

## HARSTED V2 EMERGENCY CONVERSION PACK INSTRUCTIONS

Issue 05 9th March 2021

These instructions are in addition to the standard HARSTED V2 luminaire instructions that were supplied with the main product you have purchased. They should be read carefully & installed as per instructions, then passed on to the appropriate person for retention for future reference & maintenance.

**SAFETY** This is a mains 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.



**INSTALLATION SUPPORT** If installation advice or accessories are required, please contact us at the above address. We will do our best to help. When reporting a suspected fault or seeking installation support the problem is likely to be resolved most quickly if you have full product details to-hand, as well as details of when and where it was purchased.

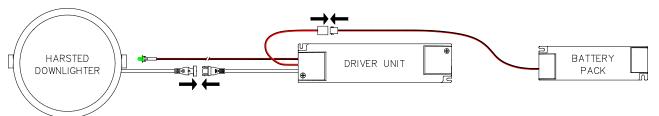
## **INSTALLATION**

The emergency conversion pack can be installed to any of the standard NVC HARSTED V2 range: NHR6/840, NHR8/840, NHR11/840 & NHR14/840

**Note!** The correct selection setting must be made on the driver unit to ensure correct operation of the product. This is explained below in point 6.

**Note!** To fit in the ceiling void a certain amount of clearance height is required to pass the units through the cut-out hole. Please ensure you have the required amount: NHE6 = 140mm, NHE8 = 90mm, NHE11 = 70mm, NHE14 = 60mm

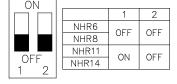
- 1. On the standard HARSTED luminaire, remove the LED driver by disconnecting the 2-pole connector on the cable
- 2. Cut the required diameter cut-out to suit the model of Harsted you have, as per the standard product instruction leaflet.
- 3. Provide mains supply cable. In addition, a permanent live supply should be fed to the luminaire in line with the switched mains supply. This permanent supply MUST be taken from the same phase as the switched supply & MUST be wired at the switchboard so that upon test it is isolated at the same time as the switched supply.
- 4. Attach the driver unit to the Harsted downlighter head unit using the two pole connector & attached the battery pack to the driver unit using the 2-pole connectors. See diagram below.



- 5. Open the AC input end of the driver unit by undoing the screw & hinging open the green cover
- SET THE DRIVER UNIT TO SUIT THE CORRECT WATTAGE OF THE HARSTED LUMINIARE. This is done via 2 dip switches next to the mains terminals, see diagram to right.

Note! Failure to do this may mean the main luminaire will not run correctly.

- Route the main supply cable to the terminals of the driver unit & insert ensuring correct polarity is observed. The unit is Class II rated so no earth is required.
- 8. Clamp the main supply cable(s) using the ratchet clamp provided.
- 9. Closer the terminal cover & secure using the screw.
- 10. If the CCT Selectable option has been chosen, then select the required CCT by sliding the switch on the black box to the allocated colour
- 11. Insert the battery pack & driver unit up through the cut-out & sit securely in the ceiling void. This gear should not be covered with insulation as it may cause components to overheat affecting performance & lifetime.
- 12. Locate the green indicator LED from the emergency conversion pack into the ceiling, close to the luminaire, using the mounting bezel provided.
- 13. Reconnect power supply & check for correct operation.
  - **Note!** Luminaires fitted with electronic drivers/components are exempt from insulation resistance tests as this may cause irreparable damage.
- 14. When power supply is reconnected, check the green indicator LED illuminates. This indicates the batteries are charging.
- 15. The batteries should be allowed to charge for at least 24 hours before carrying out a full discharge test to check batteries are charging correctly & maintained duration is being achieved.





#### **MAINTENANCE**

- 1. Nominal battery life is 4 years, after which time they should be replaced with a suitable equivalent.
- 2. When the lamp operates from the battery supply it will be at a reduced light level, so ensure cleanliness of luminaires is maintained so as not to affect performance.

#### **TESTING FOR EMERGENCY LUMINAIRES**

Recommended routine test procedures in line with BS 5266 & BS EN 50172:

# **Monthly Functional Test**

- Simulate a mains supply failure by isolating the circuit (ensuring if it is safe to do so) or by way of a test key switch if fitted
  into the circuit.
- Do this for a period of time sufficient to check that the luminaire illuminates in maintained mode.
- Once complete, ensure the normal supply is restored & that the green LED charge indicator illuminates.
- Log result/comments in the Testing Log Book (see below).

## **Annual Discharge Test**

• Simulate a mains supply failure by isolating the circuit (ensuring if it is safe to do so) or by way of a test key switch if fitted into the circuit.

Luminaire Location/No ·

- This should be for the full rated duration period for the luminaire, e.g. the reference M3 = Maintained for 3 hours
- Check that the luminaire illuminates in maintained mode & remains illuminated for the full rated duration period.
- Once complete, ensure the normal supply is restored & that the green LED charge indicator illuminates.
- Log result/comments in the Testing Log Book (see below).

| TEST | IN  | (7 |       | В | w | u | n |
|------|-----|----|-------|---|---|---|---|
|      | ••• | _  | <br>_ | _ | _ | _ |   |

Luminaire Type:

Contact Details:

| MONTH | TEST       | FIRST YEAR |      | SECOND YEAR |      | THIRD YEAR |      | FORTH YEAR |      | FIFTH YEAR |      |
|-------|------------|------------|------|-------------|------|------------|------|------------|------|------------|------|
|       |            | Signed     | Date | Signed      | Date | Signed     | Date | Signed     | Date | Signed     | Date |
| 1     | FUNCTIONAL |            |      |             |      |            |      |            |      |            |      |
| 2     | FUNCTIONAL |            |      |             |      |            |      |            |      |            |      |
| 3     | FUNCTIONAL |            |      |             |      |            |      |            |      |            |      |
| 4     | FUNCTIONAL |            |      |             |      |            |      |            |      |            |      |
| 5     | FUNCTIONAL |            |      |             |      |            |      |            |      |            |      |
| 6     | FUNCTIONAL |            |      |             |      |            |      |            |      |            |      |
| 7     | FUNCTIONAL |            |      |             |      |            |      |            |      |            |      |
| 8     | FUNCTIONAL |            |      |             |      |            |      |            |      |            |      |
| 9     | FUNCTIONAL |            |      |             |      |            |      |            |      |            |      |
| 10    | FUNCTIONAL |            |      |             |      |            |      |            |      |            |      |
| 11    | FUNCTIONAL |            |      |             |      |            |      |            |      |            |      |
| 12    | DISCHARGE  |            |      |             |      |            |      |            |      |            |      |