22*		29**	
9		16		23*		30**	
10		17*		24*		31**	
11		18*		25**		32**	

\* it's possible when using the first additional 8-channel module (16+8)  
\*\* it's possible when using the second additional 8-channel module (16+8+8)

- 3. Set the stairway steps off mode in accordance with the data of table 2.

Table 2. Setup of stairway steps off mode with "off modes" switch

Switch position	Stairway steps off modes
	alternatively one by one from the first or the last step
	smoothly all together
	alternatively one by one from the middle
	alternatively one by one to the middle

4. Supply 12V power to the assembled system. Red indicator "power" is on when there is power.

5. To actuate the "night" lighting mode slowly rotate "light sensor" control ("luminance threshold selection") till the green "status" indicator is on.

At the same time the pilot lighting of the first and the last steps should turn ON.



***set this parameter in such luminance moment when the change of "day/night" modes is required (moment when the stairway is active or off)***

6. Set the coverage range of motion sensors with "sensor 1" (lower sensor) control and "sensor 2" (upper sensor) control. Their range changes from 10 cm to 120 cm.



***set these parameters till false responses are excluded, i.e. the action range should be selected based on 1/2 ..2/3 of a step length***

7. Adjust the brightness of the whole stairway steps lighting using "min / max led" control (minimum / maximum brightness of LED strips).



***when making initial settings set the control on 2/3 of brightness***

8. Adjust the speed at which the steps lighting will turn ON using "speed on" control.

9. Adjust the speed at which the steps lighting will turn OFF using "speed off" control.

10. Adjust the pause before the step lighting turning OFF using "pause to off" control ("pause before turning off"). The adjustment range is from 0 to 10 seconds.

11. Check the configured settings. If necessary repeat the steps 1 - 10.



***for convenience of the system settings use "test" button ( "simulation of lower sensor response") and "reset" button ( "reset / restart") not to wait till the end of the cycle.***

12. To prevent false responses of the light sensor due to accidental shading set the delay of the "night" mode activation ( "mode ON delay") using "on / off delay" control. The adjustment range is from 0 to 30 seconds.



***use this setting if it necessary to avoid accidental shading (for example, from one's own shadow when moving near the light sensor) and after final setting of all parameters***

\* If you have questions about the system setting and operation please contact the "interactive home" support service.

## 8. POSSIBLE SYSTEM FAULTS AND REMEDIES

Possible system faults	Remedy
red "power" indicator does not light up at power on	check the power supply  check the polarity of the power supply unit
when setting the luminance threshold the green "status" indicator lights up, and the pilot lighting of the first and the last steps does not turn ON (or delayed)	check the status of "on / off delay" control: at the time of the system setting it is desirable to move it to the far left position, which corresponds to "min"
some steps lighting does not turn ON	check the LED strips functionality  check the polarity of the LED strips
spontaneous sensors response (steps lighting sometimes turns on independently, even if there is no motion in front of the sensors, or is constantly on)	reduce the sensors operating range using "sensor 1" and (or) "sensor 2" control  remove foreign objects from the sensors effective range  check whether there is debris in the sensors grid
the system goes to "night" mode even if the room illumination hasn't changed (for example, by passing in front of the light sensor)	check whether the light sensor is shaded  set the backlight delay using "on / off delay" control in the range of 0 - 30 seconds
Other system faults	contact the "interactive home" support service

## 9. OPERATION CONDITIONS AND SAFETY RULES

1. The system is designed for operation in dry and clean rooms. It is not allowed to use the system outdoor or in humid premises.
2. The system must not be used near flammable liquids, gases, vapors, explosive liquids or chemical substances.
3. Prior to connecting the system to the power supply it is necessary to check whether all items of this manual are met.
4. If during the system installation or operation any damages of components are detected turn off the power and remove the defects.
5. Entrust the system installation to a professional electrician.

## 10. HELPFUL INFORMATION

### 1. Light sources

the following can be used as LED light sources:

- a step full-length LED strip;
- LED strips segments;
- spotlights mounted on the walls along the stairway steps or stair risers;
- a combination of strips and spotlights.

The LED strips can be mounted:

- in special aluminum profiles with a diffusing screen;
- on plastic brackets (in this case it is better to use waterproof LED strips).

### 2. Cables and connection of LED light sources

- for sensors connection 6-wire cables (for example, 6 x 0.35) are to be used: 4 conductors for a motion sensor connection, 2 conductors for a light sensor connection;
- for LED light sources connection cables with stranded copper conductors (depending on the number of stages in the system) are to be used;
- for easy connection of the LED light sources negative contacts it is necessary to use single-pole terminal blocks or screwless terminals.

### 3. Power supply unit

- select a power supply unit based on the system power requirements plus 30% margin;
- connect the power supply unit using a circuit breaker for immediate system de-energizing when necessary;
- If a separate power supply unit is used for the 8 - channel module connection, the negative wires must be bundled.

## 11. WARRANTY AND SERVICE

THE WARRANTY TERM FOR THE CONTROLLER IS 12 MONTHS FROM DATE OF PURCHASE.  
WARRANTY CLAIMS ARE NOT ACCEPTED IN CASE OF:

- IMPROPER USE;
- MECHANICAL DAMAGES ON THE PRODUCT HOUSING;
- SIGNS OF THE HOUSING DECAPSULATION AND DESTRUCTION OF FACTORY SEALS;
- INCORRECT INSTALLATION;
- MODIFICAITONS (ATTEMPTS OF MODIFICATIOBS) IN THE COMPLETE SET OR IN THE SET INDIVIDUAL COMPONENTS.

### WARRANTY CARD

MODEL:

SERIAL NUMBER:

DATE OF SALE:

SELLER:

NAME OF THE COMPANY:

PHONE:

ADDRESS:

The product is received in good condition.

I acknowledge and accept the warranty terms.

seller's seal

(buyer's signature)

**ATTENTION!!! Warranty card is not valid without the seller's seal.**

## 12. CONTACT INFORMATION

COMPANY WEB-SITE

www.my-interactivehome.com

E-MAIL  
SUPPORT SURVICE

info.myinteractivehome@gmail.com