

## ADDRESSABLE SELF TESTING NON-MAINTAINED EMERGENCY CEILING MOUNTED LUMINAIRES



### TECHNICAL CHARACTERISTICS (for LED MODULE specifications see page 6)

	GR-490/ADR	GR-491/ADR	GR-492/ADR	GR-493/ADR
OPERATION VOLTAGE	220-240V AC / 50-60Hz			
MAXIMUM POWER CONSUMPTION	3.9W / 4.4VA			
BATTERY (Ni-Mh)	4.8V/1.2 Ah			
BATTERY PROTECTION	Deep discharge and overcharge protection			
INDICATIONS	LED Charge , Lamp Fault LED, Battery Fault LED / Magnetic Test Contact			
CHARGE TIME	24 hours			
MINIMUM DURATION	1.5 hour		3 hour	
LIGHT SOURCE	1 white power LED			
EMERGENCY ILLUMINATION	280lm		140lm	
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 MATERIAL	ABS/PC, PC			
EXTERNAL DIMENSIONS	158 x 158 x 60,4mm (without decorative bezel) - 195 x 195 x 60,4 (with decorative bezel)			
WEIGHT	600gr.			
GUARANTEE	3 years (1 year for the battery)			

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#### GENERAL

These devices are used indoors (ta 40°C) in places where emergency luminaires are needed. The luminaires GR-490/ADR and GR-492/ADR are suitable for corridors lighting and the GR-491/ADR and GR-493/ADR for open area lighting. Each device must be permanently connected to mains power supply. In normal operation the battery is charging. In case of a mains power supply failure, the device enters emergency mode and the illumination LED turns on. When the mains power supply is restored the device turns to normal operation.

#### INSTALLATION

To install the luminaire follow the installation instructions on page 3.

#### Battery Charging

The battery charging is completely controlled by microprocessor and is protected from complete discharge and overcharge.

#### Battery Cut-off

The luminaire enters in this mode when the mains power supply fails and battery has lost its energy. During this mode the luminaire

enters the idle state and battery consumption is negligible, in order to be protected from deep discharge.

#### Manual Test

This test can be done by using the A-1900 card as described on page 6. The light source and the emergency circuit of the device are tested. The manual test can be conducted only if the mains power supply and the battery are connected. During this test period the LAMP TEST LED will blink.

#### Manual Autonomy Test

A duration test can be conducted by holding the A-1900 card steadily for 5 to 10 seconds. In order to be performed, the mains power supply and the battery should be connected. The luminaire enters emergency mode, the charge LED is turned OFF and the Battery Fault led starts to blink. The test is performed until the battery is fully discharged. If at the end of the test the autonomy is low then the Battery Fault LED will be ON. If the result of the test is good then the luminaire enters charging mode and the Charge led starts to blink until the batteries are fully charged.

### Automatic Operational Test

This test includes all the operations that are provided in manual test and is conducted automatically every 15 days. In order to be performed, the mains power supply and the battery should be connected.

### Automatic Autonomy Test

The Automatic Autonomy Test tests the device's back up operation and emergency duration. This test is conducted automatically every 6 months. In order to be performed, the mains power supply should be connected and the battery must be fully charged. If the battery is not fully charged, the test is postponed until the battery is completely charged. If during this test, the autonomy is less than nominal then the battery fault LED will permanently be on and the battery must be replaced.

### Back Up Operation

The autonomy duration of battery during emergency mode must be at least as the one stated in the list of the technical characteristics. During emergency mode, a light source test is also performed.

### Resetting Errors

Hold the A-1900 card in TEST position for 10 to 15 seconds in order to delete all LED indicated errors. Then the device enters regular operation mode.

### ADDRESSABLE COMMUNICATION

The luminaire has the ability to be connected to GR-6500 panel. In order to do so, the luminaire's address has to be unique in the same bus. For more details see page 3 (installation instruction).

### 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 that is dependent on the total line's power load.
3. In case of battery or lamp replacement, these must be replaced by parts with 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 pulling out the battery's connector.
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 (mains on)

#### Charge

**On:** Fully charged.

**Off:** No battery (No charging current or disconnected battery).

**Blink:** Charging.

#### Lamp Fault

**On:** Faulty LED.

**Off:** LED OK.

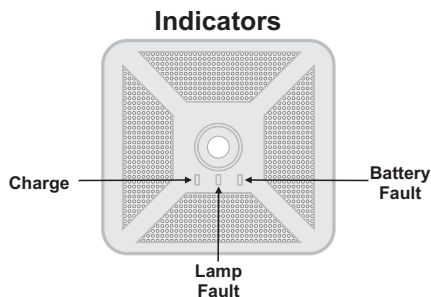
**Blink:** Operational Test.

#### Battery Fault

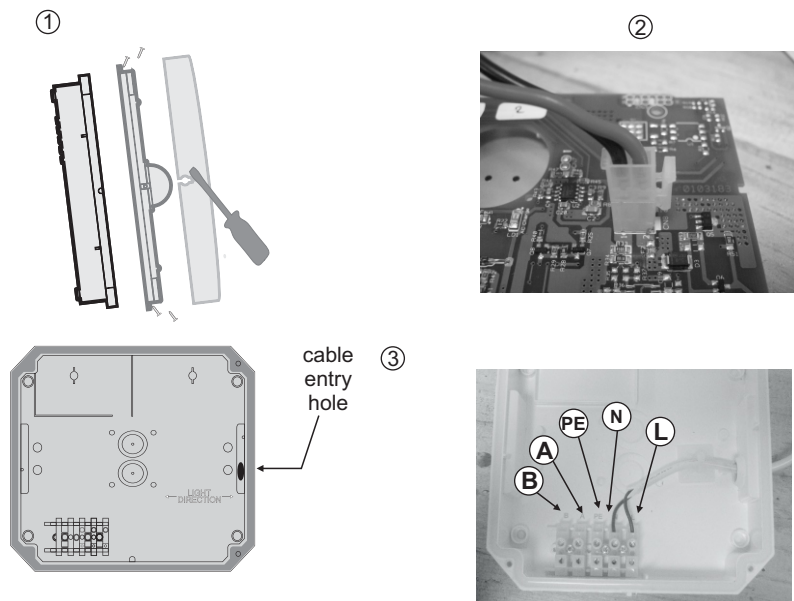
**Off:** Battery OK.

**ON (With Charge LED ON):** Autonomy or low battery problem (**the battery must be replaced**).

**Blink (With Charge LED Off):** Autonomy test is performed.



## INSTALLATION INSTRUCTIONS



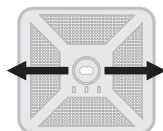
### Initial installation

1. Detach the front cover by applying pressure using a flat blade screw driver. Next, unfasten the four retaining screws without removing them and remove the diffuser.
2. Install the battery connector to its corresponding connector on the main pcb.
3. Install the cable grommet in the open hole of the plastic base and open a hole in the center of the grommet using a small screw driver. Pass the power cable through the hole in the grommet, connect the cables as shown in the photograph. Open another cutout cable entry hole and install the second supplied cable grommet. Use the supplied self adhesive pad and cable tie to anchor the cable. Pass the 2 signal cables and connect them on the A, B terminals minding the correct polarity. Set the luminaire's address through the DIP switch. See table at pages 7 to 9
4. Reinstall the diffuser and re-tighten the 4 screws in a diagonally manner with a torque of 0,9 N\*m.

**NOTE!!** After finishing the installation you must power the luminaire for at least 24 hours in order to completely charge the battery. The rated autonomy duration can be achieved after that time.

### GR-490/ADR, GR-492/WP/ADR

Corridor  
lighting



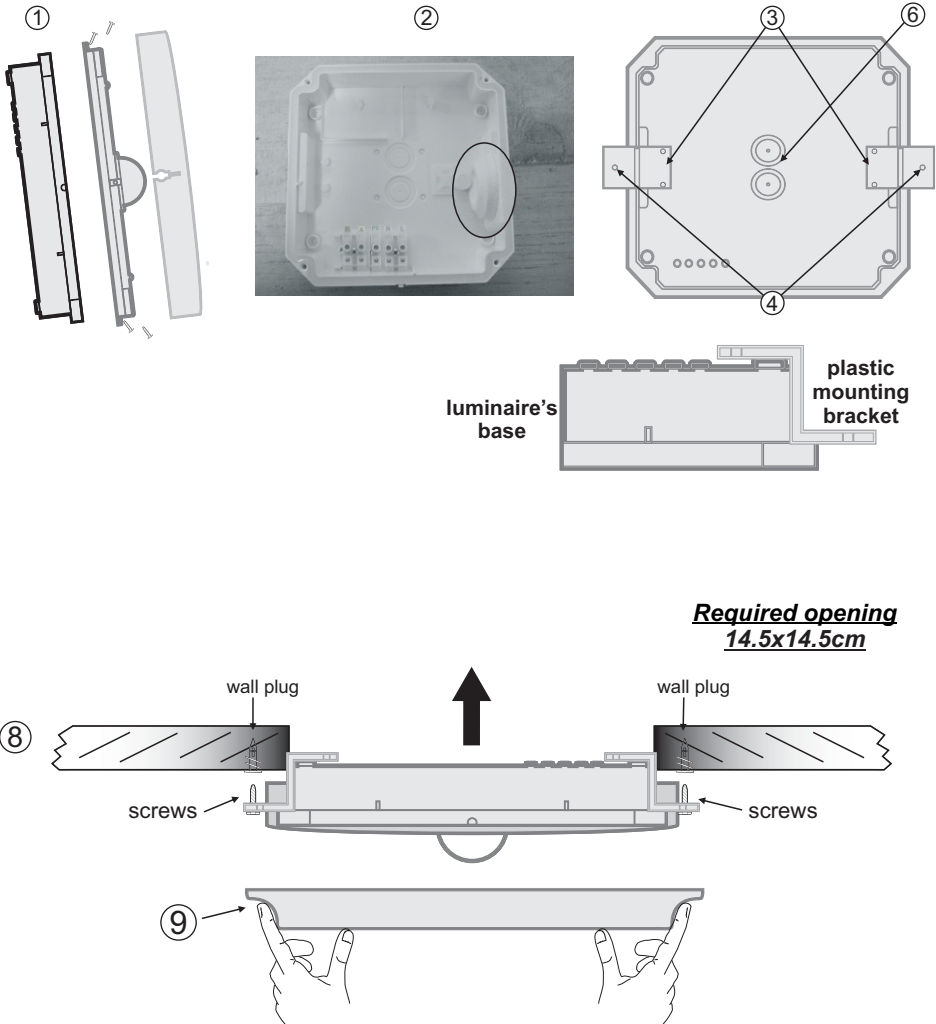
**ATTENTION!!!**  
During installation follow this light  
direction.

### GR-491/ADR, GR-493/ADR

Open  
area  
lighting



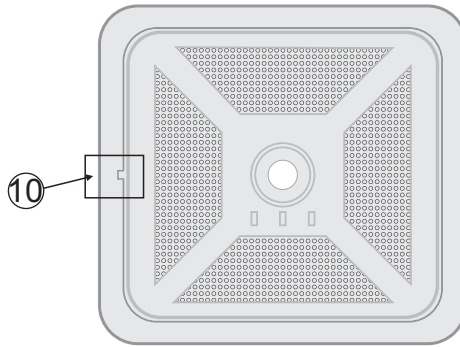
## MOUNTING IN SUSPENDED CEILING



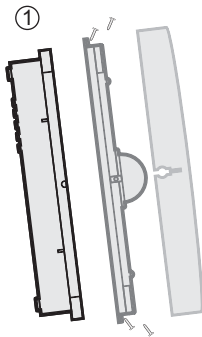
***Required opening  
14.5x14.5cm***

1. Detach the front cover by applying pressure using a flat blade screw driver. Next, unfasten the four retaining screws (figure 1) without removing them and remove the diffuser.
2. Install the supplied cable grommet from the inside of the plastic base (figure 2).
3. Install the two plastic brackets with the four screws (figure 3).
4. Mark the positions of the mounting holes on the brackets.
5. Install the two supplied plaster board plugs by screwing them on the plaster board ceiling.
6. Open a cable entry cutout hole on the plastic base and follow step 3 in the "initial installation" section.
7. Re-install the front cover that was removed in step 1.
8. Use the supplied screws to fasten the luminaire to the plaster board plugs (figure 8) that were previously installed on the plaster board ceiling.
9. Finally, install the supplied decorative bezel (figure 9). The notch on the bezel must be located on the left side of the luminaire (figure 10).

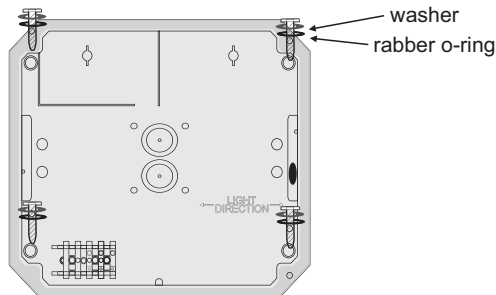
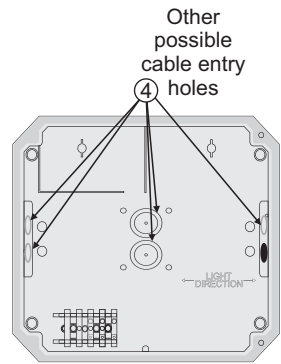
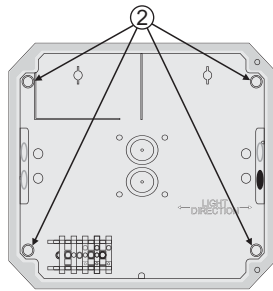
## MOUNTING IN SUSPENDED CEILING



## SURFACE MOUNTING

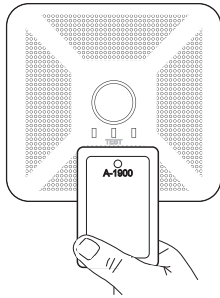


⑤



1. Detach the front cover by applying pressure using a flat blade screw driver. Next, unfasten the four retaining screws without removing them and remove the diffuser.
2. Use a drill with a 3,5mm bit to open the 4 mounting holes (figure 2) located in the plastic base..
3. Place the luminaire on the desired mounting location and mark and drill these 4 holes. Fit the supplied 4 plastic mounting plugs to these drilled holes on the mounting location.
4. If the cable entry hole is not suitable then use one of the supplied cables grommets to cover the holes and open another cable entry cut out hole (figure 3). Follow step 3 of the “ **initial installation procedure**”.
5. Mount the base to the desired location by using the supplied screws, washers and o-rings in each mounting hole(figure 5).
6. Re-install the cover that was removed in step 1.

LED MODULE CHARACTERISTICS				
	GR-490/ADR	GR-491/ADR	GR-492/ADR	GR-493/ADR
Manufacturer	Olympia Electronics S.A.			
Model Number	0405183			
Voltage Range	3-3,1V DC		2,8-2,9V DC	
Nominal Power	2W		1W	
Connections	fixed connection between main pcb and led module			
Temperature (tc)	65 °C max. across the board			



**Test and Faults Reset operations with the A-1900 card (not included and available after request).**

For lights test, you must place the card in front of the TEST indicator and remove it immediately.

For Autonomy Test, you must place the card in front of TEST and hold it for 5 to 10 seconds.

To reset errors you must place the card in front of TEST by holding it for 10 to 15 seconds and removing it.

**NOTE:** LED= Light Emitting Diode

**LABELING EXPLANATION:**X: Self contained

**0:** Non maintained (\*)

**A:** Including test device

**B:** Including remote test mode

**C:** Including inhibiting mode

**E:** With non-replaceable lamp(s)

**F:** Automatic test gear complying with IEC 61347-2-7 denoted EL-T

**90:** 1.5 hour duration

**180:** 3 hours duration

**X0ABCEF180**

(\*) Non Maintained operation: The luminaire turns on illumination source, only in case of power supply failure.



**CAUTION : Do not view directly with bare eyes**

**ATTENTION!!!**



*The light source of this luminaire is not replaceable when the light source reaches its end of life the whole luminaire shall be replaced.*

**Battery replacement**











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

1. Detach the front cover by applying pressure using a flat blade screw driver. Next, unfasten the four retaining screws without removing them and remove the diffusor.
3. Disconnect the connector and remove the old battery.
4. Connect the new battery with the same type (step 2 of the installation instructions) and place it in the position of the old one.
5. Replace the removed parts and power the device.

Address	Dipswitch setting	Address	Dipswitch setting	Address	Dipswitch setting	Address	Dipswitch setting
1		31		61		91	
2		32		62		92	
3		33		63		93	
4		34		64		94	
5		35		65		95	
6		36		66		96	
7		37		67		97	
8		38		68		98	
9		39		69		99	
10		40		70		100	
11		41		71		101	
12		42		72		102	
13		43		73		103	
14		44		74		104	
15		45		75		105	
16		46		76		106	
17		47		77		107	
18		48		78		108	
19		49		79		109	
20		50		80		110	
21		51		81		111	
22		52		82		112	
23		53		83		113	
24		54		84		114	
25		55		85		115	
26		56		86		116	
27		57		87		117	
28		58		88		118	
29		59		89		119	
30		60		90		120	

Address	Dipswitch setting	Address	Dipswitch setting	Address	Dipswitch setting	Address	Dipswitch setting
121		151		181		211	
122		152		182		212	
123		153		183		213	
124		154		184		214	
125		155		185		215	
126		156		186		216	
127		157		187		217	
128		158		188		218	
129		159		189		219	
130		160		190		220	
131		161		191		221	
132		162		192		222	
133		163		193		223	
134		164		194		224	
135		165		195		225	
136		166		196		226	
137		167		197		227	
138		168		198		228	
139		169		199		229	
140		170		200		230	
141		171		201		231	
142		172		202		232	
143		173		203		233	
144		174		204		234	
145		175		205		235	
146		176		206		236	
147		177		207		237	
148		178		208		238	
149		179		209		239	
150		180		210		240	



Address	Dipswitch setting
241	ON 
242	ON 
243	ON 
244	ON 
245	ON 
246	ON 
247	ON 
248	ON 
249	ON 
250	ON 

## 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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