



## VICTOR LIGHTING

PO Box 5571  
Glasgow, G52 9AH  
Scotland



Telephone: +44 (0) 141 810 9644  
Fax: +44 (0) 141 810 9642  
Email: [info@victor-lighting.com](mailto:info@victor-lighting.com)  
Web: [www.victor-lighting.com](http://www.victor-lighting.com)


Registered No: 669157  
Registered Office: Mitre House,  
160 Aldersgate Street,  
London, EC1A 4DD

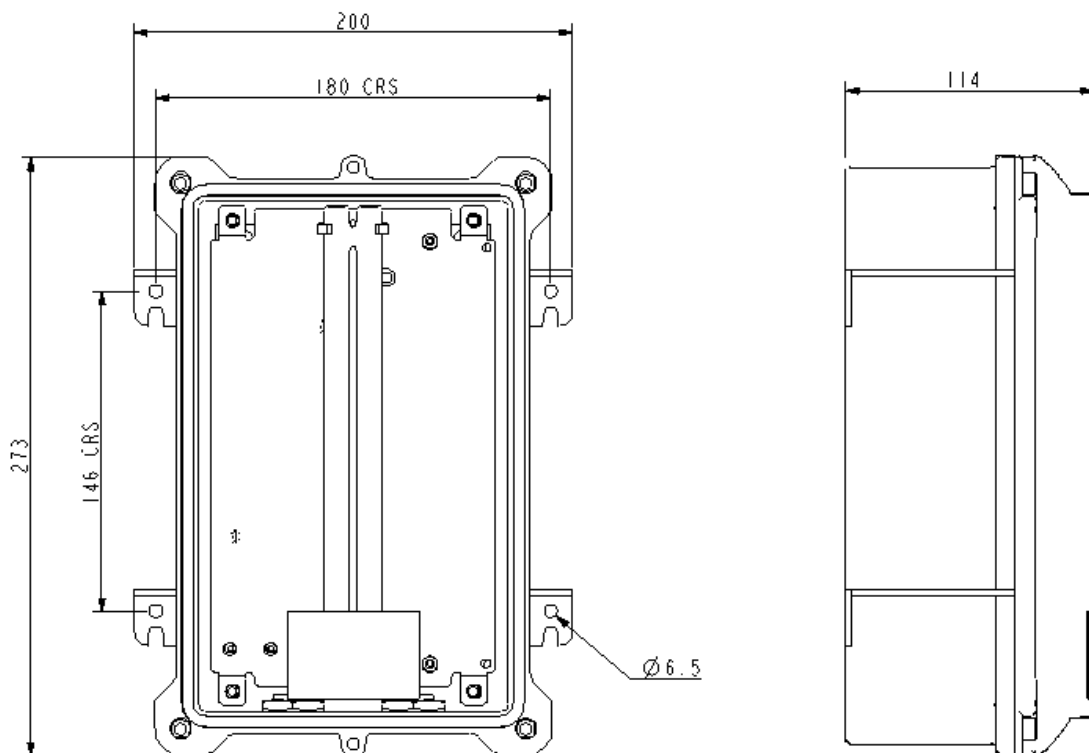
## INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

# PATHFINDER VL114E

EMERGENCY MODEL

EXPLOSION PROTECTED LUMINAIRE WITH INCREASED SAFETY AND ENCAPSULATION PROTECTIONS (type 'e' and 'm')  
INCORPORATING AN INTEGRAL EMERGENCY DC POWER SUPPLY.

VL114 IP66/67 SIRA03ATEX3556 T100°C  II 2GD EEx em II  
IEC EX SIR05.0004 Ex em II  
-15°C to +60°C T4 or +40°C T5 or +25°C T6 220V – 254V 50/60Hz AC ONLY



**SPECIAL CONDITIONS FOR SAFE USE**

None

**IMPORTANT**

1. Read this leaflet carefully before commencing to install the luminaire and retain it for future reference.
2. Check the rating label to ensure that the luminaire is suitable for the supply provided.
3. The luminaire must be installed in accordance with the recognised code of practice e.g. EN60 079.
4. High voltage insulation testing may be carried out, but the test voltage must not exceed 500V DC.  
**WARNING:** Any faults to earth within the luminaires may result in permanent damage to the electronic control unit. This possibility can be avoided by shorting the live and neutral cables together and applying the test voltage between this connection and earth.
5. The luminaire **MUST** be earthed
6. The operating temperature range for the luminaire is shown on the rating label. The luminaire should not be used outside these temperatures.
7. If the luminaire is to be installed in areas of high vibration, please consult the manufacturer.
8. Under **NO** circumstances should a luminaire be opened, even when isolated, when an explosive gas or dust environment is present.
9. Do not use excessive force on plastic components.
10. The luminaires are designed and constructed to EN60598.
11. Prices and design are subject to alteration without notice. All products are sold subject to our conditions of sale, copies of which are available on request. *We reserve the right to change characteristics of our products. All data is for guidance only.*

**GENERAL INSTALLATION NOTES.**

1. Do not attempt installation until you are familiar with all warnings, precautions and procedures within this instruction sheet.
2. Refer to the wiring diagrams for correct installation.
3. Fasteners going into plastic parts should be tightened to a torque of 2.5Nm.
4. Ensure that the mains cable connectors are correctly secured to the terminal block(s). Only one conductor should be fitted to each terminal block. All terminal screws should be fully tightened whether a conductor is fitted or not.
5. Blanking plugs and cable glands must be of the correct type and must be fitted to the manufacturer's specification to ensure that the seals prevent the ingress of moisture or dust and so maintain the luminaire's IP rating.

**GENERAL MAINTENANCE NOTES.**

1. **IMPORTANT.** Isolate the luminaire from both switched and unswitched mains supplies before carrying out any maintenance work.
2. Lamps must be changed at the intervals recommended by the lamp manufacturer.
3. It is essential that all luminaires together with their associated cables, glands, etc. which make up the installation are maintained in such a manner as to ensure the integrity of the protection to which it is designed.
4. The frequency of inspection must be determined by the user, but should be regular enough to ensure that the luminaire installation continues to operate in the designed manner. The more onerous the operating conditions, the more frequent the inspections should be. It is recommended that the interval between inspections should not exceed two years.
5. Plastic components may be cleaned with water containing a small amount of detergent, followed by a clean water wash. Surplus water can be wiped off plastic components, but they should not be wiped or polished with a dry cloth to avoid a build up of static electricity.
6. **IMPORTANT.** All components that are replaced must be in accordance with the manufacturer's specification. Failure to use such components invalidates the certification, approval and warranty of the luminaire and may make it dangerous. NO modification should be made to the luminaire without the knowledge and approval of the manufacturer. If in doubt, refer to the manufacturer.

**TECHNICAL DATA**

Total circuit watts: 1x11W= 7W  
Power factor correction is better than 0.95  
Emergency duration typically 3 hours at 20°C  
The luminaire housing and lens are made polycarbonate. The user must ensure that these materials are suitable for the atmosphere the luminaire will be installed in.

**SPECIAL NOTES**

1. The cable glands used should comply with the requirements of the Code of Practice for increased safety (type 'e') installations. They should maintain at least IP54 protection and have an impact strength of 7Nm
2. NiCd batteries have a reduced charge acceptance efficiency at temperatures continuously above 30°C, so a reduction in emergency discharge durations may be experienced.
3. The batteries are supplied discharged and must be charged for 48 hours and discharged three times before reaching full charge capacity.
4. The emergency operation of the luminaire should be tested regularly in accordance with the relevant code of practice, e.g. BS5266

**INSTALLATION AND MAINTENANCE NOTES SPECIFIC TO THIS PRODUCT.**

**WIRING** - The luminaire can only operate in non- maintained (normally off) mode. The Live supply from the mains should be connected to the terminal marked 'L'.

**REMOVE EMERGENCY LAMP/ BALLAST HOUSING COVER ASSEMBLY.**

Isolate the luminaire from the mains and unscrew the bolts securing the ballast housing cover. Disconnect the emergency supply wires from the terminal block and then remove the clips on the securing straps. The ballast housing cover assembly can now be fully removed to a safe working area before carrying out any work on it. It is important that a replacement assembly should be fitted immediately. The luminaire must not be left in the open condition and must not be energised from the mains when open.

**REPLACING THE BATTERY. (Victor Type VL139 – SIRA03ATEX3209U)**

Remove the emergency assembly as described above and take to a safe area. The battery can be removed by disconnecting its cables and removing it from the gear tray. As each wire is removed it should be insulated. Failure to do this may result in a short circuit. Replacing the battery is the opposite procedure.

**REPLACING THE FUSE. (Victor Type VL140 – SIRA03ATEX5210U)**

Replacement of the fuse is straightforward, but only fuses supplied by the manufacturer can be used. Any other fuse will invalidate the certification.

**REPLACING THE EMERGENCY LAMP (Victor Type VL137 – SIRA03ATEX3208U)**

Remove the emergency assembly as described above and take to a safe area. Disconnect the emergency lamp leads. Unscrew the emergency reflector to gain access to the lamp. Remove the lamp from its clips and replace with a new lamp supplied by the luminaire manufacturer. (Normal commercial lamps cannot be used, as they will invalidate the certification.)

**REGULAR MAINTENANCE AND INSPECTION**

All luminaires, cable, conduit and other associated systems which make up an installation must be maintained in such a way to ensure the integrity of the protection it was designed to have. BS5345 makes particular reference to this subject, recommending initial and periodic inspections, with suitable recording of data.

**TROUBLESHOOTING**

FAULT	CAUSE	REMEDY
No emergency function, or limited emergency function	Battery has not yet been cycled to achieve minimum charge capacity	Cycle battery as per the instruction leaflet
	Battery not connected	Check wiring
	Battery fuse blown	Check fuse
	Battery not fully charged	Charge
	Failed lamp	Replace lamp
	Faulty inverter	Replace

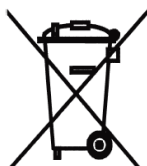
**HEALTH AND SAFETY AT WORK etc. ACT 1974**

In the United Kingdom all equipment must be installed, operated and disposed of (as required) within the legislative requirements of the Health and Safety at Work etc. Act 1974. Leaflet No. HSS L1 refers to the Company's obligation and is available on request.

It is the responsibility of the user to select, install, operate and maintain the equipment in accordance with the relevant legislation and appropriate codes of practice.

**Disposal of Material**



Any disposal must satisfy the requirements of the WEEE directive [2002/96/EC] and therefore must not be treated as commercial waste. The unit is mainly made from incombustible materials. The control gear contains plastic, resin and electronic components. All electrical components may give off noxious fumes if incinerated.



To comply with the Waste Electrical and Electronic Equipment directive 2002/96/EC the apparatus cannot be classified as commercial waste and as such must be disposed of or recycled in such a manner as to reduce the environmental impact.

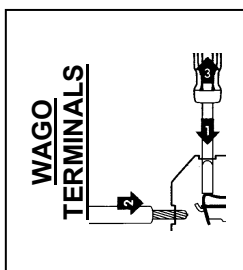
## VICTOR LIGHTING

Hereby declare our sole responsibility that the product which is the subject of this declaration is in conformity with the following standards or normative documents.

Number and date of standards	Directive description
EN50082 (1992) EN55015 (1993) EN 60555-2 (1987)	89/336 EEC: Electromagnetic Compatability
EN 50014 (1998) EN 50019 (2000) EN 50028 (1987) EN 50281 (1999)	94/9 EC: Equipment and protective systems intended for use in potentially explosive atmospheres.
<b>CE Mark</b> 	The CE marking of this product applies to "The Electrical Equipment (Safety) Regulations 1994", "The Electromagnetic Compatibility Regulations 1992", the "Waste Electrical and Electronic Equipment Regulations 2006" and the "Equipment and Protective Systems intended for use in Explosive Atmospheres Regulations 1996". [This legislation is the equivalent in UK law of EC directives 2006/95/EC, 2004/108/EC and 2002/96/EC respectively].
<b>ATEX Directive</b>	The Equipment is declared to meet the provisions of the ATEX directive (94/9/EC) by reason of the EC Type Examination and compliance with the Essential Health and Safety Requirements.
<b>Notified Body:</b> SIRA Certiifcation Services (0518) Rake Lane Eccleston Chester, CH4 9JN	 Ian MacLeod (Technical Manager) August 2005

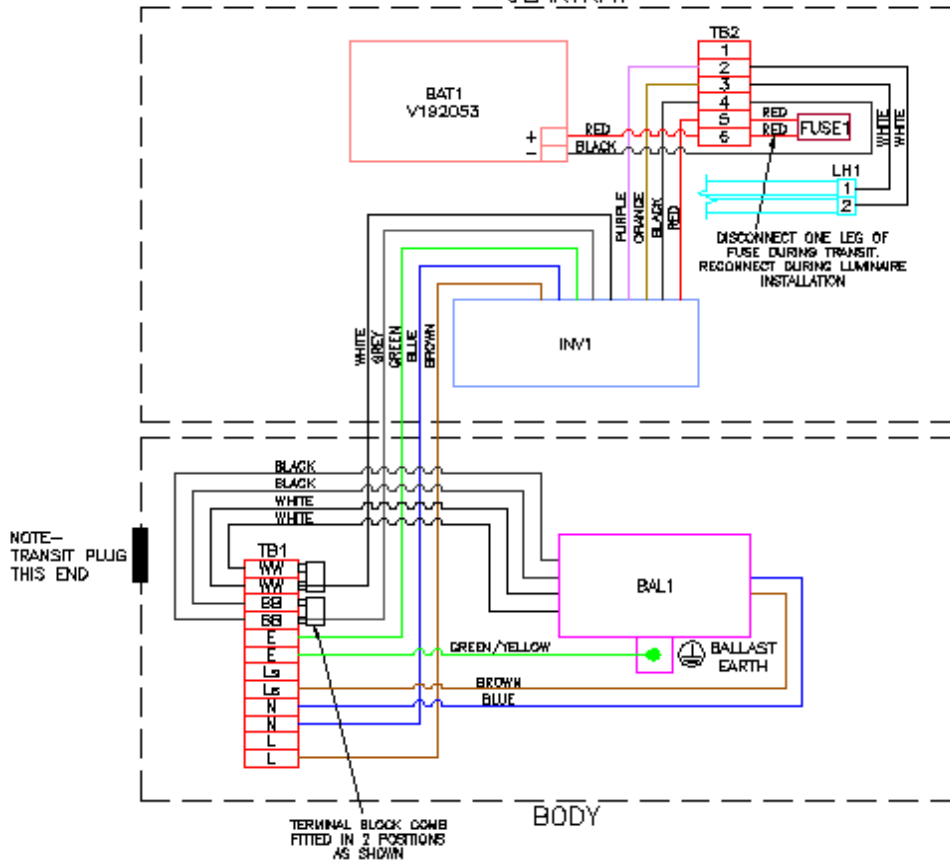
For Technical support, please contact [technical@victor-lighting.com](mailto:technical@victor-lighting.com)

Note: Victor Lighting reserves the right to amend characteristics of our products and all data is for guidance only.



## Wiring Diagrams

### Maintained Emergency GEARTRAY



### Non Maintained Emergency

#### GEARTRAY

