# Installation Sheet

**DL3NMST -** 3W LED Self-Test Non Maintained Emergency Downlight



Please read these instructions before commencing installation & retain them for future reference.

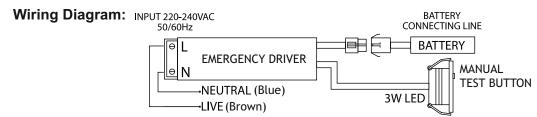
### Important information:

It is recommended that luminaires are installed by a qualified electrician ensuring the installation complies to current IEE wiring regulations & local building control.

- These products are designed for connection to a 220-240V mains supply.
- Any broken or damaged parts should be replaced as soon as possible.
- We will not accept responsibility for any claims arising from a poor installation.

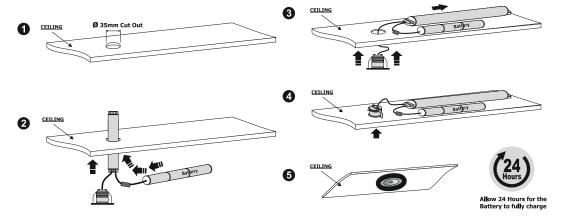
# **Important User Advice:**

- · Always switch off mains supply before servicing.
- This luminaire is suitable for indoor use only and should not be fitted to damp or wet surfaces such as freshly plastered or painted walls or ceilings.
- This product is designed for permanent connection to fixed wiring: this must be a suitable circuit (protected with the appropriate MCB or fuse).
- Do not cover the fitting, battery and driver with any insulating materials.
- This product is Class II, double insulated and does not require an earth connection.



#### **Installation Procedure:**

- Choose the installation location for the downlight and mark it. Cut a 34mm diameter hole in the ceiling ensuring it does not infringe with electrical cables, water/gas pipes or ceiling joists.
- Prepare the route for the mains cable and feed through the hole and make the L & N connections to the input side of the driver/inverter. Feed the driver/inverter through the hole, followed by the battery pack, which can lay adjacent to the hole.
- Feed the excess cable through the hole and press the down light into position until it is retained by the springs. The fitting may require some manipulation in order to pass through the hole. Do not enlarge the hole to make fitting easier.
- Restore the power and check if the fitting is working correctly. The LED will illuminate green on normal operational mode, which indicates the fitting is charging.
- On mains power failure the LED will illuminate white light continuously for 3 hours minimum.



Dimensions (mm):

# **Specifications:**

• Input Voltage: 220-240V/AC

• Power: 3W

Light Output: 120LmTest method: Self-test

• CCT: 5500K

• CRI >85

• IP Rating: IP20

• Protection Class: Class II

Housing: PC Body

White Painted Aluminium Trim

Ceiling Recessed Mounting

Cut-out: Ø34mm

• Battery: LiFePO4 3.2V 1500mAh

Warranty: 3 years

# Emergency Testing and Battery Maintenance:

- Initial battery charge must be for a minimum of 24 hours before testing.
- To achieve best performance the DL3NMST should be tested fully by switching into emergency mode regularly in accordance with local testing regulations. Any warranty claim must be accompanied by documentation which records the dates of this maintenance procedure and signed by maintenance personnel.
- When first connecting to AC power check if the Green LED light is lit confirming that the battery is charging.
- The battery must be replaced when the unit no longer meets the rated emergency duration or if there is a battery fault.

# **Emergency Self-Test:**

The DL3NMST self-test fitting performs a self-commissioning test at first power on. After charging for 24 hours a full duration test (3 hours) is performed. Initial functional and duration tests are randomly generated. They are then performed in accordance with standard requirements (every 30 days for functional tests and every 52 weeks for duration tests).

#### **Self Test Function:**

- <u>Monthly inspection:</u> The system will perform a **functional test** every 30 days for 2 minutes that simulates a mains failure and checks the operation of the emergency light source from the battery supply. The green indicator LED slowly flashes whilst the 2 minutes functional test is in progress. It will quit and return to the mains power state automatically if there is no fault.
- <u>Annual inspection:</u> The system will perform a **duration test** every 360 days for 3 hours or until the battery power is dissipated. The duration test simulates a mains failure and checks the operation of the light source from the battery supply for the rated duration. The indicator LED fast flashes green whilst the duration test is in progress. It will quit and return to the mains power state automatically if there is no fault.

## **Manual Test Button Function:**

- <u>Functional Test:</u> Hold the test button for 5 seconds. The green indicator LED flashes slow and the system performs a functional test for 30 seconds. It will quit and return to the mains power state automatically if there is no fault.
- <u>Duration test:</u> Hold the test button for 7 seconds. The green indicator LED flashes fast and the system performs a duration test, simulating a power outage for 3 hours or until the battery power is dissipated. It will quit and return to the mains power state automatically if there is no fault.

#### **Test Button Functions:**

Test Button	Green LED	Status
Press for about 1s	Off	Emergency mode for 1 second
Press for about 5s	Slow flash	Function for 30 seconds
Press for about 7s	Fast flash	3 hour duration test
Press for about 10s		End the duration test

#### **LED Indicator Status:**

LED Status	Green LED	Status
Green Solid	Mains on/ No fault	
Green Flash	Slow flash	Function for 2 minutes
Green riasii	Fast flash	3 hour duration test
	1 Flash	Battery fault
Red Flash	2 Flash	Lamp fault
	3 Flash	Duration test fault

#### Notes:

- To turn off emergency mode (mains failure) press the test button for 10 seconds
- Manual test will not affect the monthly and yearly test schedule.

# **Troubleshooting:**

Most failures experienced are not due to the fitting itself and are caused by improper installation or connection of the unit. Please check that:

- Wires are properly clamped into terminals.
- Installation is done according to the wiring diagram.
- Proper polarities are observed.

Luminaire Ref/Location	-ocation		In Case	of difficulty	In Case of difficulty, contact the Installation Engineer:	nstallation	Engineer:			
			1				Tel:			
Full Rec	Full Recharge Time 24 Hours	Hours		Duration	Duration 3 Hours			Lamp Type - LED	e - LED	
				ROUTIN	ROUTINE TEST RECORD	CORD				
	Year	_	Year 2	2	Year 3	3	Year 4	<u></u>	Year 5	10
Monthly Test	Signed	Date	Signed	Date	Signed	Date	Signed	Date	Signed	Date
Functional										
Functional										
Functional										
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Functional										
Functional										
Duration (3Hr)										