ADDRESSABLE WATERPROOF SELF TESTING NON-MAINTAINED EMERGENCY CEILING MOUNTED LUMINAIRES

| TECHNICAL CHARACTERISTICS (for LED MODULE specifications see page 6) |  |
| :---: | :---: |
|  |  |
| OPERATION VOLTAGE | $220-240 \mathrm{~V}$ AC / 50-60Hz |
| MAXIMUM POWER CONSUMPTION | $3.9 \mathrm{~W} / 4.4 \mathrm{VA}$ |
| 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 Contanct |
| CHARGE TIME | 24 hours |
| MINIMUM DURATION | 1.5 hour 3 hour |
| LIGHT SOURCE | 1 white power LED |
| EMERGENCY ILLUMINATION | 2801m 1401m |
| 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 $40{ }^{\circ} \mathrm{C}$ |
| RELATIVE HUMIDITY | Up to 95\% |
| CONSTRUCTION MATERIAL | ABS/PC, PC |
| EXTERNAL DIMENSIONS | $158 \times 158 \times 60,4 \mathrm{~mm}$ (without decorative bezel) $-195 \times 195 \times 60,4$ (with decorative bezel) |
| WEIGHT | 600 gr . |
| GUARANTEE | 3 years (1 year for the battery) |

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## GENERAL

These devices are used indoors (ta $40^{\circ} \mathrm{C}$ ) in places where emergency luminaires are needed. The luminaires GR-490/WP/ADR and GR-492/WP/ADR are suitable for corridors lighting and the GR-491/WP/ADR and GR-493/WP/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, 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.
3. 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.

(1)

cable (3)
(2)


## 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. 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 diffusor and re-tighten the 4 screws in a diagonally manner with a torque of $0,9 \mathrm{~N}^{*} \mathrm{~m}$.

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/ADR, GR-492/WP/ADR

Corridor lighting


ATTENTION!!!
During installation follow this light direction.

GR-491/WP/ADR, GR-493/WP/ADR

Open area lighting



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 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.
6. Re-install the front cover that was removed in step 1.
7. Use the supplied screws to fasten the luminaire to the plaster board plugs (figure 8) that were previously installed on the plaster board ceiling.
8. 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 $3,5 \mathrm{~mm}$ 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/WP/ADR | GR-491/WP/ADR | GR-492/WP/ADR | GR-493/WP/ADR |
| Manufacturer | Olympia Electronics S.A. |  |  |  |
| Model Number | 0405183 |  |  |  |
| Voltage Range | $3-3,1 \mathrm{~V}$ DC |  |  | $2,8-2,9 \mathrm{~V}$ DC |
| Nominal Power | 2 W |  |  | 1 W |
| Connections | $65^{\circ} \mathrm{C}$ max. across the board |  |  |  |
| Temperature (tc) |  |  |  |  |



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

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\begin{array}{|l|l|l|l|l|}
\hline X & 0 & A & B C E & 180 \\
\hline
\end{array}
$$

(*) $^{*}$ 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.
2. Disconnect the connector and remove the old battery.
3. Connect the new battery with the same type (step 2 of the installation instructions) and place it in the position of the old one.
4. 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 |  ${ }_{1} 12345678$ | 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 | 에교 12345678 | 69 |  | 99 |  |
| 10 |  | 40 |  | 70 |  | 100 |  |
| 11 |  | 41 |  | 71 | - ${ }_{1}^{\text {¢12 }}$ | 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 | $\stackrel{\text { \% }}{\text { ¢ }}$ |
| 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 | ${ }_{1}^{\text {O }}$ | 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 |  12345678 | 237 |  |
| 148 |  | 178 |  | 208 |  | 238 |  |
| 149 |  | 179 |  | 209 |  | 239 |  |
| 150 |  | 180 |  | 210 |  | 240 |  |


| Address | Dipswitch |
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| 241 | \% |
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| 243 |  |
| 244 |  |
| 245 |  |
| 246 | ํxTํx |
| 247 | ำํํํํ |
| 248 | \% |
| 249 |  |
| 250 |  |

## 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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