LIGHTING
ADR

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SAFETY & SECURITY SYSTEMS
for a safer world!

Emergency lighting addressable panel GR-6500

Quick Installation Guide & Generic Design

DESCRIPTION

With Olympia Electronics emergency lighting addressable panel GR-6500, the light system becomes more optimal, simple and provides the user valuable information, not only for the entire network, but also for each luminaire individually. The ease of access of GR-6500 helps you to retrieve information and control the system light network with simple actions as well as remotely via Ethernet.

Our software application makes things way more simple. You create the plan, you set up each luminaire and zone according to your needs and eventually you upload the whole plan via USB cable.

PRODUCTS

- GR-6500 250 devices. 16 Zones.

SPECIFICATIONS

Dimensions: 322 x 241 x 97 mm
Weight : < 2Kg (Without battery)
Input Power: 230VAC, 50-60Hz, <25W
Operating Temperature: 5° - 40°C (41°F – 104°F)
Degrees of cover protection : IP30

CAUTION

- This product may only be installed or maintained by a qualified Electrician.
- The system must be installed in accordance with national regulations and requirements.
- All power must be disconnected before installation or maintenance.
- Only original spare parts must be used for this product.
- The panel is compatible only with the corresponding Olympia Electronics addressable luminaires.

NEEDED MATERIALS

- Mounting Hardware.
- Screwdrivers
- Multi-meter
- Pliers
- Cutter

MAINTENANCE

The periodical checks must follow the EN50172 or be verified according to local regulations.

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.

CONTACT DETAILS

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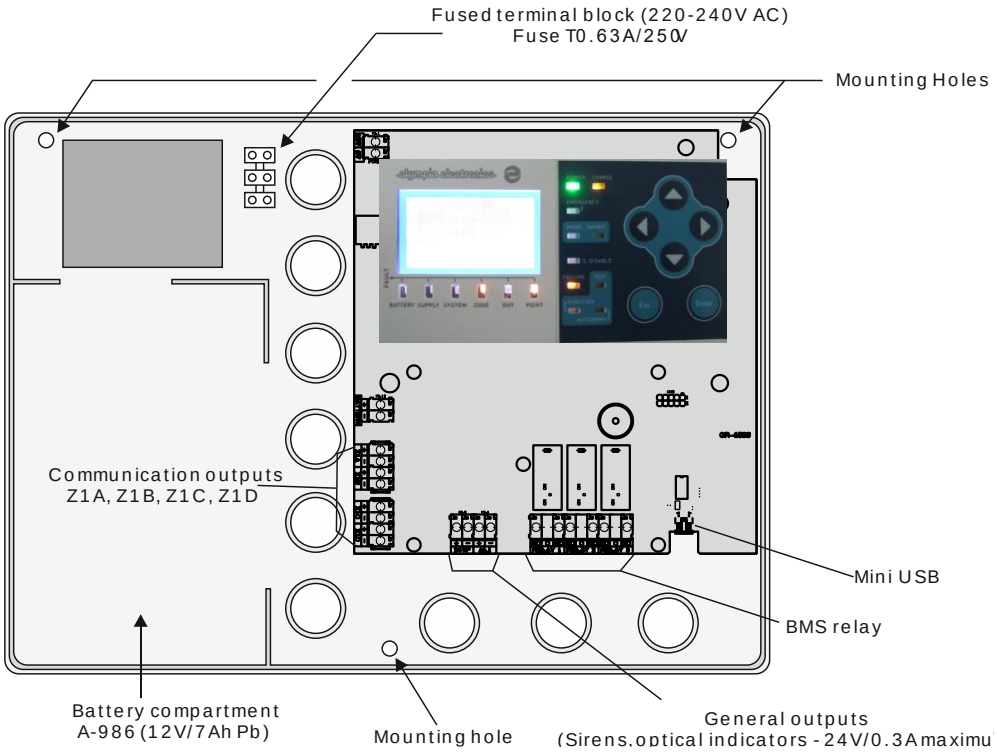
MOUNTING THE PANEL

- The panel must be installed in a suitable area and must not be obscured. Also it must be powered by a permanent 230V power connection from the fuse panel and not via a power outlet or a wall switch.



PREREQUISITE REQUIREMENTS AND PRELIMINARY PROCEDURES

Addressable Luminaire Connections

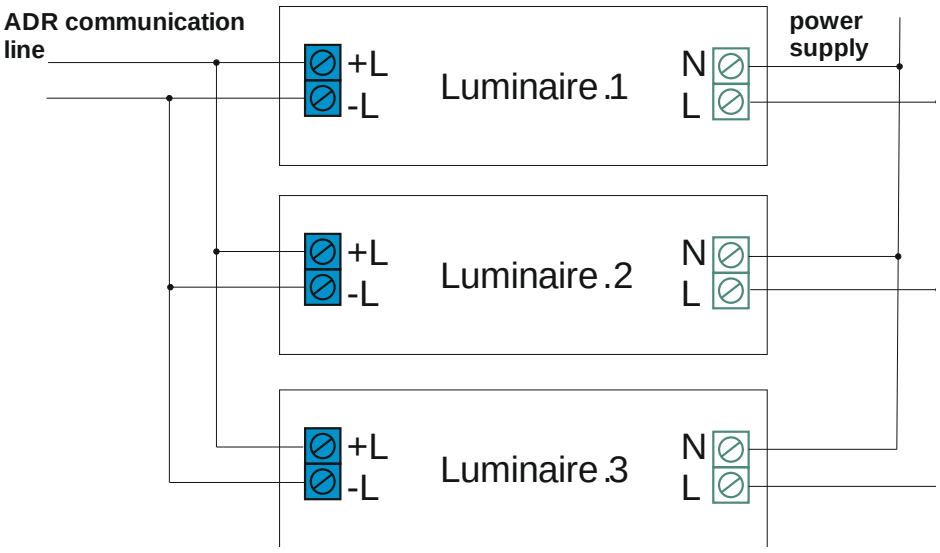
- 16 available Zones.
- The GR-6500 can support up to 250 points.
- The maximum connected points to each LOOP must not exceed the 150.
- Each point must have unique non repeatable address.
- No arithmetic address sequence is obligatory.
- Keep a record of points' addresses and names.

Correct cable and connection

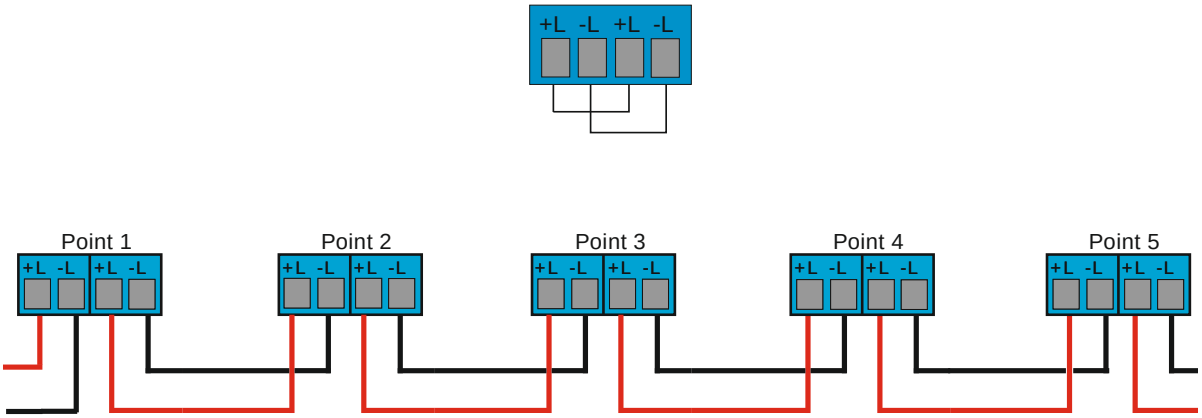
- The installation cable must be suitable for data transfer.
- We recommend: - LiYCY - YSLY-OZ
- The communication cables must be placed 40cm away from any MAINS cable.
- The communication cables must be placed 5m away from any motors or power station.
- The cross section depends on the distance and the number of installed points. The communication cable must contain 2 conductors, a shield and no additional unused conductors.

Length of cable / Luminaires	200m	500m	1000m	1500m	2000m
50	0.75 mm^2	1 mm^2	1 mm^2	1.5 mm^2	2.5 mm^2
100	1 mm^2	1 mm^2	1.5 mm^2	1.5 mm^2	2.5 mm^2
150	1.5 mm^2	1.5 mm^2	2.5 mm^2	2.5 mm^2	2.5 mm^2

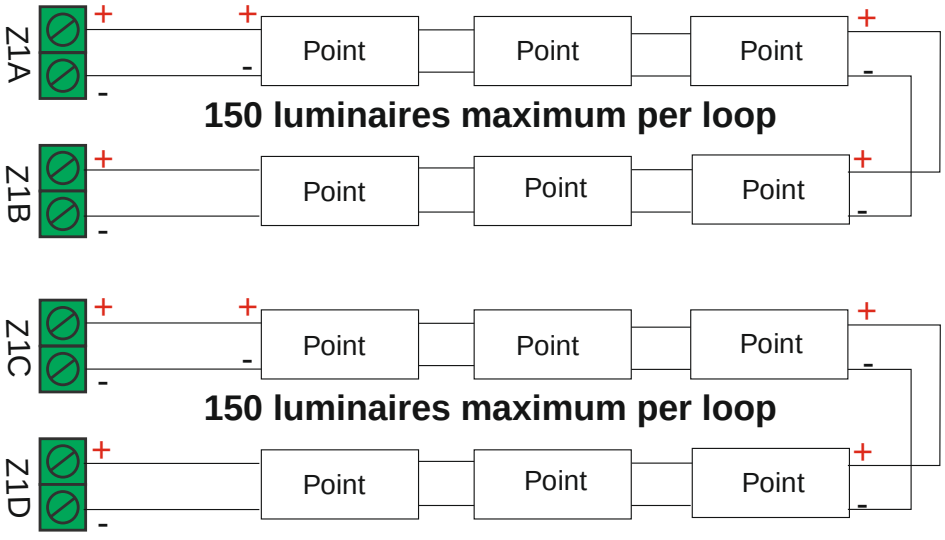
- Select shielded cable for every installation.
- The cable shield must be reconnected in every cut during the length of the loop and must be terminated to the «PE» (Power Earth).
- The positive and negative polarity must be maintained throughout the installation.
- All points must be connected in parallel with the output.



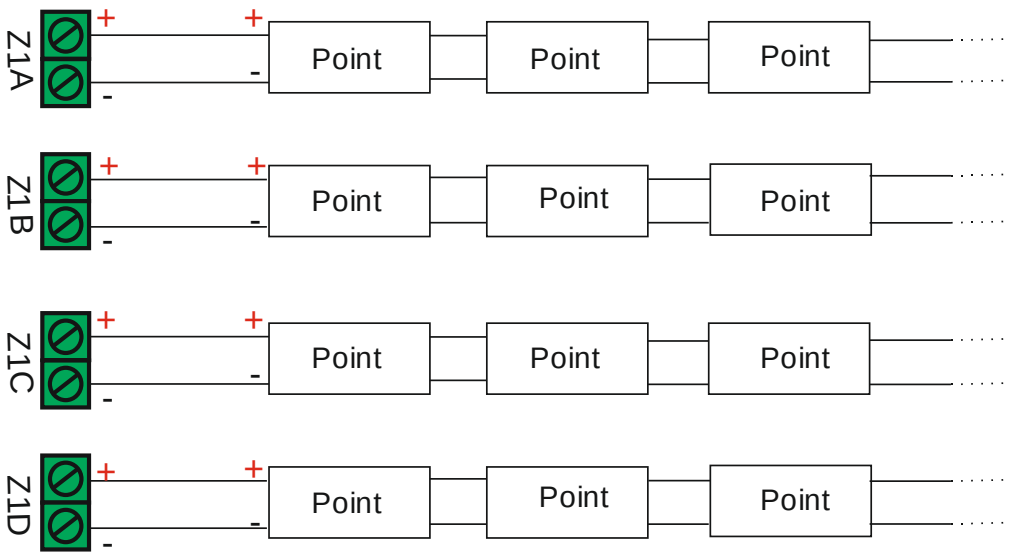
- If 4 contacts on the communication terminal blocks, the L+ are linked together as well as the L-.



- Loop topology. Note: Max 250points in total.



- In- line topology(or Star). Note: Max. 75 points per line / Max 250points in total.



STEP BY STEP INSTALLATION ISTRUCTIONS

- Mount the panel on a surface, able to support 10Kgs at least.
- Connect the each zone to the corresponding output of the panel.
- Connect the monitoring Relays. (Optional)
- Connect the 12V / 7Ah Lead Acid battery with the correct polarity.

ACTIVATION

- **Make sure there is no short circuit and the POWER EARTH is connected to EARTH terminal.**
- Connect the panel to power Mains.

INSTALLATION PROCEDURE

PREPARATION

•Set the address of each luminaire, setting up the DIP switch inside of the luminaire.

PREPARATION

• Certain models, such as ZLD-34, do not contain DIP switches. In this case, the address should be set through the panel, connecting and setting the luminaires one-by-one.

ADDRESSING LUMINAIRES

• TECHNICIAN MENU > SETTINGS > CHANGE ADDRESS POINT.
Note: ***It is not required to connect the 230VAC power on the luminaire in order to set the address. Only the communication line.***

PREPARATION

•Keep a record of the points' addresses and names.

USER MENU <TEST>

•TEST LED to inspect them visually for proper operation.

TECHNICIAN MENU <SETTINGS>

•Set the DAY, DATE and TIME.

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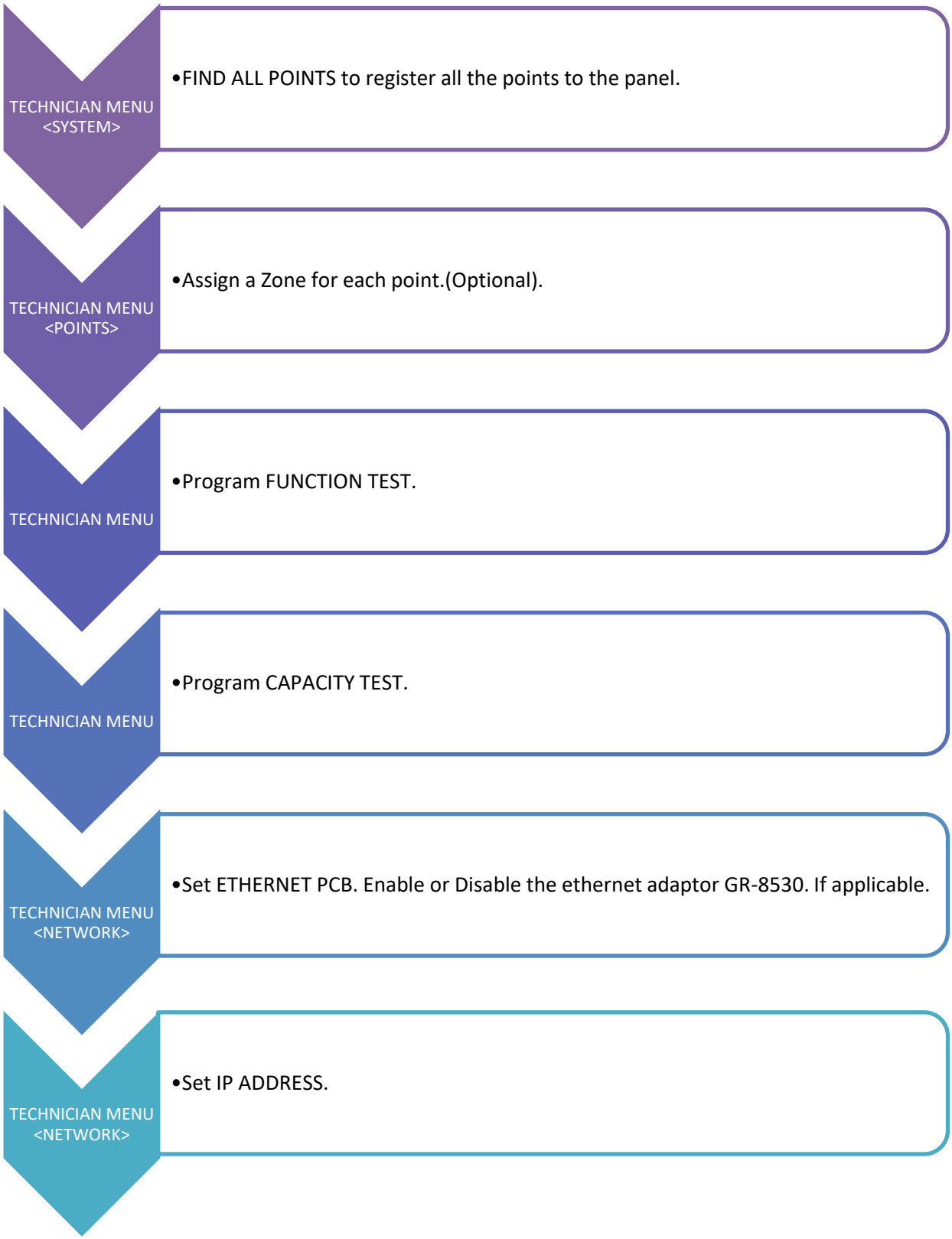
TECHNICIAN MENU <SYSTEM>
•FIND ALL POINTS to register all the points to the panel.
TECHNICIAN MENU <POINTS>
•Assign a Zone for each point.(Optional).
TECHNICIAN MENU
•Program FUNCTION TEST.
TECHNICIAN MENU
•Program CAPACITY TEST.
TECHNICIAN MENU <NETWORK>
•Set ETHERNET PCB. Enable or Disable the ethernet adaptor GR-8530. If applicable.
TECHNICIAN MENU <NETWORK>
•Set IP ADDRESS.

TROUBLESHOOTING

FAULT	PROBABLE CAUSE	ACTION
THE PANEL REPORTS: «PANEL DISCONNECTED BATTERY»	The internal battery of the panel is not connected	Connect the battery.
THE PANEL REPORTS: «POINT X,WRONG LUMINARY»	1) The luminaire type was changed in the specific address. 2) During the first detection, the luminaire was OFF.	Re execute the automatic point recognition via the technician menu (SYSTEM > FIND ALL POINTS), or install manually the luminaire type via the option POINTS.
THE PANEL REPORTS: «POINT X, LUMINARY COMM.»	1) The luminaire is probably OFF (without battery or 230V power) or there is an internal malfunction. 2) Probable noise on the communication line due to nearby electromagnetic interference. 3) Bad communication due to long distance and small cable cross section.	Verify the good operation of the luminaire. Inspect for internal faults such as disconnected wiring. Check for probable nearby electromagnetic interference. Verify the specifications of the communication cable.
THE PANEL REPORTS: «POINT X, LAMP/BATTERY FAULT»	As mentioned, the error comes from either an unconnected battery or a lamp/led error.	Inspect for probable faults or insufficient connection at the specified points.
THE PANEL REPORTS: «OUTPUT X, SHORT CIRCUIT»	There is a short circuit along the length of the loop / communication line.	Disconnect the output terminal block and inspect for probable short circuits along the line connect on the specific output.
THE PANEL REPORTS: «POINT X, DISCONNECTED»	The panel can't detect a luminaire that was previously registered.	Inspect for probably disconnection at the specific point.
THE PANEL REPORTS: «POINT X, NOT REGISTERED»	The point has been detected after automatic point recognition but is not registered in memory.	Conduct automatic point recognition or manually install the point.
THE PANEL REPORTS: «POINT X, BATTERY CAPACITY FAULT»	During the last duration test of the luminaire a problem was found. The real duration is smaller that the stated duration.	Replace the luminaire battery with one of the same type and rating. (see the luminaries user manual)

THE PANEL FINDS ONLY CERTAIN LUMINAIRES	1) There is an open circuit in the communication line. If the connection is done using the loop topology then there might be more than one open circuit. 2) Another cause might be wrong addressing of non detected points.	Find the open circuit, between the last detected point and the first un detected. To easily see the communication indication go to **MENU>TEST>POINTS IN TEST** and by using the up/down arrows go to the address where the problem is. By repairing the connection problem, on point X we can now see only «**GOOD**» packets increasing, we can see the **name of the luminaire** as well as the battery voltage and charge or lamp current. (any connection open circuit can be located in section 5, CABLE INSPECTION) If there is no open circuit then test for wrong addressing.
THE PANEL REPORTS: «POINT X, CONFLICT DATA»	The panel detects more that one points with the same address.	Inspect the adjusted addresses for errors. The point that can't be recognized in the desired address via the operation **MENU>TEST>POINTS IN TEST** as mentioned above probably has a conflicting address with another point.