

## NEBRASKA LIFE STANDARD & SELF TEST EMERGENCY BULKHEAD INSTRUCTIONS Issue 01 29<sup>TH</sup> September 2023

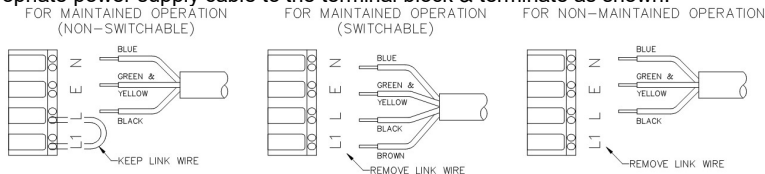
**SAFETY** This is a mains voltage powered product. It is designed to be installed by suitably qualified personnel only and in accordance with the applicable building and electrical regulations. Before installation or maintenance, the electrical supply to the product must be isolated.

### LUMINAIRE INSTALLATION

1. Remove diffuser by unscrewing the two screws.
2. Hinge the gear tray open on the two retaining straps.
3. Screw the base to the chosen mounting surface using the two screw fixing points in the base moulding at 240mm centres. These should be drilled to a size to suit the fixing screws.

**Note: It is the responsibility of the installer to ensure these fixing points are sealed to ensure the IP65 rating is maintained. The use of silicone sealant is recommended.**

4. Select one of the available cable entry points on the base (one on either end, on one side, or through the bottom) & drill to suitable size to suit IP65 rated (or better) cable entry gland (not provided).
5. Install cable entry gland.
6. Depending on which variant of the product you have, determine your required function & route the appropriate power supply cable to the terminal block & terminate as shown.



7. If applicable, tighten cable gland to seal & secure mains cable.
8. Connect the battery pack to the PCB by connecting the female socket on the battery wires to the male plug mounted on the PCB, ensuring the correct orientation.
9. Enter the "Installation Date" in the appropriate place on the battery pack label.
10. Refit the diffuser & secure using the two screws opposite to step 1 above.
11. Reconnect the power supply & check the green LED charge indicator illuminates.
12. The batteries should be allowed to charge for at least 24 hours before carrying out a full discharge test to check they are charging correctly & the maintained duration is being achieved.
13. The luminaire operating temperature range is 0°C - +25°C.

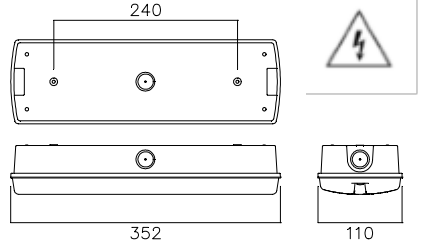
### OPERATION / MAINTENANCE

14. The luminaire must be replaced when it fails to meet its full rated duration in emergency mode.
15. Ensure cleanliness of the luminaire is maintained so as not to affect performance.
16. The light source of the luminaire is non-replaceable; when the light source reaches its end of life the whole luminaire must be replaced.
17. **Do not insulation test this luminaire!**

\*\*\*\*\* IMPORTANT WARNING \*\*\*\*\*

**This unit uses Lithium Iron Phosphate cells (LiFePO4) in its battery pack. These batteries require close monitoring and protection circuitry to operate safely. This pack uses a dedicated protection circuit board under the batteries sleeving meaning the protection is part of the battery pack in this case and not via the driver PCB. THE BATTERY IS NON-REPLACEABLE. When it is no longer able to provide its full rated duration, the luminaire must be replaced.**

Testing of emergency luminaires should be in line with BS5266 and BS EN 50172.



## SELF-TEST VERSIONS

This product comes with a built-in self-test facility. Once given a permanent mains supply, the luminaire will automatically carry out a monthly functional check & an annual full duration test, in line with the testing procedures to BS 5266.

### Pre-commissioning

- Luminaire must be left to charge for 24 hours.
- Upon completion of the 24-hour charge cycle, a full 3-hour Discharge Test is automatically conducted (this is to commission the luminaire). During this time the Bi-colour LED indicator will remain in the off state.
- Once the full 3-hour Discharge Test has completed the luminaire will revert to normal charge mode and the Bi-colour LED indicator will illuminate green.

### Monthly Function Test

- At some point between 15-30 days the luminaire will carry out a 30-second Function Test during which time the Bi-colour LED indicator will remain in the off state.
- On completion of the monthly Function Test the Bi-colour LED indicator will illuminate green.
- The Function Tests will be repeated on a monthly basis.
- The Function Tests will be carried out at randomly selected times to avoid luminaires carrying out the testing at the same time.

### Annual Discharge Test

- At the end of the year a full 3-hour Discharge Test will be carried out, during the test the Bi-colour LED indicator will remain in the off state.
- On completion of the yearly Discharge Test the Bi-colour LED indicator will illuminate green.

If there is a power outage the luminaire will continue with its cycle once power is restored

## FAULT INDICATORS

Notes:

- The fault indicator will continue to flash until the fault is cleared.

| SELF TEST - FAULT INDICATION |  |  |  |
|------------------------------|--|--|--|
| MODE                         | Method   | Cause                                      | LED Indication                               |
| MAINS ON                     | No Action  | No faults                                  | Green (on)                                   |
|                              | No Action  | Battery fault (open or short)              | Red (Flashing every 1s) + bleep every 45s    |
|                              | No Action  | Led fault                                  | Yellow (flashing every 1s) + bleep every 45s |
| MONTHLY SELF TEST MODE       | No Action  | Emergency ok                               | Green (on)                                   |
|                              |  | Battery fault                              | Red (Flashing every 1s) + bleep every 45s    |
|                              |  | Led fault                                  | Yellow (flashing every 1s) + bleep every 45s |
| YEARLY SELF TEST MODE        | No Action  | Emergency > 3hr.                           | Green (on)                                   |
|                              |  | Battery open or short, or discharge < 3hr. | Red (Flashing every 1s) + bleep every 45s    |
|                              |  | Led fault                                  | Yellow (flashing every 1s) + bleep every 45s |
| MAINS FAILURE                | Goes into 3-hour emergency discharge mode of operation | Discharge>3hr                              | Green (on) when power restored               |
|                              |  | Discharge<3hr                              | Red (Flashing every 1s) + bleep every 45s    |