

# GR-2000

## "SLIM LIGHT" SERIES FOR NON MAINTAINED / MAINTAINED LUMINAIRE



### TECHNICAL CHARACTERISTICS (for LED MODULE Specs. see page 5)

OPERATION VOLTAGE	220-240V AC 50-60Hz
MAXIMUM POWER CONSUMPTION	3.8W/8.2VA
BATTERY (Ni-Cd)	3.6V/1Ah
BATTERY PROTECTION	From overcharge and deep discharge
INDICATIONS - CONTROLS	Charge (green), lamp fault (red), fault (yellow) indication LED, TEST button
CHARGING TIME	24h
AUTONOMOUS DURATION	2-7 hours depending on the illumination adjustment of the LEDs
ILLUMINATION SOURCE	White LEDs
ILLUMINATION SOURCE INTENSITY	125lm (230VAC) / 125lm (emergency)
DEGREES OF COVER PROTECTION	IP40
PRODUCED IN ACCORDANCE WITH	EN 60598-1, EN 60598-2-22, EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3
OPERATION TEMPERATURE RANGE	5 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)

### Congratulations for your selection to buy this product. Olympia Electronics - European manufacturers.

#### GENERAL

The luminaires of this type cover the standard functionality in emergency 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 illumination LEDs, 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 (see on page 3).

*The functions 1, 2 and 3 may be implemented using the TEST button as explained on page 3 and 4.*

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

power supply is restored the unit returns to normal operation.

#### Battery Charging

The battery's charging is fully controlled by the luminaire in order to achieve optimal battery maintenance, and enlogation of its life. When the battery is fully charged, the charging current is limited to maintenance current.

#### 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 illumination LED and the driving circuit. To perform this operation, the unit should be connected to the mains power supply and the battery must be connected. During the test the yellow indicate LED blinks.

### Automatic LED Test

It includes all manual tests and 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 connected.

### 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 connected and fully charged, otherwise the check is postponed until the battery is fully charged. If during the Automatic Autonomous Test the luminaire's duration is lower than the nominal ( $>2$ ), then the battery must be replaced.

### Backup Status Operation

The duration of battery in emergency mode is at least that specified in the table of first page. During the back-up operation a LED test is also performed.

### Indication LED Status:

The status of the indication LEDs is described in the diagram shown on page 6.

### 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 through a fuse dependent by the total amount of the line's power load.
3. In case of battery or illumination source replacement, these must be replaced by parts of the same type, by the manufacturer or by a competent person.
4. In case of inactive use for a period greater than 2 months, disconnect the battery by removing the battery enable jumper.
5. **It is not allowed to discard batteries in to common trash bins, but they must be discarded only in battery recycling points. Do not incinerate.**



**NOTE!!** Luminaires which are installed on the same site and the installer wants to avoid the simultaneous automatic six-month duration testing, 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).**

### INSTALLATION

To install the luminaire follow the installation instructions which are described on page 5.

## OPERATIONS OF INFRARED REMOTE CONTROL IRT200 (the IRT200 is included after request).

(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**: Turns ON the illumination LEDs, if it is in OFF condition, either in emergency or in normal mode.
  2. Button **OFF**: Turns OFF the illumination LEDs, if it is in ON condition, either in emergency or in normal mode.
  3. Buttons **▲M▼**: increases or decreases the brightness of the illumination LEDs in normal mode. By pressing the ▼ button once, the luminosity will decrease to 65%. By pressing the same button twice, 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 indication LED as indication of the luminosity's highest level.
  4. Buttons **▲E▼**: increases or decreases the brightness of the illumination LEDs in emergency mode 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 indication LED blinks) the test will not be conducted (the Red indication LED will blink).
  7. (\*) Buttons **SET + DUR OFF** (with mains power supply present): cancels the automatic six-month duration test. When the cancellation is activated, the yellow indication LED blinks every 2 seconds. To reactivate this test press the **SET + DUR OFF** buttons (\*).
  8. (\*) Buttons **SET + ERR CLR** (with mains power supply present): delete 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 blinks once. During the change of operation from non maintained to maintained the red indication LED blinks twice.
  10. (\*) Buttons **SET + F1** (with mains power supply present): activates or deactivates the sensor light as before. When the sensor is deactivated, the yellow indication LED blinks once and when is reactivated the yellow indication LED blinks twice.
  11. (\*) Buttons **SET + F2** Activates/deactivates peripheral lighting (blue indication LED).
- (\*) Combination of keys: briefly press the **SET** button and then the next key (not simultaneously).



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

### TEST BUTTON FUNCTIONS

If the test button is pressed, when the luminaire is in emergency mode (during interruption of mains power supply) the indication 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.

**- 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 faults are deleted (the 3 indication LEDs light sequentially) and at the end of the 10 seconds the green and red indication 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 blinks once. During the change of operation from non maintained to maintained the red indication LED blinks 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 faults are deleted (the 3 indication LEDs light sequentially), in 10 seconds the green and red indication LEDs light and in 15 seconds the red indication LED goes OFF and the yellow indication LED lights. If you release the button immediately after the yellow indication LED lights the light sensor is activated or deactivated, depending on the previous state. *When the sensor is deactivated, the yellow indication LED blinks once and when is reactivated the yellow indication LED blinks twice.*

**- Light Adjustment** (only in emergency mode).

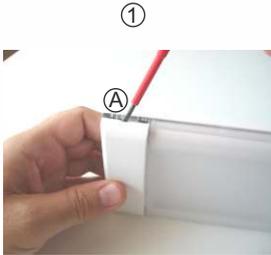
By pressing continuously the test button for 5 seconds, the luminaire will light in 30% of the nominal luminosity. If the test button is pressed again for 5 seconds the luminaire will light again in 100% of the nominal luminosity.

**- Peripheral Lighting** (Blue LED) To activate/deactivate the peripheral lighting press continuously the Test button until the yellow indication LED blinks for three times.

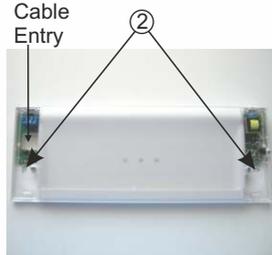
**LIGHT SENSOR**

when the light sensor is activated, controls the illumination LED of the GR-2000 only when it is connected to the mains power supply operation, operating as maintained luminaire. When the lighting of the area where the luminaire is placed is sufficient, the illumination LED 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.

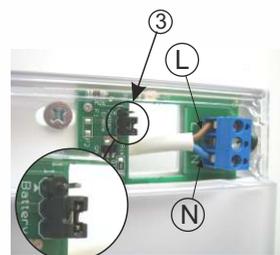
## INSTALLATION INSTRUCTIONS



Picture 1



Picture 2



Picture 3

- ① Put a flat blade screwdriver in region **A**. Separate the plastic hooks and remove the plastic cover as shown on the picture 1. Do the same, for the Cover on the other side of the luminaire.
- ② Use the 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 on the board as shown on the picture 3.** Connect the power cord to terminals **L for Live wire** and **N for Neutral**.
- ④ Gently refit the plastic covers which are removed in step 1 and the device is ready to be powered by the mains power supply.

### NOTE!!

**After finishing the installation you must power the luminaire at least for 24 hours for battery charging to perform the nominal autonomy.**

**NOTE:** LED= Light Emitting Diode

#### **LABELING EXPLANATION:**

**X:** Self contained

**1:** Maintained (\*)

**A:** Including test device

**B:** With the ability for remote rest mode

**G:** Internally illuminated

**\*120:** 2 hours duration

Note!! The installer should fill in, on the specification label, the letter **G** if the luminaire is used as a safety sign.

↓  

X	1	A	B	G	1	2	0
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(\*) Maintained operation: The luminaire lights its illumination source, when it is powered by the mains power supply or not.

Non Maintained operation: The luminaire lights its illumination source, only in power supply's failure.



*The light source contained in this luminaire shall only be replaced by the manufacturer, or his agent, or a similar qualified person.*

**NOTE!** The light source is non-user replaceable.

LED MODULE CHARACTERISTICS	
	GR-2000
Manufacturer	Olympia Electronics S.A
Model Number	3107103
Voltage Range	8.5-10.5V DC
Nominal Power	980mW
Connections	Permanent cable connection
Temperature (tc)	47 °C max. across the board

## Indication LED status

LED	Description
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <b>GREEN</b>  <input type="radio"/> </div> <div style="text-align: center;"> <b>RED</b>  <input type="radio"/> </div> <div style="text-align: center;"> <b>YELLOW</b>  <input type="radio"/> </div> </div>	Normal operation
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input checked="" type="radio"/> </div> <div style="text-align: center;"> <input type="radio"/> </div> <div style="text-align: center;"> <input type="radio"/> </div> </div>	Battery charge
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input type="radio"/> </div> <div style="text-align: center;"> <input type="radio"/> </div> <div style="text-align: center;"> <input type="radio"/> </div> </div>	Charging fault, disconnected battery, absence of mains power supply
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input type="radio"/> </div> <div style="text-align: center;"> <input checked="" type="radio"/> </div> <div style="text-align: center;"> <input type="radio"/> </div> </div>	LED lighting test
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input checked="" type="radio"/> </div> <div style="text-align: center;"> <input checked="" type="radio"/> </div> <div style="text-align: center;"> <input type="radio"/> </div> </div>	LED lighting fault
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input type="radio"/> </div> <div style="text-align: center;"> <input type="radio"/> </div> <div style="text-align: center;"> <input checked="" type="radio"/> </div> </div>	Emergency duration check (automatic or manual)
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input checked="" type="radio"/> </div> <div style="text-align: center;"> <input type="radio"/> </div> <div style="text-align: center;"> <input checked="" type="radio"/> </div> </div>	Battery duration check fault
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input checked="" type="radio"/> </div> <div style="text-align: center;"> <input checked="" type="radio"/> </div> <div style="text-align: center;"> <input checked="" type="radio"/> </div> </div>	Battery and LED lighting fault
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input type="radio"/> </div> <div style="text-align: center;"> <input checked="" type="radio"/> </div> <div style="text-align: center;"> <input type="radio"/> </div> </div>	LED lighting fault (or mains power supply failure and LED lighting fault)
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input type="radio"/> </div> <div style="text-align: center;"> <input type="radio"/> </div> <div style="text-align: center;"> <input checked="" type="radio"/> </div> </div>	Charger fault or battery fault (or mains power supply failure and charger fault or battery fault)
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input type="radio"/> </div> <div style="text-align: center;"> <input checked="" type="radio"/> </div> <div style="text-align: center;"> <input checked="" type="radio"/> </div> </div>	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.

### WARRANTY

Olympia Electronics guarantees the quality, condition and operation of the goods. The period of warranty is specified in the official catalogue of Olympia Electronics and also in the technical leaflet, which accompanies each product. This warranty ceases to exist if the buyer does not follow the technical instructions included in official documents given by Olympia Electronics or if the buyer modifies the goods provided or has any repairs or re-setting done by a third party, unless Olympia Electronics has fully agreed to them in writing. Products that have been damaged can be returned to the premises of our company for repair or replacement, as long as the warranty period is valid. Olympia Electronics reserves the right to repair or to replace the returned goods and to or not charge the buyer depending on the reason of defection. Olympia Electronics reserves the right to charge or not the buyer the transportation cost.

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