European manufacturer

olympia electronics SAFETY & SECURITY SYSTEMS

for a safer world

SELF TESTING MAINTAINED EMERGENCY LUMINAIRIES WITH WIRELESS COMMUNICATION

CE

TECHNICAL CHARACTERISTICS *(for LED MODULE Specs. see page 4)*						
	LLB-26/90/WL	LLB-26/180/WL	LLB-40/90/WL	LLB-40/180/WL	LLB-64/90/WL	LLB-64/180/WL
OPERATION VOLTAGE	220-240V AC/50-60Hz					
MAXIMUM POWER CONSUMPTION	6W/6.4VA (PF=0.94)		7W/7.4VA (PF=0.94)		9.3W/9.8VA (PF=0.94)	
TX/RX FREQUENCY RANGE	868.150-868.450MHz					
TX POWER	11dBm					
BATTERY (Ni-MH)	4.8V/1.2Ah		4.8V/1.2Ah	4.8V/2.4Ah	4.8V/2Ah	4.8V/4Ah
BATTERY PROTECTION	From overcharge and deep discharge					
INDICATIONS - CONTROLS	Charge LED, Lamp fault LED, Battery Fault LED, TEST button					
CHARGING TIME	24 h					
MINIMUM AUTONOMOUS DURATION	90 min	180 min	90 min	180 min	90 min	180 min
ILLUMINATION SOURCE	White LEDs					
LIGHT SOURCE INTENSITY (Mains/emerg.)	230lm/300lm	230lm/123lm	370lm / 300lm		600lm / 500lm	
DEGREES OF COVER PROTECTION	IP44					
PRODUCED IN ACCORDANCE WITH	EN 60598-1, EN 60598-2-22, EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 1838, 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%					
VIEWING DISTANCE	26m		40m		64m	
CONSTRUCTION MATERIALS	Aluminum, ABS/PC, PC, Plexiglass					
EXTERNAL DIMENSIONS (LxHxW)	287 x 205 x 55 mm		435 x 280 x 55 mm		673 x 400 x 55 mm	
TYPICAL WEIGHT	876gr.		1396gr.	1503gr.	1650gr.	2777gr.
GUARANTEE	3 years (1 year for the battery)					

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

GENERAL

These luminaires are used in places where emergency luminaires are needed. Each luminaire must be permanently connected to mains power supply. In normal operation the led strip lights and the battery is charging. In case of a mains power supply failure the luminaire will light the led strip automatically in emergency mode. When the mains power supply is restored the device turns to normal operation.

Manual Operational Test

By pressing the test button briefly (less than 5 seconds) an emergency operation test is performed. The white LEDs will be lit for approx. 3 seconds, the red LED will flash during this test sequence.

Automatic Operational Test

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

Manual Autonomous Test

By pressing the test button for between 5 and 10 seconds a battery condition test is performed. This test will last for the stated duration and can only be performed when the battery is fully charged (steady green LED). The white LEDs will be lit and the red LED will flash during this test sequence.

Automatic Autonomous Test
The Automatic Autonomous Test measures 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 and the battery should be connected and 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 the nominal then the battery fault led will turn on continuously and the battery must be replaced.

Resetting Errors
Push the test button for >10 seconds to delete all indicated errors. Then the luminaire 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.

INSTALLATION
To install the luminaire follow the installation instructions on page 4.

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 dependent by the total amount of the line's power load.
3. In case of battery or lamp replacement, these must be replaced by parts of the 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 into common trash bins, they must be discarded only in battery recycling points. Do not incinerate.**

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.

Indicator LEDs			Description
GREEN	RED	RED	
◍	○	○	Battery charged no faults
✳	○	○	Charging (battery test not possible while charging)
○	○	○	Mains off, battery not connected or charger fault
○	○	✳	Battery test
◍	○	◍	Battery fault
○	✳	○	Light source test
◍	◍	○	Light source fault
◍	◍	◍	Battery fault and light source fault

Led status explanation

○ Off ◍ On ✳ Flashing

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.

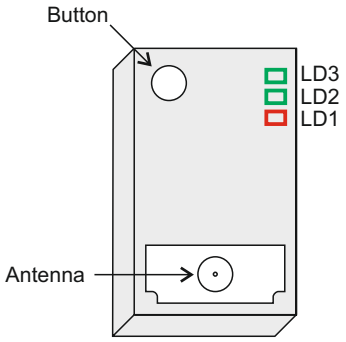
The **middle LED** (LD2-green) indicates the received signal strength (RSSI) of the router module.
This LED may blink according to the following patterns:
1. Very fast flash [5 times/s]: received signal strength is excellent.
2. Fast flash [2 times/s]: received signal strength is good.
3. Moderate flash [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 (V1 Wireless System):
- SID: 00000001
- RF Channel: 13 (869.525MHz)

Default settings (V2 Wireless System):
- SID: 00000001
- NKEY: 00000000
- RF Channel: 2 (868.150MHz)



INSTALLATION INSTRUCTIONS

ELECTRICAL CONNECTIONS (after the mains interruption)

① Unfasten the two side cover screws and remove the plastic cap by sliding it gently. Install the gasket and make a hole in the center by using a small screwdriver. Pass the round cable through the gasket.

② Connect the mains cables to the respective terminal block. **N for neutral**, **L for live wire, L1 for the maintained operation and the ⏚ for ground connection**. The L1 wire can be connected to an external switch to control the maintained or non maintained operation of the luminaire. For permanent maintained operation use two wires to power the luminaire, N for neutral and L for live wire, and link the L and L1.

③ The battery is not connected. See the section "Battery replacement process" to access the battery compartment and connect the battery.

④ **ATTENTION!!** *Make sure that the ground cable is attached to the respective ground connector.* Replace the removed parts in the previous steps.

SURFACE MOUNTING ON A WALL (single sided)

⑤ Install the included plastic bracket on the wall (figure 1). Remove the aluminum bracket from the luminaire and use the two supplied mounting screws to install the aluminum bracket to the plastic bracket (figure 2). Slide the luminaire to the aluminum bracket and use the bolt on the center **(*)**, to stabilize the luminaire (figure 2).

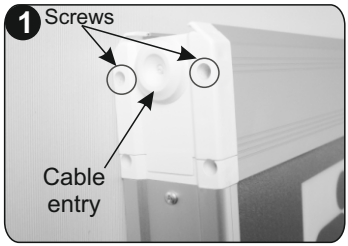
CEILING MOUNTING (double sided)

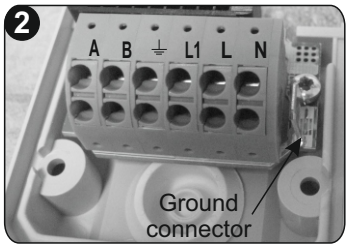
⑥ Remove the aluminum bracket from the luminaire and install it with the included spacers, screws and plugs in the ceiling (page 5). Slide the luminaire to the aluminum bracket and use the bolt on the center **(*)**, to stabilize the luminaire (figure 4).

⑦ Power on the device at the end of the installation.

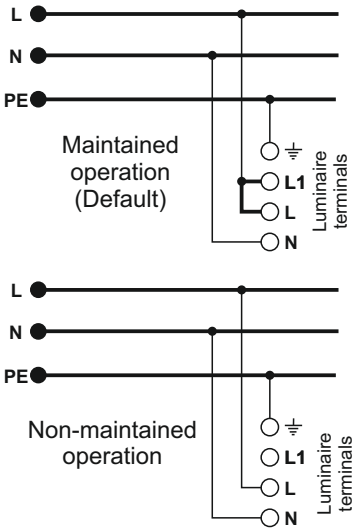
NOTE!! After finishing the installation you must power the luminaire at least for 24 hours for battery charging to perform the nominal autonomy.

(*) First, hand tighten it and then, use pliers to tighten it little bit more (not all the way).





Connection Diagramms



LED MODULE CHARACTERISTICS			
	LLB-26/90/WL-LLB-26/180/WL	LLB-40/90/WL-LLB-40/180/WL	LLB-64/90/WL-LLB-64/180/WL
Manufacturer	Olympia Electronics S.A		
Model Number	2405185	0204185	2605185+2705185
Voltage Range	14 - 16.5VDC		
Nominal Power	4.5W	7.2W	11.7W
Connections	Non reversible connection between main pcb and led module		
Temperature (tc)	45 °C max. across the board	45 °C max. across the board	50 °C max. across the board

MOUNTING METHODS

SURFACE MOUNTING ON A WALL (single side luminaire)

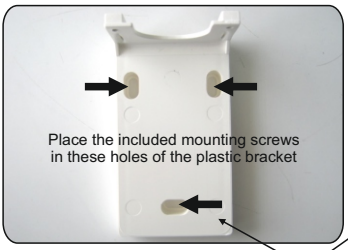


Figure 1

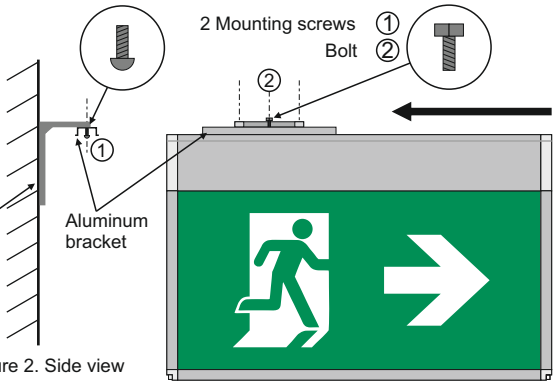
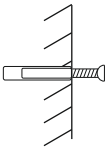


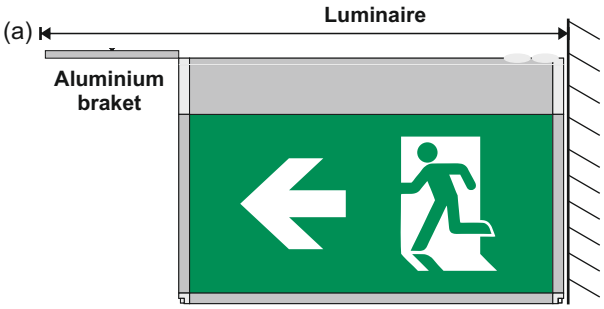
Figure 2. Side view

Figure 3. Front view



GENERAL!!
Measure the distance of the mounting holes and after the drilling place on these spots the mounting plugs and fasten the base with the mounting screws.

SIDE WALL CLEARANCE



Depending on the size of the luminaire the distance from the side wall must be more than:

(a): **LLB 26: 440mm**

LLB 40: 580mm

LLB 64: 820mm

CEILING MOUNTING (double side luminaire)

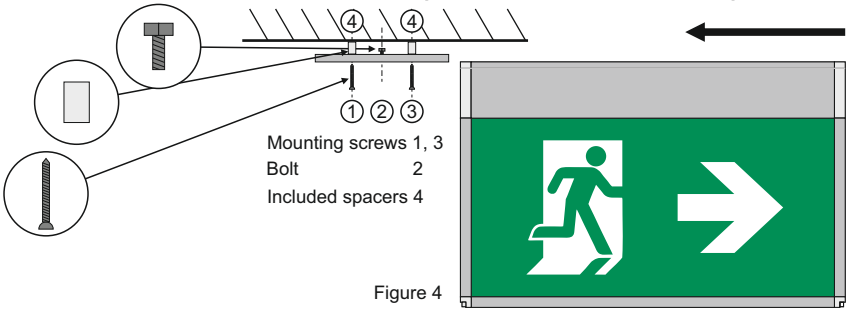
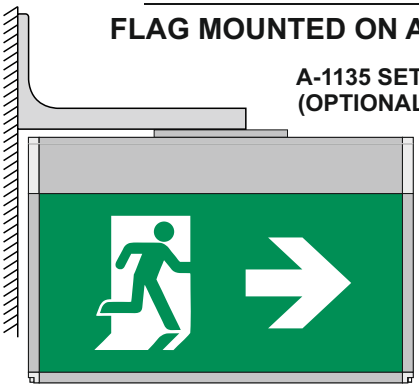


Figure 4

ALTERNATIVE MOUNTING METHODS

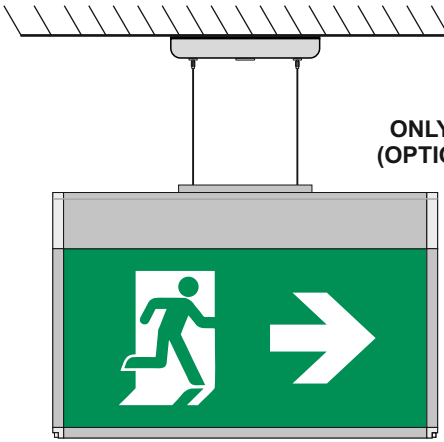
FLAG MOUNTED ON A WALL (double side luminaire)

A-1135 SET, *ONLY FOR LLB-26*
(OPTIONAL AFTER REQUEST)



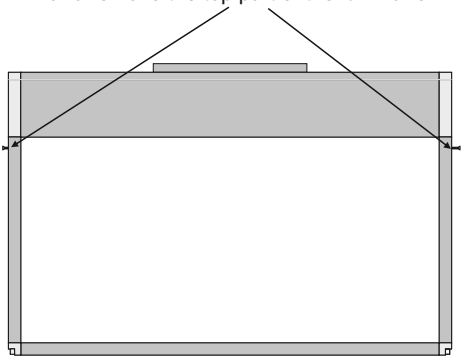
HANGING INSTALLATION (double side luminaire)

A-1136 SET,
ONLY FOR LLB-26 & LLB-40
(OPTIONAL AFTER REQUEST)

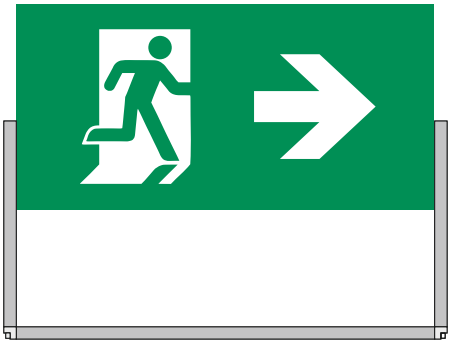


INSTALLATION PICTOGRAMMS

1. Unfasten the two screws of the luminaire and remove the top part of the luminaire.

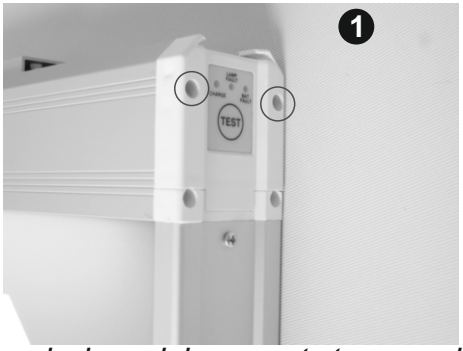


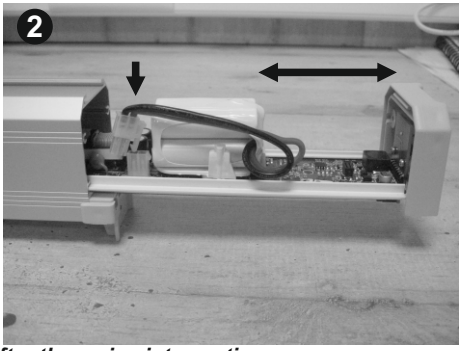
2.Insert the pictogramm after removing the protective film from the back side.



3.Carefully fit the top aluminium cover and reinstall the retaining screws.

Battery replacement process





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

1. Unfasten the two side cover screws and remove the plastic cap (with the indications) by sliding it gently to the right.
2. Remove the old battery. Install the new one and place the connector as shown on the picture.
3. Refit the plastic cap (with the indications) by sliding it gently to the left and fasten the removed screws in step 1.

WARNING!! *Use a maximum torque of 0,9Nm to tighten the screws.*

NOTE!! In case of battery replacement the used battery must be replaced with a new one of the same type, by the manufacturer or by a competent person.

NOTE: LED= Light Emitting Diode
LABELING EXPLANATION:
X: Self contained
1: Maintained **(*)**
A: Including test device
B: Including remote test mode
C: Including inhibiting mode
E: With non-replaceable lamp(s) and/or battery
F: Automatic test gear complying with IEC 61347-2-7 denoted EL-T
G: Internally illuminated
90: 1.5 hour duration
180: 3 hours duration

X	1	A	B	C	E	F	G	90

Maintained operation: The luminaire lights its illumination source, when it is powered by the mains power supply or not.
(*) Non Maintained operation: The luminaire turns on illumination source, only in case of power supply failure.

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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