Installation & Wiring Instructions
E/DLDA/3 Standalone Emergency LED

Description:

The E/DLDA/3 is a standalone 3 hour DALI self-test emergency driver with a choice of dedicated LED heads which are suitable for open areas or escape routes. The LED is driven at 700mA which provides up to 288 lumen in emergency.
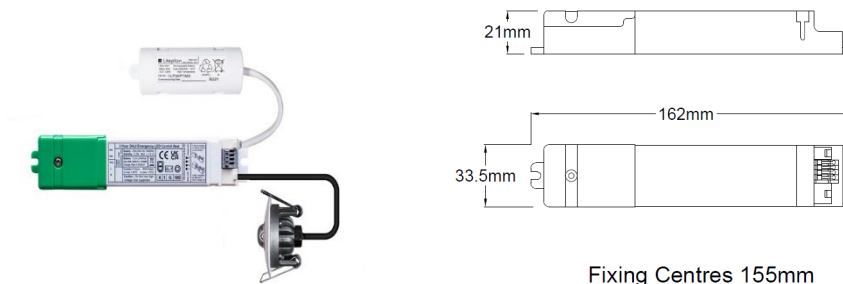
The batteries used with this kit are lithium iron phosphate (LiFePO4) which not only last double the life of traditional emergency lighting batteries, but consume far less power. If not connected to a DALI system, this product will revert to standalone self-test and carry out its commissioning and testing regime in accordance with the British Standards.

The battery is fitted with a PCM to protect the supply voltage against reverse polarity.

DALI 2 certified device, registered with DiiA.

SPECIFICATIONS	
Input Voltage	230-240 Volts AC 50/60 Hz
Power (Non-Maintained Charging)	0.3W 8mA - λ = 0.15
Power (Maintained Charged)	5W 28mA - λ = 0.74
Ambient Temp.	0°C to + 50°C
Max Case Temperature	70°C
Max Battery Temperature	55°C
Mains Input Terminal	0.5mm - 1.5mm
Battery Fuse	Internal
Battery Discharge Current	900mA
Discharge Voltage Limit	2.5V
Ingress Protection	IP20
Battery Pack	3.2V 3.8Ah LiFePO4
Charge Current	225mA Nominal
Recharge Period	24-Hours
Module Size (L x W x H)	162mm x 33.5mm x 21mm
Module Fixing Centres	155mm M4
Battery Size (L x Ø)	100mm x 34mm
Module Weight	0.1Kg
Battery Weight	0.15Kg
LED Weight	0.06Kg
Aperture	40-43mm
Bus Current Consumption	1.46mA

21mm

162mm

33.5mm

Fixing Centres 155mm

Important

It is recommended that the product is installed by a competent person ensuring the installation complies with the necessary standards. Channel Safety Systems accept no responsibility for injury, damage or loss, which may arise as a result of incorrect installation, operation or maintenance.
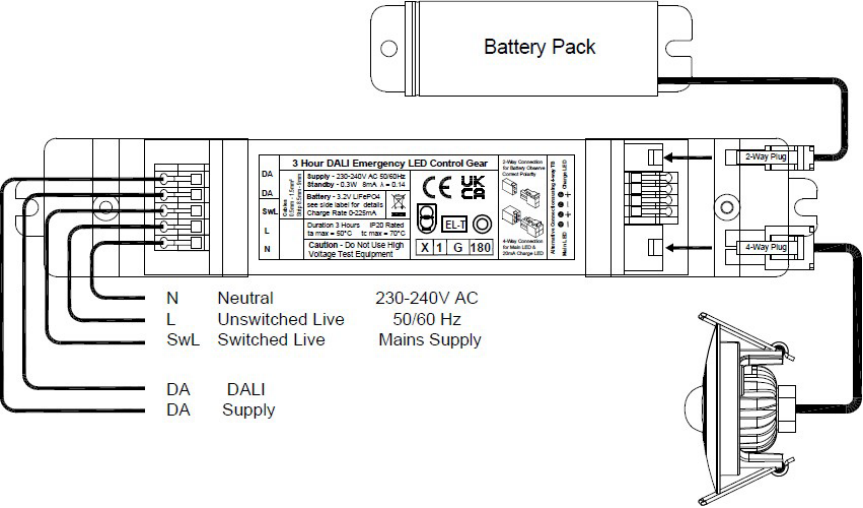
The control gear requires an unswitched supply for charging the battery and a switched supply for maintained operation.

ISOLATE MAINS SUPPLIES AND DISCONNECT THE BATTERY BEFORE INSTALLATION OR MAINTENANCE.

Installation:

1. Cut a 40-43mm diameter hole in the ceiling tile.
2. Connect the LED to the main assembly via the 4 way connector.
3. Connect the 2 core mains input cable as follows - Black Unswitched (Battery Charging) 240V and Blue to Neutral.
4. Only connect the battery when the Un-switched supply is fully assured. Even though these units are protected with a Deep Discharge Protection Circuit, the batteries can be damaged by being left in an uncharged state for prolonged periods. Ensure correct polarity.
5. When the supply is present and the battery connected, check that the green LED indicator is illuminated showing that the supply is healthy and the batteries are charging.
6. Pass the whole assembly through the 40mm aperture and clip the LED housing into the ceiling ensuring that the IP gasket is installed behind the bezel of the LED head if ingress protection is required.

Wiring Diagram

Battery Pack

3 Hour DALI Emergency LED Control Gear
Supply - 230-240V AC 50/60Hz
Standby - 0.3W 8mA λ = 0.14
Battery - 3.2V LiFePO4
see side label for details
Charge Rate 0-225mA
Duration 3 Hours   IP20 Rated
ta max = 60°C   tc max = 70°C
Caution - Do Not Use High Voltage Test Equipment

2-Way Plug
4-Way Plug

		230-240V AC
N	Neutral	50/60 Hz
L	Unswitched Live	Mains Supply
SwL	Switched Live	
DA	DALI	
DA	Supply	

Device Status Indicator

Green Solid	Battery connected & charging
Green Fast Flash	Function Test in progress
Green Slow Flash	Duration Test in progress
Green Very Slow Flash	Automatic Duration Test Passed in last 7 days
Red Solid	Emergency LED Fault
Red Fast Flash	LED Driver Fault
Red Slow Flash	Battery Fault
Red Very Slow Flash	In Emergency Mode

Month	Test	First Year		Second Year		Third Year		Fourth Year		Fifth Year	
		Sign	Date	Sign	Date	Sign	Date	Sign	Date	Sign	Date
1	Functional										
2	Functional										
3	Functional										
4	Functional										
5	Functional										
6	Functional										
7	Functional										
8	Functional										
9	Functional										
10	Functional										
11	Functional										
12	3 hour Functional										