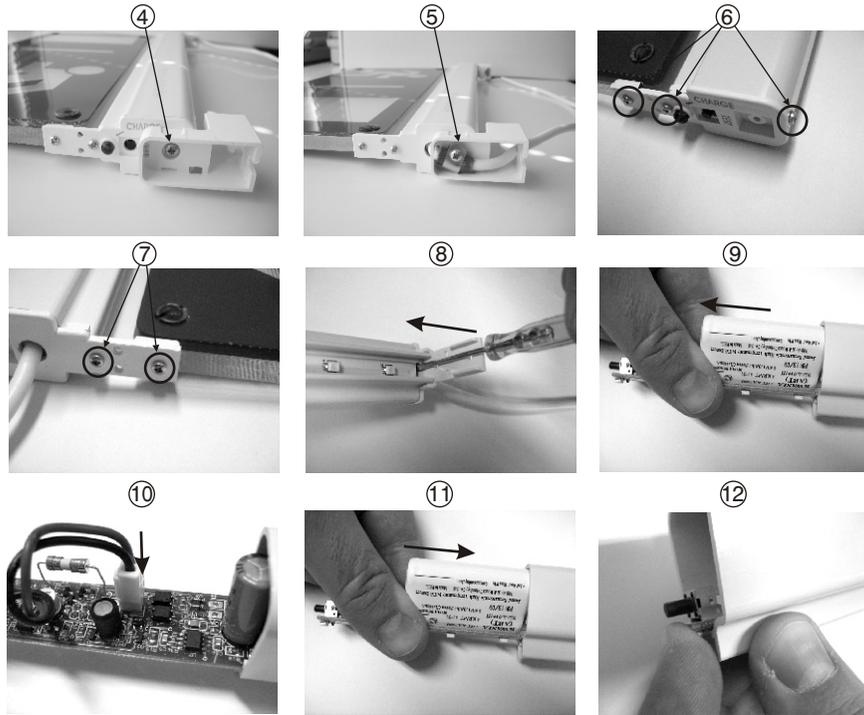


Battery replacement process



Before service interrupt the mains power supply.

- ① Open the cover of the electric box and disconnect the illumination sign's cable according to figure 3.
- ② Remove the plastic cover from each side. (figure 1, step 2).
- ③ Unfasten the mounting screws to unmount the illumination sign (figure 1, step 4).
- ④ Unfasten the mounting screw of the bracket and remove it.
- ⑤ Unfasten the mounting screw (with the cable holding accessory) of the bracket and remove the bracket.
- ⑥ Unfasten the 3 screws without moving the marking panel.
- ⑦ Unfasten the 2 screws and remove the marking panel.
- ⑧ Slide out the led strip with a flat screwdriver.
- ⑨ Pull carefully the led strip by holding it from the two sides as shown in picture.
- ⑩ Remove the used battery and place a new one with the same type A-939/HT with same cables and connector.
- ⑪ Push carefully the led strip by holding it from the two sides as shown in picture.
- ⑫ Push the led strip to face the edge of the plastic cover.
- ATTENTION !!! Don't apply force to the test button.**
- ⑬ Refit the removed parts in steps 7,6,5 and 4.
WARNING!! Use a maximum torque of 0,25Nm to tighten the screws (step 6,7) and a maximum torque of 0,6Nm to tighten the screws (step 4,5).
- ⑭ Mount the illumination sign with the mounting screws (figure 1, step 4).
- ⑮ Open the cover of the electric box and connect the illumination sign's cable (figure 3). Close the cover and power the illumination sign.

MAINTAINED TO NON-MAINTAINED SELECTION CAPABILITY

Power on the device and press continuously the TEST button for 10 seconds, until the led strip turns off. Release the button and after a short emergency test, the device operates as non-maintained. If you want to restore the previous condition (maintained operation), press continuously the TEST button for 10 seconds, until the led strip lights. Release the button and after a short emergency test, the device operates as maintained illumination sign.

Troubleshooting

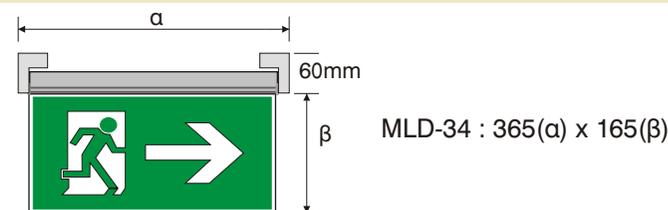
Trouble	Solution
1. The illumination sign does not light when the TEST button is pressed.	The battery has lost it's energy Wait at least for 1 hour for the battery to be charged. The battery is not connected Attach the battery's connector to the appropriate connector on the P.C.B. The battery is inappropriate The battery must be replaced.
2. During the automatic 6month check, the illumination sign does not light or has less autonomy than the nominal.	The battery has lost it's energy Wait at least for 24 hours for the battery to be fully charged. The battery is inappropriate The battery must be replaced.
3. The illumination sign does not light in normal operation.	The illumination sign is adjusted to operate as non-maintained Choose (if you must) to turn the operation to maintained, according to relative paragraph in page 6.
4. The illumination sign does not light during a mains failure.	The battery has lost it's energy Wait at least for 24 hours for the battery to be fully charged. The battery is not connected Attach the battery's connector to the appropriate connector on the P.C.B. The battery is inappropriate The battery must be replaced.

Package contents

- The package contains:
1. The illumination sign
 2. The instructions manual
 3. Plastic bag with supporting materials.



Eco Light dimensions in mm



MAINTAINED/NON-MAINTAINED (OPTIONAL) ILLUMINATION SIGNS WITH WHITE LEDs



TECHNICAL CHARACTERISTICS	MLD-34D/w
Mains voltage	220-240V AC/50-60Hz
Maximum power consumption	8 VA
Batteries (Ni-Cd)	3.6V/1Ah
Battery protection	Overcharging and full discharging protection
Recharging time	24h
Minimum emergency duration	3h
Light source intensity (Mains / Emerg)	100lm/80lm
Degrees of cover protection	IP 40
Produced in accordance with	EN 60598-1, EN 60598-2-22, EN 1838
Operation temperature range	0 to 40 °C
Relative humidity	up to 95%
External panel's dimensions	340x170mm
External dimensions	365x25x225mm
Typical weight	870gr.
Guarantee	3 years (1 year for the battery)

Operation instructions

These new sign illumination luminaires use a new technology, friendly to the environment, with high illuminated L.E.D.s. L.E.D. technology has very low power consumption.

The edge illumination sign is used as a maintained emergency lighting with indications symbols. In this type of marking panels, the PVC overlay is mounted on the marking panel with 4 plastic screws, and it can be changed by change the PVC overlay in accordance with the marking code.

Each model combines modern, aesthetics, together with functionality. The exit illumination signs are used in every public area where clear direction and good appearance are important.

NON-MAINTAINED OPERATION

By default the illumination sign operates as maintained. The device has a possibility to operate as non-maintained. To change the maintained to non-maintained operation follow the relative instructions in page 6.

All models must be permanently connected to the mains power supply as shown on page 2.

The legend is screened on to a clear acrylic sheet which has the marking on the marking panel with the light that comes from the top of the luminaire and diffracts, giving light to the marking panel. The luminaire has an indication (CHARGE) for the charging of the battery and a (TEST) button to TEST the emergency circuit and the LEDs for good operation only when the luminaire is plugged in to mains power supply. The unit must be mounted in a clearly visible area and can either be hung on a ceiling or mounted on a wall depending on the requirements of the installation. The package

includes all the required materials for mounting on the wall or on the ceiling. The pages 2,3 and 4 show us the mounting methods.

WARNING !!

1. Read carefully this instruction manual.
2. The unit must be connected to a dedicated fused power line, for example 16A rating.
3. Every month, an optical and emergency mode operation check should be carried out by pressing the TEST button.
4. Every six months, a full duration check should be carried out by disconnecting the mains power supply. Count the autonomous duration of the luminaire and in case of no correspondence to stated emergency duration replace the battery.
5. During long periods of inactive use (i.e 6 months), disconnect the batteries from the units.
6. **Replaced batteries must not be thrown into trash bins. They must be returned to special battery disposal points. Do not incinerate.**

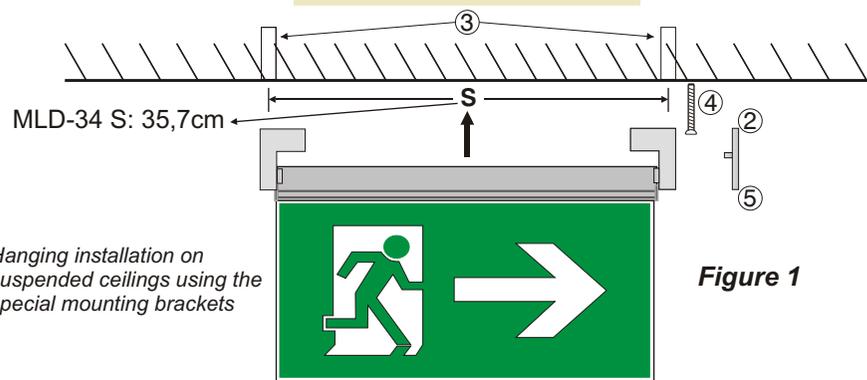
NOTE: LED= Light Emitting Diode

LABELING EXPLANATION:

- X: Self contained**
- 1: Maintained**
- A: Including test device**
- 180: 3 hour duration**

Mounting methods

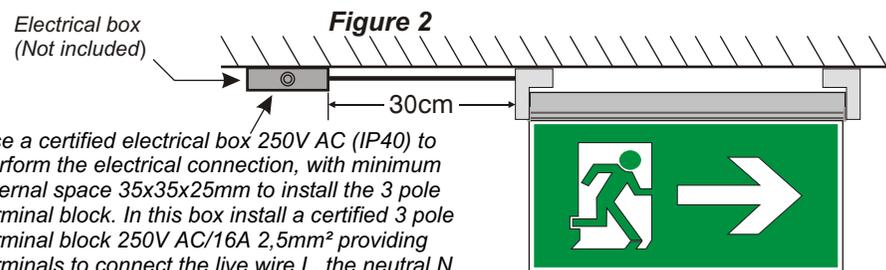
Ceiling mounting



Hanging installation on suspended ceilings using the special mounting brackets

Figure 1

- Attention!!!** Choose the installation area to insure that the mounting surface is appropriate for the installation of the illumination sign.
- Remove the plastic cover from each side.
- Measure the space **S** according to the illumination sign's type and drill the appropriate holes in the ceiling for the installation of the included mounting plugs No 6.
- Place the mounting plugs No 6 and mount the sign by tightening the included mounting screws.
- Refit the plastic cover on each side.
- Attention!!!** Interrupt the mains power supply.
- For the installation of the electrical box you may need to open holes in the ceiling and at it's cable entrances, for the entrance of the power and illumination sign's cables. Place the electrical box on the side of the illumination sign at a distance of 30cm from it (Figure 2).
- After mounted the electrical box open the cover and perform the electrical connection according to Figure 3. No preparation is required (stripping) for the cable. After the connection close the cover of the box.
- Power the illumination sign.
- Check the illumination sign's operation.



Use a certified electrical box 250V AC (IP40) to perform the electrical connection, with minimum internal space 35x35x25mm to install the 3 pole terminal block. In this box install a certified 3 pole terminal block 250V AC/16A 2,5mm² providing terminals to connect the live wire L, the neutral N and the ground GND. To this terminal block is connected the power cable with a cross section of 1,5mm². Install the electrical box in an appropriate area in the ceiling. Install securely the 3 pole terminal block and perform the connection according to figure 3.

The electrical box and the 3 pole terminal block are not included in the package.

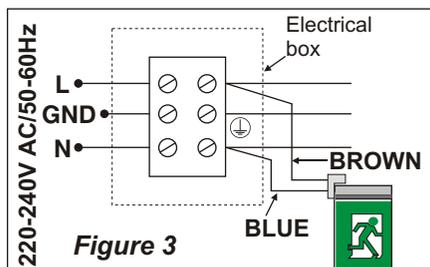
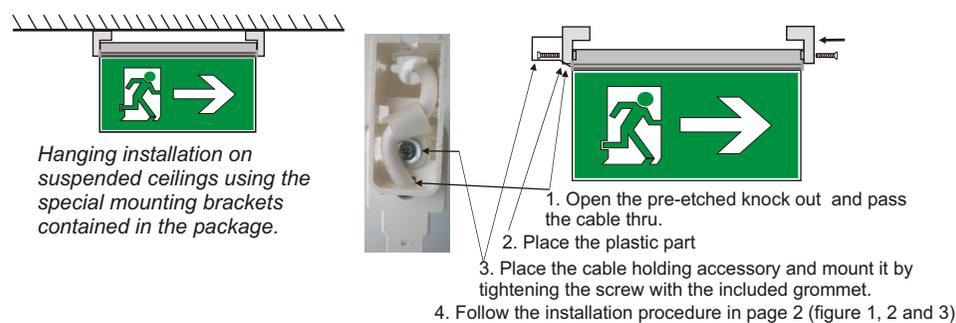


Figure 3

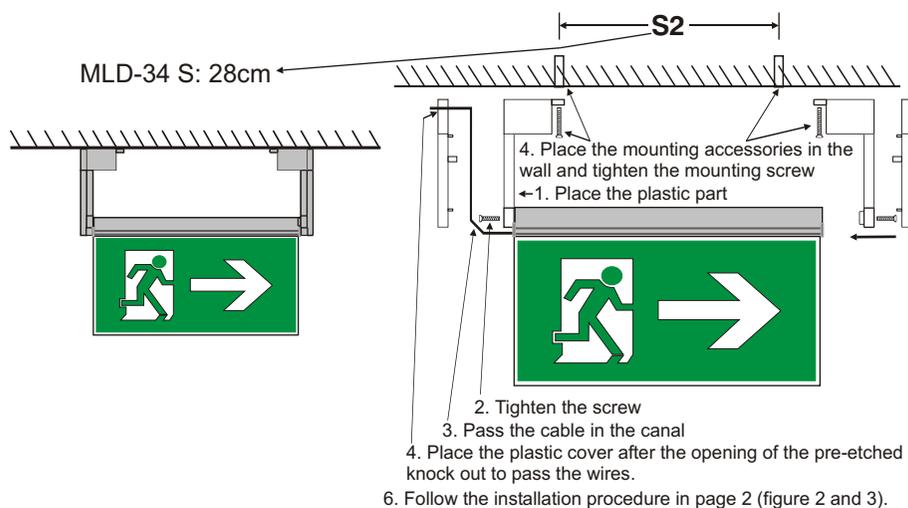
Mounting methods

Ceiling mounting



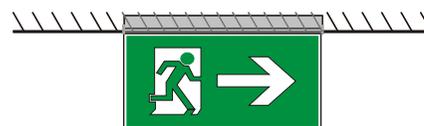
Hanging installation on suspended ceilings using the special mounting brackets contained in the package.

1. Open the pre-etched knock out and pass the cable thru.
2. Place the plastic part
3. Place the cable holding accessory and mount it by tightening the screw with the included grommet.
4. Follow the installation procedure in page 2 (figure 1, 2 and 3).

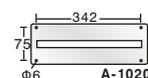


MLD-34 S: 28cm

1. Place the plastic part
2. Tighten the screw
3. Pass the cable in the canal
4. Place the plastic cover after the opening of the pre-etched knock out to pass the wires.
6. Follow the installation procedure in page 2 (figure 2 and 3).

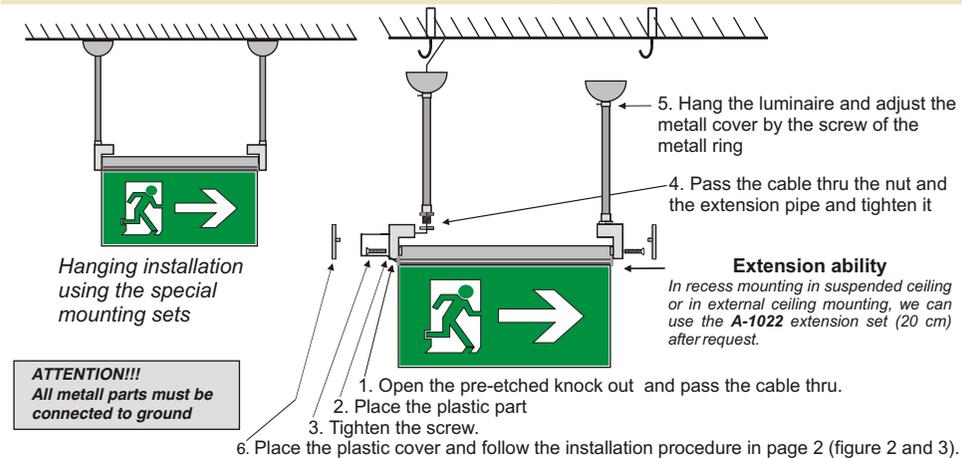


Suspended ceiling mounting base



Recessed mounted installation on suspended ceilings using the base type A-1020

Alternative mounting method



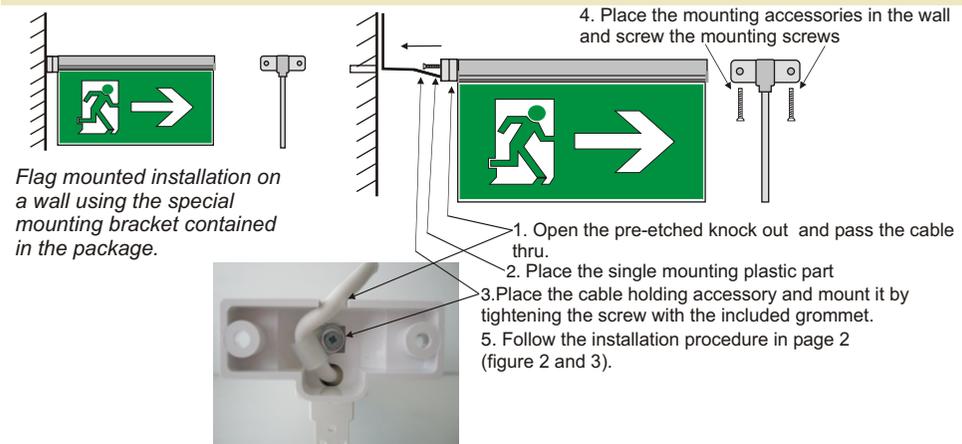
ATTENTION!!!
All metal parts must be connected to ground

Hanging installation using the special mounting sets

Extension ability
In recess mounting in suspended ceiling or in external ceiling mounting, we can use the A-1022 extension set (20 cm) after request.

1. Open the pre-etched knock out and pass the cable thru.
2. Place the plastic part
3. Tighten the screw.
4. Pass the cable thru the nut and the extension pipe and tighten it
5. Hang the luminaire and adjust the metal cover by the screw of the metal ring
6. Place the plastic cover and follow the installation procedure in page 2 (figure 2 and 3).

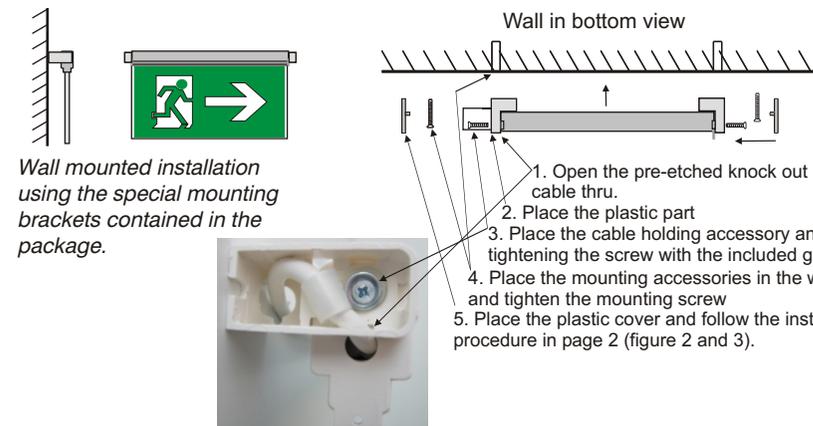
Wall mounting



Flag mounted installation on a wall using the special mounting bracket contained in the package.

1. Open the pre-etched knock out and pass the cable thru.
2. Place the single mounting plastic part
3. Place the cable holding accessory and mount it by tightening the screw with the included grommet.
4. Place the mounting accessories in the wall and screw the mounting screws

5. Follow the installation procedure in page 2 (figure 2 and 3).



Wall mounted installation using the special mounting brackets contained in the package.

1. Open the pre-etched knock out and pass the cable thru.
2. Place the plastic part
3. Place the cable holding accessory and mount it by tightening the screw with the included grommet.
4. Place the mounting accessories in the wall and tighten the mounting screw
5. Place the plastic cover and follow the installation procedure in page 2 (figure 2 and 3).