BACKLIT LED **Range**

THIS FITTING SHOULD NOT BE USED IN AREAS EXCEEDING 25°C AMBIENT AIR TEMPERATURE

This fitting must be installed by a qualified electrician and wired in accordance with the latest edition of the IEE Electrical Regulations. Information regarding Part Number, Description, Voltage, Frequency and IP Rating is shown on the label affixed to the luminaire.

PRE INSTALLATION

ALWAYS TURN OFF THE MAINS SUPPLY BEFORE COMMENCING INSTALLATION

- Make sure that the mains supply is compatible with the fitting.
- If IP rating has to be retained. A cable gland of the correct IP rating must be used and any fixing holes must be filled with a proprietary silicon sealing compound.
- High voltage insulation test equipment **MUST NOT** be used on High Frequency, Emergency or Dimming luminaires.
- The luminaire is suitable for use within ambient temperature range of -10ºC to + 25ºC ONLY.

Particular attention should be paid to the temperature range for emergency fittings.

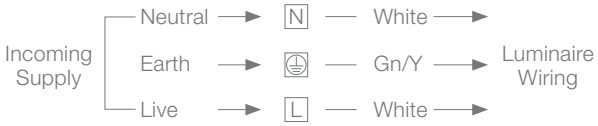
Installations that regularly drop below 0º C for prolonged periods, particularly when the luminaire is not illuminated are likely to result in a shortened battery life. In such applications a regular testing and battery replacement schedule is recommended.

INSTALLATION NON-EMERGENCY LUMINAIRES

- Remove gear tray
- For most luminaires, drill out the cable entry and any other “Cut Outs” required.

  If cut outs are required for conduit fixing (Not BESA) make sure that the hole is drilled high enough in the side of the base to allow the inside nut to be fitted.
- Feed the incoming mains through the cable entry gland and secure the base to the mounting surface required using the mounting points provided (failure to do this will cause the fitting to distort) with fixings suitable to support the fitting and for the material to which the base is being attached.
- Connect the incoming mains to the terminal block. If using stranded cables, make sure that no stray wires are omitted from the terminal connection.

Standard Wiring



- Refit the gear tray (make sure that all cables are clear of the gear tray components) and if applicable secure with the screw(s) provided.

Screw on the diffuser making sure that it is correctly tightened to locate in the seal.

INSTALLATION EMERGENCY LUMINAIRE

- For all non-maintained and maintained emergency light fittings, the driver is electronic, consisting of a high frequency inverter, battery charger, charge indicator, and battery deep discharge protection circuit.
- These fittings are self-contained without “Rest Mode” facility.
- All emergency versions are 3 hour duration.
- The mains supply and the battery connection must be disconnected before servicing or maintenance.
- The battery connections must be left disconnected during installation if the site supply is switched off at the end of the day.

Emergency Wiring

To make the fitting “Non-Maintained” leave out the “Switched Live”

- Close the gear tray (make sure that all cables are clear of the gear tray components) and if applicable secure with the screw(s) provided.
- Screw on the diffuser making sure that it is correctly tightened to locate in the seal.

CIRCUITS

The emergency mains supply must be connected to a direct source via a Key Switch (for test purposes only).

The switched line must be wired so that it disconnects from the luminaire if the Key Switch is switched off (no power to the fitting).

NOTE:

The incoming supply earth **MUST** be connected.

NOTE:

Both luminaire supplies must be broken simultaneously (switched and un-switched) when testing.

Connections into the driver must not exceed 2.5mm2.

After connecting the mains supply, check that the green charge indicator is illuminated. The luminaire should operate when it is switched on (maintained and sustained only).

An initial uninterrupted minimum charge period of 24 hours should always be allowed before testing the module for its rated duration.

The recommended maximum battery storage period of one year should not be exceeded.

If batteries have been left in a discharged state, one or more full charge / discharge cycles may be necessary to restore them to their normal capacity.

Stick the supplied rating label to the luminaire where it can be seen! It **MUST NOT** be fitted on the diffuser.

X	**1**		**180**

GENERAL ROUTINE MAINTENANCE

At commissioning and handing over of the installation, ensure that a copy of this data is presented to the authority responsible for the operation, maintenance and repair of the luminaires.

- Cleaning of the Luminaire must only be carried out after the fitting has been isolated from the electrical supply. **ALWAYS** check before servicing.
- Cleaning should be carried out at regular intervals to ensure that contaminants do not accumulate to an extent that will impair the thermal safety of the luminaire, or degrade the optical performance. **DO NOT** use spirit based cleaners.

Notes:

This luminaire should not be modified or repaired by any persons other than those nominated by the manufacturer.

Any unauthorised modification or repair may render the luminaire unsafe and will invalidate the warranty and conformance to any safety or safety standards that may apply.

The company will accept no responsibility for any modified fittings or for any damage caused as a result of modifications. All details are given as guidance only and do not constitute a contract.

We reserve the right to change or withdraw products without notice.

Installation Details		
Installation Date:		Contact Details:
Installer Name:		
Installation Site Details:		
Amount and Type of Fittings installed:		

ROUTINE MAINTENANCE FOR EMERGENCY LUMINAIRES

Routine maintenance must be carried out in compliance with the requirements of the British Standards Institute Code of Practice BS5266: Part 1 - Emergency Lighting of Premises.

The following tests assume a three-hour system			
Daily	**1.** Check that any recorded faults have been rectified.	**2.** Check that the charge indicator light is illuminated.	
Monthly	**1.** Check that luminaire operates in emergency mode.	**2.** Simulate a mains failure and check that the luminaire illuminates immediately and remains on for three minutes.	**3.** After reverting back to mains supply check the charge indicator light is illuminated.
Six Monthly	**1.** Simulate a mains failure and check that the luminaire illuminates immediately and remains on for at least one hour.	**2.** After reverting back to mains supply check the charge indicator light is illuminated.	**3.** On restoring the mains supply the unit will require 24 hours to recharge before becoming fully operational.
Annually	**1.** Simulate a mains failure and check that the luminaire illuminates immediately and remains on for at least 3 hours.	**2.** After reverting back to mains supply check the charge indicator light is illuminated.	**3.** On restoring the mains supply the unit will require 36 hours to recharge before becoming fully operational.

It is recommended that battery packs are replaced every 4 years or sooner if the unit performance requirements fail to be met. To maintain optimum unit performance, only approved replacement battery packs must be used. All routine maintenance checks must be recorded on the unit Test Record / Installation sheet and must be made available for inspection at all times.

INSTALLATION/ COMMISSIONING AND TEST RECORD	Model No			Serial No (on gear tray)		
	Type		Location			
	Installed by				Date	
	Commissioned by				Date	

Routine Test Report										
	First Year		Second Year		Third Year		Fourth Year		Fifth Year	
Monthly Test	Signed	Date	Signed	Date	Signed	Date	Signed	Date	Signed	Date
Functional										
Functional										
Functional										
Functional										
Functional										
1 Hour Duration										
Functional										
Functional										
Functional										
Functional										
Functional										
1 Hour Duration										
Full Duration										

DISPOSAL

The disposal of any electrical equipment, including this fitting may be subject to Local Authority Regulations and therefore should be consulted for specific guidance.

The batteries within this fitting are Nickel Cadmium and must be disposed of as per Local Authority Regulations for the disposal of toxic waste.

Fern-Howard products are manufactured in the UK at our modern factory in Alton, Hampshire. Luminaires are manufactured and tested in accordance with BS EN60598. Incorporated control gear and components comply with BS/VDE standards. Luminaires are tested in accordance with IES LM-79-08.