

**"POWER LIGHT" SERIES FOR WATERPROOF ADDRESSABLE SELF TESTING NON MAINTAINED EMERGENCY LUMINAIRES**



<b>TECHNICAL CHARACTERISTICS</b> (for LED MODULE Specifications see page 4)		
	<b>GRL-37/90/WP/ADR</b>	<b>GRL-37/180/WP/ADR</b>
OPERATION VOLTAGE	220-240V AC/50-60Hz	
MAXIMUM POWER CONSUMPTION	13.3W/14VA	
SUPPLY CURRENT	63 mAAC	
MIN./MAX. CHARGE CURRENT	230/710mA	
CHARGING VOLTAGE	14.7V	
TRICKLE CHARGE VOLTAGE/CURRENT	13.7V/25mA	
MIN./MAX. DISCHARGE CURRENT	1.7A/2.3A	
CUTOFF VOLTAGE	10.8V	
U-OUT	18V	
OPEN CIRCUIT VOLTAGE	23.5V DC	
CONTROL GEAR CHARACTERISTICS	Prated = 21.6W, Irated = 1.2A	
CONTROL GEAR FUSE	8A/250V FB, 5x20mm	
CONTROL GEAR MAX. TEMPERATURE	tc = 75 °C at R11	
BATTERIES (Pb)	12V/7Ah	2x12V/7Ah
BATTERY PROTECTION	From overcharge and deep discharge	
INDICATIONS - CONTROLS	POWER-CHARGE indicator, LAMP FAULT-BATT. FAULT indicator, TEST button	
CHARGING TIME	<24h	
MINIMUM AUTONOMOUS DURATION	90 min	180 min
LIGHT SOURCE	White power LEDs	
EMERGENCY ILLUMINATION	3200lm	
DEGREES OF COVER PROTECTION	IP65	
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%	
INSULATION BETWEEN SUPPLY & BATTERY CIRCUIT	Basic Insulation	
CONSTRUCTION MATERIALS	ABS/PC, PC	
EXTERNAL DIMENSIONS	307 x 100 x 333 mm	
TYPICAL WEIGHT	4260gr.	6450gr.
GUARANTEE	3 years (1 year for the battery)	
CONTROL GEAR WITH AUTOMATIC TEST FUNCTION	<b>EL-T</b>	



Do NOT stare at operating light source. The luminaire should be positioned so that prolonged staring into the luminaire at a distance closer than 1.2m is not expected.  
 $E_{thr} = 904.8 \text{ lux}$ .

**Thank you for your trust in our products**  
**Olympia Electronics - European manufacturer**

**GENERAL**

These luminaires are used indoors (ta 40°C) where emergency light is needed. Each luminaire must be connected permanently to the mains

power supply.

**ADDRESS OPERATION**

The luminaires can be connected to a GR-6500

address panel. For address operations refer to the installation manual of the panel. For address module connections see page 4. For dip-switch addressing selection see page 5 and 6.

#### **OPERATION DESCRIPTION**

When the unit is connected to the main power supply (after connecting the battery) the indicator LAMP FAULT – BATT. FAULT remains OFF whereas the indicator POWER CHARGE blinks to indicate that the batteries are charging. When the batteries are fully charged this indicator will light permanently. If this indicator does not light then probably the battery has not been connected. If the batteries are connected and the indicator does not light then contact a qualified service technician for assistance. The charging procedure is monitored by a microprocessor and is based on a 3 stage cycle thus ensuring a fast and full charge of the battery. The charge current is supplied by a high efficiency switch mode power supply which ensures perfect charging even during the fluctuations of the mains power supply.

#### **BATTERY CHARGE FAILURE DUE TO SHORTCUT**

The recharging device will recharge the battery normally after the short circuit is removed and the batterie(s) are reinstalled.

#### **BATTERY CUTOFF**

The unit enters this state during the power supply failure and when the battery has been fully discharged. In this state the luminaire draws the least power from the battery in order to prevent deep discharge.

#### **MANUAL TESTING**

Is accomplished by briefly (<1 sec.) pressing the TEST button. This permits the user to test the good operation of the luminaire's emergency circuit. The unit simulates a power failure and the lamps are lit using the batteries. This manual test does not affect the automatic test.

#### **DIMMING OPTION**

When the voltage is interrupted, with corresponding pressings of the button, we can choose the illumination of 100%, 50%, 33% or turned off, either to increase the autonomy time or not to consume the battery power unnecessarily. This option is canceled when the power network is restored.

#### **LAMP TESTING**

The luminaire tests the good condition of the lamps in emergency mode and warns the user for probable malfunction. If a lamp is found faulty then the LAMP FAULT indicator starts to blink. To verify which lamp is faulty use the TEST button. If the faulty lamp is replaced then the error is automatically restored and the indicator is turned OFF.

#### **TESTS**

Normally the illumination source and the autonomy tests are programmed by the control panel and the test results are sent to the control panel.

***If the luminaire is not connected to GR-6500 panel, the following automatic tests executed:***

#### **AUTOMATIC EMERGENCY CIRCUIT TEST**

The unit automatically tests the emergency circuit every 15 days (if the battery and mains power are connected). During this test the lamps are turned ON for 3 seconds using the batteries. In some cases this function might not be acceptable (i.e in cinema theaters) so the installer must take this into account during the installation.

#### **AUTOMATIC DURATION TEST**

This test is conducted every 6 months by simulating a power failure, if the battery and mains power supply are connected. The unit lights the lamps using the charged battery and counts the time until the stated duration. If the lamps are ON during the end of the test then the unit is restored to its normal operation (lamps OFF and battery charging). If the lamps go OFF before the end of the test then the unit is restored to its normal operation but the LAMP FAULT / BATT. FAULT indicator is lit to show that there is a problem with the battery and that the battery must be replaced. Let it be noted that this duration test is also done during every long power failure. If the power failure lasts for a long time and the luminaire has entered the BATTERY CUTOFF mode and the duration measured is not correct then the fault indicator will light when the power is restored.

#### **ERASING ERRORS**

Erasing errors is accomplished with a prolonged pressing of the TEST button (>5 sec) when the unit is connected to the mains power supply. The fault indicated with the indicator LAMP FAULT / BATT. FAULT will be erased. If the cause of the fault has not been restored (i.e burned lamp) then the indicator will light again. If the fault was caused by a low emergency duration and you erase the error then this will be indicated again during the next duration test after 6 months. In this case (for duration errors) it is vital to replace the battery before erasing the error (the error is automatically erased if the mains power and the battery are disconnected).

#### **WARNING !!!**

1. Every test, installation or maintenance procedure must be done only by qualified personnel.
2. The unit must be connected to the mains power supply using a line fuse rated accordingly.
3. The replacement of the battery and the light source must be done using parts of the same type, by the manufacturer or by a competent person.
4. If the luminaire must be isolated from the mains power supply for more than 2 months then the batteries must be disconnected by removing the battery connectors.
5. **It is not allowed to discard batteries in to common trash bins, they must be discarded only in battery recycling points. Do not incinerate.**



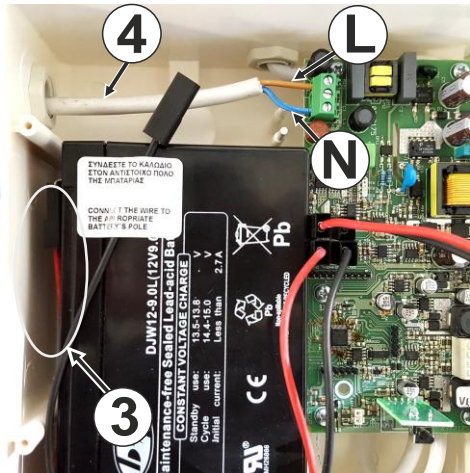
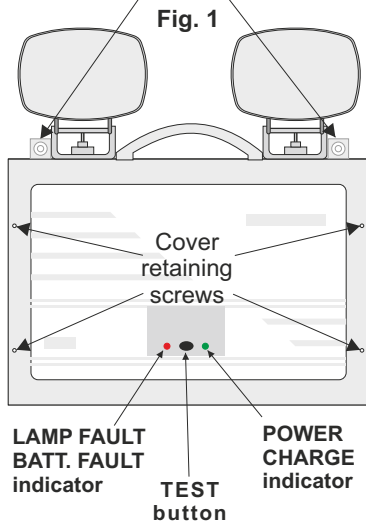
## INDICATION LED STATUS (with the mains power supply connected)

POWER / CHARGE		LAMP FAULT / BATT. FAULT	
○	Disconnected battery / not charging	○	Normal operation mode
●	Charged battery	●	Low emergency duration (replace battery)
☀	Battery under charge	☀	Lamp fault (Check lamps and replace if needed)

○ Indicator OFF   ● Indicator ON   ☀ Indicator Blinking

### INSTALLATION PROCEDURE (For wall mounting only)

#### Mounting holes



1. Use the supplied mounting accessories to mount the device (Fig1).
2. Remove the four cover retaining screws (Fig 1).
3. Install the battery cable connectors to the batteries taking care of the polarity, black cable (-) and red cable (+).
4. **Always use in any case round mains cable, with external diameter of 6-9mm (H05RN-F type 2x1mm<sup>2</sup> or any other type, at least equal to it's mechanical and electrical properties). ATTENTION!! The cable must not be deformed in any way (This requirement is important to ensure the tightness isolation IP65).** Install the cable gland, pass the round cable through and tighten it all the way.
5. Connect the cables to the respective positions in the terminal block **L for phase and N for neutral**.
6. Reinstall the front cover and fasten the retaining screws. (Tightening torque 1Nm). Pay attention to the 4 sealing o-rings.

**WARNING!!** After the installation has finished, charge the batteries for at least 24 hours so as to obtain the rated autonomous duration.

**ATTENTION!!** After installing the luminaire, you are advised to briefly press (<5sec) the test button in order to conduct a lamp test. If there is no fault indicator permanently turned on, it means that the luminaire is working properly in emergency mode. After 24 hours of the installation, you are advised to conduct a battery capacity test, by disconnecting the mains power supply from the luminaire. The luminaire should operate in emergency mode, for at least the nominal duration time. The result of the test will be available in the fault indication LEDs, after reconnecting the luminaire to the mains power supply. If there is no error indicated, it means that the luminaire will meet its nominal duration in case of an emergency. In case of any error, please contact the installer or the representative seller of this product.

**NOTE:** LED= Light Emitting Diode

**LABELING EXPLANATION:**

**X:** Self contained

**0:** Non Maintained (\*)

**A:** Including test device

**B:** Including remote rest mode

**C:** Including inhibiting mode

**\*90:** 1.5 hour duration

**180:** 3 hour duration

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

**Maintained operation:** The luminaire lights its illumination source, when it is powered by the mains power supply or not.

**Battery replacement**

**It can be done only by a competent person and after the mains interruption**


1. Follow the step 2 of the installation procedure.
2. Disconnect the cables and remove the old battery.
3. Connect the new battery with the same type (step 3 of the installation procedure) and place it in the position of the old one.
4. Follow the step 6 of the installation procedure and power the device.



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.

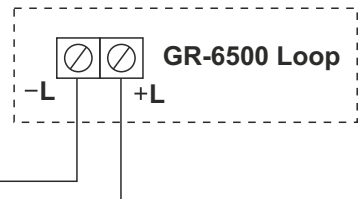
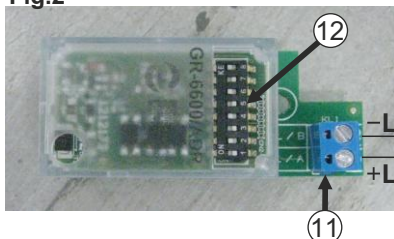
**LED MODULE CHARACTERISTICS**

	<b>GRL-37/90/WP/ADR</b>	<b>GRL-37/180/WP/ADR</b>
Manufacturer	Olympia Electronics S.A.	
Model Number	1005183	
Voltage Range	17.5-20.5V	
Nominal Power	14W	
Supply Current	600 mA on each lamp	
Max Working Voltage for Proper Insulation	700 V	
LV Supply - Control Conductors Insulation Type	Basic Insulation	
Connections	Cable connection between main pcb and led module	
Temperature (tc)	68 °C max.	
LED Module Type	Built-in 	

**Address module connections**

- 11 Connect the address cables, in the terminal block with the indicating polarity (Fig.2).
- 12 Address the luminaire by using the dip-switches with the appropriate combinations as you can see in pages 4 and 5 (Fig.2).

**Fig.2**



Address	Dipswitch setting	Address	Dipswitch setting	Address	Dipswitch setting	Address	Dipswitch setting	Address	Dipswitch setting	Address	Dipswitch setting
1		31		61		91		121		151	
2		32		62		92		122		152	
3		33		63		93		123		153	
4		34		64		94		124		154	
5		35		65		95		125		155	
6		36		66		96		126		156	
7		37		67		97		127		157	
8		38		68		98		128		158	
9		39		69		99		129		159	
10		40		70		100		130		160	
11		41		71		101		131		161	
12		42		72		102		132		162	
13		43		73		103		133		163	
14		44		74		104		134		164	
15		45		75		105		135		165	
16		46		76		106		136		166	
17		47		77		107		137		167	
18		48		78		108		138		168	
19		49		79		109		139		169	
20		50		80		110		140		170	
21		51		81		111		141		171	
22		52		82		112		142		172	
23		53		83		113		143		173	
24		54		84		114		144		174	
25		55		85		115		145		175	
26		56		86		116		146		176	
27		57		87		117		147		177	
28		58		88		118		148		178	
29		59		89		119		149		179	
30		60		90		120		150		180	

Address	Dipswitch setting	Address	Dipswitch setting	Address	Dipswitch setting	Address	Dipswitch setting	Address	Dipswitch setting
181		196		211		226		241	
182		197		212		227		242	
183		198		213		228		243	
184		199		214		229		244	
185		200		215		230		245	
186		201		216		231		246	
187		202		217		232		247	
188		203		218		233		248	
189		204		219		234		249	
190		205		220		235		250	
191		206		221		236			
192		207		222		237			
193		208		223		238			
194		209		224		239			
195		210		225		240			

## 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.

## HEAD OFFICE

72nd km. O.N.R. Thessaloniki-Katerini  
P.C. 60300 P.O. Box 06 Eginio Pierias Greece  
[www.olympia-electronics.gr](http://www.olympia-electronics.gr)  
[info@olympia-electronics.gr](mailto:info@olympia-electronics.gr)