

**CONSTANT LIGHT CONTROL AND
MOVEMENT DETECTORS
1/10Vcc**

ILSR110



INSTRUCTION MANUAL

Technical specifications

- **Power supply:** 230V~ 50/60Hz
- **Consumption:** 2W
- **Charge:** Normalink adapter (ref. IDNG-EAD).
- **Relay maneuver voltage:** 250V_{CA}
- **Relay breaking capacity:** 16A
- **Maximum absorption current:** 500mA
- **Maximum injection current:** 250mA
- **Detection range:** 360° and maximum 7m diameter, installed at 2.4m height.
- **Connection time:** 10 min to 30 min.
- **Sensor dimensions:** Ø65mm
- **Control dimensions:** 107 x 53 x 34mm
- **Total weight:** 205g
- **IP rating:** IP20 according to UNE20324.
- **Working temperature:** 0°C to 40°C.
- **Storage temperature:** -10°C to 45°C.
- **Terminal blocks:** Conductor up to 6mm² section.
- **According to UNE EN 60730 norm.**

1 FEATURES

Light sensor with movement detection option with two channels:

- An output channel 1-10v depending on the light measured.
- An L (Charge) output channel for the movement detection function. Embedded into the ceiling mounting
- Circular movement detection area, with a maximum diameter of 7m, installed 2.4m height.
- It consist of two elements:

- **Sensor:**
 - Embedded into the ceiling, installation is the same than a Ø65mm diameter halogen lamp.
 - Incorporates light sensor and movement detector.
 - It is connected to the control with an RJ12 connector.
 - Two possible settings:
 - Time adjustable (see section 4)
 - Adjusting the gain factor (See section 4B)
- **Control:**
 - It is installed in the false ceiling, connected to the sensor.

2 FUNCTIONING

The system allows having a permanent 1-10v output depending on the light detected, and its light range goes from 30 to 1000 luxes. The movement detection function is independent from the level of light and its "L" output is temporized, and it can be adjusted between 10 and 30 minutes.

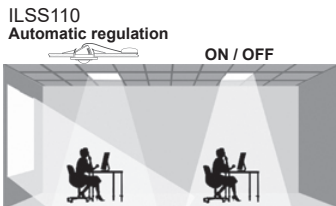
3 INSTALLATION

A. Choosing a place to install the fitting:

Depending on the use given to the unit and the functioning mode chosen, the place where to install the sensor should be chosen, several things should be considered.

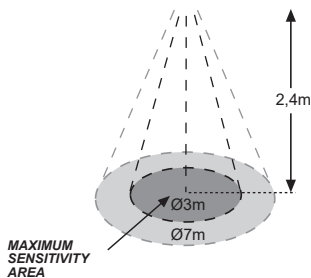
- If the automatic regulation is going to be used, take into account the luminosity of the room:

Distribute the installation by zones depending on the quantity of natural light. Install one unit in each zone if they are clearly separated.



Install the sensor in the position to be taken as a luminosity reference (normally on top of the working space). For an optimum functioning, the sensor should be installed 2 or 3 meters away from the window. Avoid installing the sensor on top of dark surfaces (furniture or carpets) or highly reflecting surfaces (tables and polished floors). Avoid direct sunlight into the sensor (sunlight, reflections coming from windows or mirrors, lamps directly pointing at the sensor...).

- **Installation criteria for an optimum movement detection:** Install the sensor taking into account its detection field.

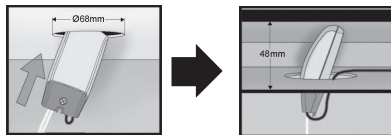


Given that the movement sensor detects temperature changes, please avoid the following:

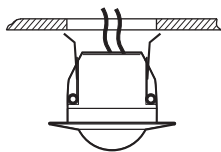
- Avoid pointing the detector to areas or objects highly reflectant or that are suitable to sudden temperature changes.
- Avoid installing the detector close to heat and or light sources.
- Avoid installing the detector pointing to objects that are suitable to be moved by the wind, such as curtains, small plants, etc.

In case of using both functions (movement detection and light regulation), please take into account all the conditions mentioned above.

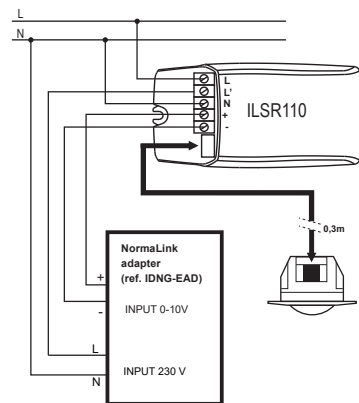
B. Mounting:
Easy installation in false ceilings. Only 48mm height required to install if the hole is 68mm, and 60mm height if the hole is 55mm.



To install the sensor, drill a 65mm hole in the ceiling and keep the wire through it.



C. Functioning as a light regulator and presence detector:



Please note: Once the fitting is connected to mains and it is turned off, the relay will remain closed and the + output will be at maximum while the stabilization takes place (approximately 1 minute).

4 ADJUSTING AND FUNCTIONING MODE

There are two potentiometers to carry out the adjustments:

A. Connection time adjustment (Time) and test mode (-) (sensor).
With this potentiometer, the time that the system will remain active after detecting movement can be adjusted. This interval can be adjusted between 10 and 30 minutes. If a potentiometer is set at the minimum (-), the TEST mode is selected. This mode is quite helpful when checking if the system is detecting movement properly, since it reduces the time that the fitting is active to only 10 seconds.



B. Adjusting the gain factor.
With this potentiometer, the proportional gain factor (K) of the sensor can be adjusted. If we turn the potentiometer to the ∞ position, this will be at minimum, and if we turn it to the ⊕ position it will be at maximum. Adjustment of this factor depends on (K)



C. Movement test and LED function.

- The LED can be used as an indicator when the movement detection functioning test is carried out.
- How to carry out the test:
- 1- Point the detector to the area to be covered.
 - 2- Set the TIME potentiometer to the "-" position. This sets the active time to 10 seconds only.
 - 3- Turn on the detector.
 - 4- Wait for at least 1 minute for the detector to stabilize.
 - 5- Walk into the detection area until we are detected.
 - 6- Adjust the head of the detector when it is needed to change the covered area. Remember not to point the detector to light sources.
 - 7- Repeat steps 5 and 6 until the level of coverage desired is met.