European manufacturer

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SAFETY & SECURITY SYSTEMS
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WATERPROOF SELF TESTING NON-MAINTAINED EMERGENCY CEILING MOUNTED LUMINAIRES WITH WIRELESS COMMUNICATION

CE

TECHNICAL CHARACTERISTICS *(for LED MODULE specifications see page 7)*

	GR-490/WP/WL	GR-491/WP/WL	GR-492/WP/WL	GR-493/WP/WL
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			
TX/RX FREQUENCY RANGE	868.150-868.450MHz			
TX POWER	11dBm			
INDICATIONS	LED Charge , Lamp Fault LED, Battery Fault LED / Magnetic Test Contanct			
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	IP65			
PRODUCED IN ACCORDANCE WITH	EN 60598-1, EN 60598-2-22, EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 62311, ETSI EN 303 446-1 V1.1.0, ETSI EN 300 220-2 V3.1.1			
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	580gr.			
GUARANTEE	3 years (1 year for the battery)			

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Olympia Electronics - European manufacturer

GENERAL

These devices are used indoors and outdoors (ta 40°C) in places where emergency luminaires are needed. The luminaires GR-490/WP/WL and GR-492/WP/WL are suitable for corridors lighting and the GR-491/WP/WL and GR-493/WP/WL 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 Operational 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. Its duration is the stated autonomy duration of the luminaire. 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.

WIRELESS COMMUNICATION
The WL luminaire models have the ability to communicate over the air with Olympia's control panels for wireless emergency luminaires. The luminaires can also communicate with a PC/laptop through a gateway (Ethernet, Wi-Fi, USB). For more information, please refer to Wireless Emergency Lighting guides, available on the company's website.

ATTENTION!!!
1. Operations for installation, maintainance 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.

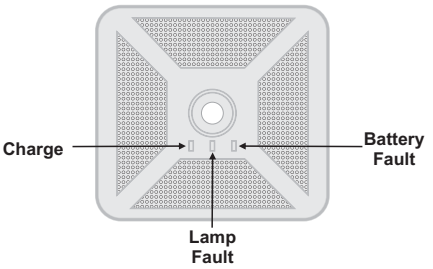
Indication LED status (mains on)

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.

Indicators



Wireless Communication LED indications (interior)

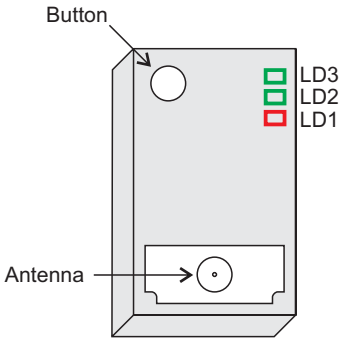
The **top LED** (LD3-green) indicates the network connection status.
This LED may blink according to the following patterns:
1. Steady ON: The device has established direct connection to a Gateway device, and at least one more Gateway device is available for alternate routing
(false condition).
2. Rapid flash [5 times/s]: The device has established direct connection to a single Gateway device.
3. Fast flash [2 times/s]: The device has established connection to a Router device and at least one more Router device is available on the same hop level, as an alternate route (redundant connection).
4. Moderate flash [1 second ON / 1 second OFF]: The device has established connection to a single Router device, and no alternatives exist on the same hop level.
5. No light: The device is disconnected.

The **middle LED** (LD2-green) indicates the received signal strength (RSSI) of the router module.
This LED may blink according to the following patterns:
1. Very fast flash [5 times/s]: received signal strength is excellent.
2. Fast flash [2 times/s]: received signal strength is good.
3. Moderate flash [1 second ON / 1 second OFF]: received signal strength is acceptable for reliable communication.
4. Very slow [2 seconds ON / 2 seconds OFF]: received signal strength is not acceptable for reliable communication, or no signal.

The **bottom LED** (LD1-red) indicates operation status.
This LED may blink according to the following patterns:
1. Very fast blink [5 times/s]: the module is not initialized correctly. In this case you have to press for more than 2 seconds the push button, in order to reset the module (loads default settings).
2. Moderate flash [2 times/s]: The module is properly operating.

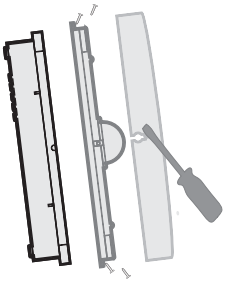
Button functionality:
The on-board button has the two following functions:
1. Short press (<2"): a status message will be sent to the Gateway device of the wireless network.
2. Long press (>2"): Loads factory default settings to the module.

Default settings:
- SID: 00000001
- RF Channel: 13 (869.525MHz)



INSTALLATION INSTRUCTIONS

①



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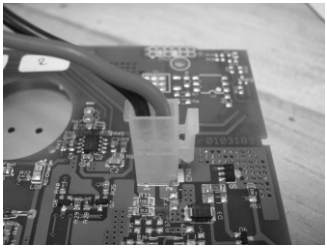

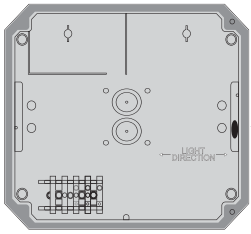

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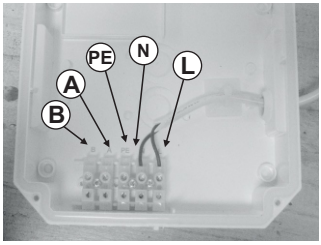


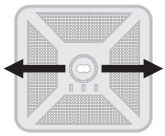
Initial installation

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 diffusor.
2. Install the battery connector to its corresponding connector on the main pcb.
3. **Always use in any case round mains cable, with a diameter of 5-10mm (H05RN-F type 2x1mm² 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 IP rating).** Install the included gaskets in to the cable entry holes (verify that are not deformed). Make a hole in the center by using a small screwdriver. Pass the round cable through the gasket. Detach the power terminal, connect the wires as shown in the picture and attach the power terminal (10A max). Supply voltage polarity is irrelevant. Use the supplied self adhesive pad and cable tie to anchor the cable.
4. Reinstall the diffusor 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/WP/WL, GR-492/WP/WL

Corridor lighting

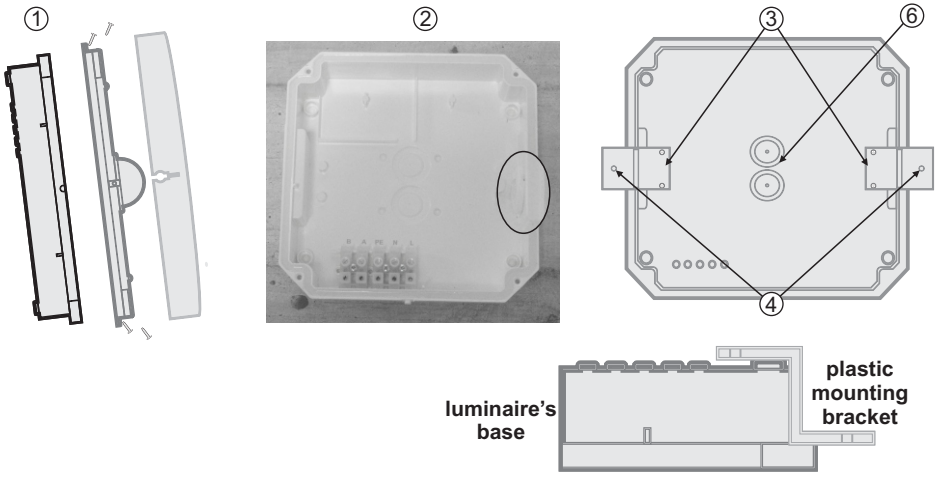


ATTENTION!!!
During installation follow this light direction.

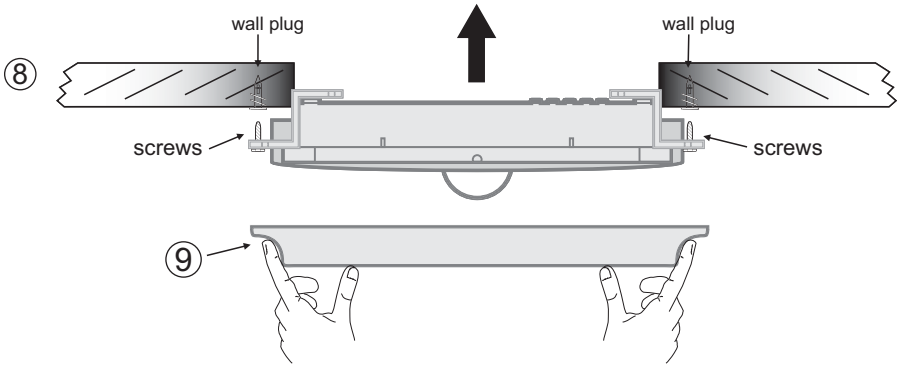
GR-491/WP/WL, GR-493/WP/WL

Open area lighting

MOUNTING IN SUSPENDED CEILING

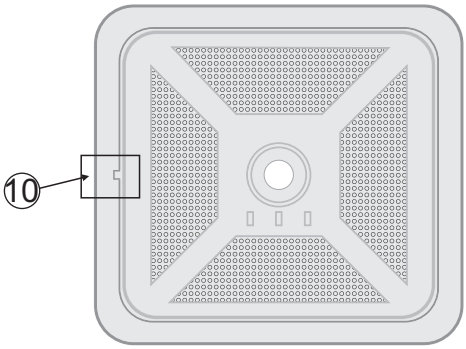


Required opening 14.5x14.5cm

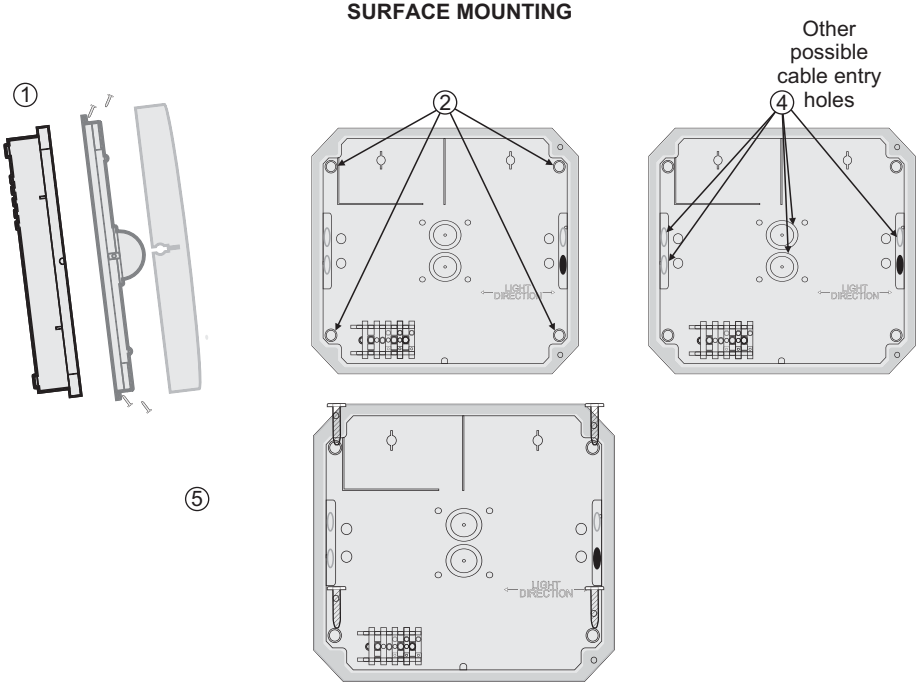


1. Detach the front cover by applying pressure using a flat blade screw driver. Next, unfasten the four retaining screws (figure 1) without removing them and remove the diffusor.
2. Install the supplied cable grommet (figure 2).
3. Install the two plastic brackets with the four screws (figure 3).
4. 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

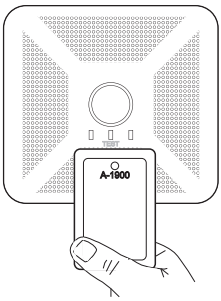


SURFACE MOUNTING



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.
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 in each mounting hole(figure 5).
6. Re-install the cover that was removed in step 1.

LED MODULE CHARACTERISTICS				
	GR-490/WP/WL	GR-491/WP/WL	GR-492/WP/WL	GR-493/WP/WL
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
A: Including test device
B: Including remote test 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

X	0	A	B	C	E	F	1	8	0

(*) 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.

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
info@olympia-electronics.gr