

- selecting maintained or non-maintained operation (with mains power supply present).
Performed by continuously pressing the button for 10 seconds. The following will occur when the button is pressed:

Within 5 seconds the faults are cleared (the 3 indication LEDs light sequentially) and at the end of the 10 seconds the green and red LEDs stay on. When these LEDs stay on release the test button and the luminaire will operate as maintained or non-maintained depending on the previous mode of operation. *During the change of operation, from maintained to non-maintained, the red indication led will blink once. During the change of operation from non-maintained to maintained the red indication led will blink twice.*

-Activation /Deactivation Light sensor (with mains power supply present).

Performed by continuously pressing the button for 15 seconds. The following will occur when the button is pressed:

Within 5 seconds the faults are cleared (the 3 indication LEDs light sequentially), in 10 seconds the green and red LEDs light and in 15 seconds the red goes OFF and the orange LED lights. If you release the button immediately after the orange LED lights the light sensor is activated or deactivated, depending on the previous state. *When the sensor is deactivated, the orange indication led will blink once and when is reactivated the orange indication led will blink twice.*

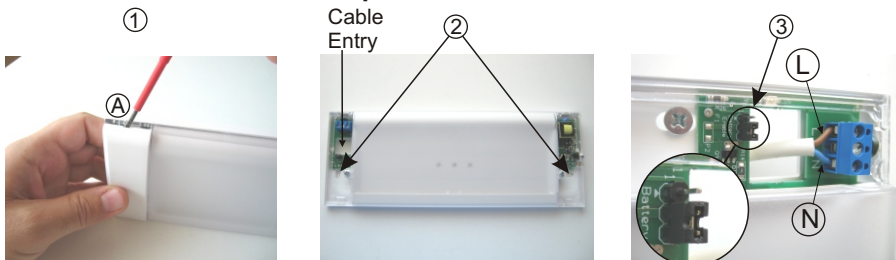
-Light adjustment (only in emergency mode).

By pressing continuously the test button for 5 seconds, the luminaire will light in 30% of the nominal luminosity. If the test button is pressed again for 5 seconds the luminaire will light again in 100% of the nominal luminosity.

LIGHT SENSOR

The light sensor when activated, controls the LED lighting of the GR-2000 only when it is connected to the mains power supply operation and not in emergency mode, operating as maintained luminaire. When the lighting of the area where the luminaire is placed is sufficient, the LED lighting turns off so as not to consume unnecessary energy, as defined by the guidelines of the European Union. It should therefore be taken into account that the installation of the luminaire is relative to other light sources in order to ensure smooth operation. One simple rule for installation is: keep minimum distance of 0.5m from the ceiling and 1.5 m from the wall on the test button side.

Installation procedure of the luminaire



- ① In order to install the luminaire you need to insert a flat blade screwdriver in region **A**, so it separates the plastic hooks to remove the plastic cover as shown to the picture. Do the same for the Cover on the other side of the luminaire.
- ② Use the support materials contained in the packaging to mount the luminaire to a flat wall
Attention!!! The luminaire should be placed in such a way as to align the power cables with the power supply cable entry of the luminaire.
- ③ **Put the battery's jumper slot onto the board as shown in the picture.** Connect the power cord to terminals **L** for phase and **N** for neutral.
- ④ Re-install carefully the plastic covers removed in step 1 and the device is ready to be powered by the mains power supply

GR-2000

"SLIM LIGHT" SERIES FOR MAINTAINED / NON-MAINTAINED
(OPTIONAL) LUMINAIRE



TECHNICAL CHARACTERISTICS

OPERATION VOLTAGE	220-240V AC/50-60Hz
MAXIMUM POWER CONSUMPTION	4W
BATTERIES (Ni-Cd)	3.6V/1Ah
BATTERY PROTECTION	From overcharge and full discharge
INDICATIONS - CONTROLS	Charge (green), lamp fault (red), fault (orange) indication LED, TEST button
CHARGING TIME	24h
MINIMUM AUTONOMOUS DURATION	180 min
ILLUMINATION SOURCE	White LED's
ILLUMINATION SOURCE INTENSITY	110lm (230V AC) / 110lm (emergency)
DEGREES OF COVER PROTECTION	IP 40
PRODUCED IN ACCORDANCE WITH	EN 60598-1, EN 60598-2-22
OPERATION TEMPERATURE RANGE	0 to 40 °C
RELATIVE HUMIDITY	Up to 95%
CONSTRUCTION MATERIALS	Bayblend FR3010, transparent polycarbonate
EXTERNAL DIMENSIONS	270 x 100 x 25 mm
TYPICAL WEIGHT	340gr.
GUARANTEE	3 years (1 year for the battery)

GENERAL

The luminaires of this type cover the standard functionality in security lights, for professional or household use.

They have features such as:

1. Change function from maintained to non-maintained or vice versa, whenever desired.
2. Light sensor to select the activation or not of the luminaire, when it is connected to the mains power supply, if there is adequate lighting in the area.
3. Dimming control (with remote control).
4. Possibility of remote control for these functions and additional functions are analyzed on page 3.

The functions 1,2 and 3 may be implemented using the TEST button as explained on page 3.

The luminaire must be permanently connected to the mains power supply. During normal operation it charges the battery and lights the LED lighting (maintained mode). In any power failure the luminaire is automatically switched to emergency mode, lighting the LED lighting from the battery. When the mains power supply is restored the unit returns to normal operation.

Charging the Battery

The charging of the battery is fully controlled by the luminaire to achieve optimal battery maintenance, and prolonged life. When the battery is fully charged, the charging current is limited for maintenance.

Battery cut off

The luminaire enters this state when the mains power supply is interrupted and the battery has lost all its energy. The consumption of all lighting circuits is limited to the minimum needed to protect the battery from deep discharge.

Manual Test

Manual testing is performed by pressing the Test button to check the LED lighting and the driving circuit. To perform this operation, the unit should be connected to the mains power supply and the battery must be enabled. During the test the orange LED blinks.

Automatic LED Test

It includes all manual tests but is conducted automatically every 15 days. To perform this operation, the unit should be connected to the mains power supply and the battery must be enabled.

Automatic duration test

The automatic duration test measures the autonomy of the emergency operation of the device. This test is performed automatically every 6 months. To perform this operation, the unit should be connected to the mains power supply and the battery must be enabled and fully charged, otherwise the check is postponed until the battery is fully charged.

Backup Status Operation

The duration of battery life in emergency mode is at least that specified in the table above. During the backup operation an LED test is also performed.

Indication LED status:

The status of the indication LEDs is described in the diagram below.

ATTENTION!!!

1. Operations for installation, maintenance or testing must be done by authorized personnel only.

2. The device must be connected to the mains power supply thru a fuse dependent by the total amount of the line's power load.

3. In case of inactive use for a period greater than 2 months, disconnect the battery by removing the battery enable jumper.

4. It is not allowed to discard batteries in to common trash bins, they must be discarded only in battery recycling points. Do not incinerate.

NOTE: LED= Light Emitting Diode

LABELING EXPLANATION:

X: Self contained

1: Maintained

A: Including test device

180: 3 hour duration

INSTALLATION

To install the luminaire follow the installation instructions which are described on page 4.

Important note luminaires which are installed on the same site and we want to avoid the simultaneous automatic six-month duration testing.

The installer must first connect the battery to the luminaire and then connect the luminaire to the mains power supply, ensuring that there is a time difference of >90 seconds between connections. This ensures non-simultaneous automatic control autonomy (the difference is at least 1 day).

Indication LED status

Indication LED status			
LED	Description		
GREEN	RED	ORANGE	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Normal operation
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Battery charge
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Charging fault, disconnected battery, absence of mains power supply
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	LED lighting test
<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	LED lighting fault
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Emergency duration check (automatic or manual)
<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Battery fault
<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	Battery and LED lighting fault
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	LED lighting fault (or mains power supply failure and LED lighting fault)
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Charger fault or battery fault (or mains power supply failure and charger fault or battery fault)
<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	Charger fault, battery fault and LED lighting fault (or mains power supply failure and battery fault and LED lighting fault)

Explanation for the indication Led status

Continuously On Continuously Off Blinks

The green led, in case of remote control operation, blinks showing that receives signal from remote control.

GR-2000 WITH REMOTE CONTROL

OPERATIONS OF REMOTE CONTROL IRT200 (for models that support remote control).

(To operate the remote control you must first remove the transparent protective battery insulator from the bottom of the device).

Explanation of the function keys:

1. Button **ON**: lights the luminaire when operating in emergency mode or from the mains power supply.
 2. Button **OFF**: turns off the luminaire when operating in emergency mode or from the mains power supply.
 3. Buttons **▲M▼**: increases or decreases the brightness of the luminaire in a state of mains power supply. By pressing the **▼** button once, the luminosity will decrease to 65%. By pressing the same button for second time the luminosity will reach the lowest level of 30% of the nominal luminosity. If the **▼** button is pressed again, the red led will light as indication of the luminosity's lowest level. The **▲** button operates with the opposite way. If you press sequentially the button, the luminosity can increase from 30% to 65% and finally to 100%. Any additional pressure of the button will activate the red led as indication of the luminosity's highest level.
 4. Buttons **▲E▼**: increases or decreases the brightness of the luminaire in a state of emergency operation as the operation of the **▲M▼** buttons.
 5. (*) Buttons **SET + TEST** (with mains power supply present): performs a test of the emergency operation circuit.
 6. (*) Buttons **SET + DUR TEST** (with mains power supply present): performs a full autonomy duration test when the battery is fully charged. If it is not fully charged (the green indicator blinks) the test will not be conducted (the Red led will blink).
 7. (*) Buttons **SET + DUR OFF** (with mains power supply present): cancels the automatic six-month duration test indefinitely. When the cancellation is active, the orange LED gives a brief flash every 2 seconds. To reactivate this test press the **SET + DUR OFF** buttons (*).
 8. (*) Buttons **SET + ERR CLR** (with mains power supply present): extinguish all fault indications of the luminaire.
 9. (*) Buttons **SET + M / NM** (with mains power supply present): toggles from maintained mode to non-maintained mode and vice versa. During the change of operation, from maintained to non-maintained, the red indication led will blink once. During the change of operation from non-maintained to maintained the red indication led will blink twice.
 10. (*) Buttons **SET + F1** (with mains power supply present): activates or deactivates the sensor light as before. When the sensor is deactivated, the orange indication led will blink once and when is reactivated the orange indication led will blink twice.
- (*) Combination of keys: briefly press the **SET** button and then the next key (not simultaneously).

The **INH** and **F2** key are not used (the **INH** button can be active after request).

GR-2000 WITHOUT REMOTE CONTROL

TEST BUTTON FUNCTIONS (Valid also for remote controlled models).

If the test button is pressed, when the luminaire is in emergency mode (during interruption of mains power supply) the LEDs are switch OFF, to avoid wasting the battery power (this condition is not permanent and if the mains power supply is restored then, in the next interruption, the luminaire will light in emergency mode). If the luminaire is turned off by pressing the test button in emergency mode, then you can turn it on by pressing the test button again.

- **Check emergency operation** (with mains power supply present).

By briefly pressing the button will light the lighting LEDs for 3 sec. In this way the emergency operating system is tested.

- **Fault reset** (with mains power supply present).

Performed by continuously pressing the button for 5 seconds and confirmed by the sequential lighting of the 3 indication LEDs.

