



# **GENERAL INSTALLATION AND MAINTENANCE INSTRUCTION**

## **FOR: FLUORESCENT AND LED LIGHTING LUMINAIRES**

Before use of this product please read below instructions carefully. Be aware all installation, maintenance and testing of these luminaires may only be done by a qualified person and according to local regulations. This product may only be used as intended, as a luminaire to illuminate areas. All other use may damage product, and product may not be working as intended. If the product is modified in a mechanical and/ electrical way the warranty of the product is no longer valid.

### **1. INSTALLATION:**

#### **Important Notes:**

- a) Check product labels for correct input voltage and frequency before installation.
- b) If separate switched and unswitched supplies are to be connected to this luminaire they must originate from the same phase.

1.1 Installation should be carried out by a qualified person in accordance with local regulations.

1.2 Carefully unpack the luminaire and remove the diffuser/box lid, as appropriate.

1.3 Remove the gear tray assembly from the housing where necessary or open the connection box or plug in the plug.

**Important Note – to ensure continuously correct function of all electronic/electrical components make sure to keep them dry and clean.**

1.4 Fix the luminaire to the ladder, wall or where needed. Position the luminaire to ensure that the indicator LED will be visible when installed.

1.5 Ensure that the main supply is off. Connect the luminaire to the supply as marked. Self contained emergency lighting luminaires must be supplied with an unswitched supply (see Resolux standard marking below).

1.6 Reassemble the luminaire where necessary and check operation by switching on the mains supply. Power must be turned on for at least 24 hours for fluorescent and 12 hours for LED lights to ensure that the batteries are fully charged.

1.7 Test of emergency lighting luminaires can be carried out after charging the battery for at least 15 min. and this is done by adding power to L2.

The normal light function can be tested by adding power to L1 and L2. The emergency light function can be tested by turning off the power to L2.

Please refer to Figure 1.

1.8 If there are no failures recorded, the product is correctly installed.

#### **Resolux standard marking:**

**L1** Switched live (normal light on/off). Switch can be a part of light system delivered by Resolux.

**L2** Unswitched live (Emergency light battery charging). If the model is equipped with heat element this will also be connected to L2. **Must be a permanent live/phase/supply.**

**L3** Optional. If the model is equipped with service socket this can be connected to L3.

**N** Neutral connection

**PE** Earth

**Supply:** 120 – 277V 50/60Hz - For products with heat element 120V or 230V must be chosen.

## **2. SPECIFICATION:**

- 2.1 Emergency Lighting – working for 60, 90, 180 minutes depending on model.
- 2.2 Battery – Rechargeable high temperature Nickel Cadmium, voltage and capacity as marked.
- 2.3 Lamp(s) - Fluorescent (See specification on product label).
- 2.4 Emergency light Indicator - High Intensity Light Emitting Diode (LED) indicating correct functioning of charger and connection of battery.

## **3. OPERATION AND MAINTENANCE**

- 3.1 On completion of the installation a copy of these instructions should be handed over to the authority responsible for maintenance.
- 3.2 Replacement of light source and cleaning of emergency lighting luminaires should be carried out regularly to ensure optimal photometric performance. No solvents should be used for cleaning, only mild detergent.
- 3.3 **Ensure that the main supply is off before attempting any form of servicing.** Be aware that the emergency lighting inverter circuit will continue to function after the main supply is cut off and there is an electric shock risk from fluorescent lamp tube pins etc. This risk can be minimized by disconnecting the backup battery.
- 3.4 It is recommended that sealed rechargeable nickel cadmium batteries are replaced after about 5-7 years of operation in accordance with their design life. Batteries should be replaced when the luminaire no longer meets its' declared duration performance. Consult Resolux for details of correct replacement of battery packs.
- 3.5 **Important Note - When replacing components:** Fluorescent lamps should be disposed of carefully taking precautions against glass fragments. Rechargeable batteries **should not** be disposed of with normal waste. Seek advice from Resolux.

## **4. TESTING RECOMMENDATIONS**

We recommend test of emergency light every 6 month and for every 12 month we recommend a test of emergency light function running 60/90/180 minutes depending on model Emergency light must always be tested according to local rules and regulations.

## **5. GUARANTEE AND CLAIM**

If no other agreement/contract is made between buyer and Resolux, the “General sales and delivery conditions” apply.

## **6. TROUBLE SHOOTING/**

When you encounter any problems for our product, we would like to always provide our service to you immediately.

Please check the following points frequently asked. We hope it can help you resolve your problem as soon as possible. If the light still can't work well after you have tried the exercise, please let us know.

Resolux contact information:

Web: [www.resolux.dk](http://www.resolux.dk)

Email: [quality@resolux.dk](mailto:quality@resolux.dk)

Problems	Reason	Verify & Actions/
<b>Light fixture does not light.</b>	The tubes are broken.	Change OK tubes.
	Some problem with supply voltage.	Check the outside supply voltage is in accordance with the product specification.
<b>Light fixture with internal battery that does not light. (see Figure 1)</b>	The reason why the light fixture does not start up when both switches (L1) and constant voltage (L2) are connected by testing, can be due to the fact that a security feature ensures that the light fixture does not start up if there is no power on the backup battery.	Recharge the battery for at least 10-15 minutes by connecting constant voltage on the light fixture (L2) only. In the worst case, the battery needs to be recharged in 24 hours before the light fixture is activated by the switch (L1)



a. Power on L2 only (battery charging)



b. Power on L1 and L2 (Working)



c. Power on L1 only (not work)

Figure 1. Light fixture with internal battery work