# BELLlighting

## Installation Instructions: Emergency Exit Blade (09012V2)

#### Specification

- 1. Maximum Ambient Temperature: 35°C
- 2. Operating relative humidity: less than 90%.
- 3. Rated voltage: 220-240V 50/60Hz.
- 4. Wattage: 2.5W.
- 5. Conversion time: 1 second.
- 6. LED:SMT 2835 LED\*16pcs.
- 7. Viewing Distance: 28m.
- 8. Emergency duration: more than 180 minutes.
- Battery installed or replaced: LiFePO4 3.2V 1500mah
- 10. Recharge time: 24 hours.

#### Important Information

We recommend that luminaires are installed by a qualified electrician ensuring the installation complies with current IEE wiring regulations BS7671:2018 & local building control.

- All tests should be carried out in accordance to EN 50172:2004.
- BELL will not accept responsibility for any claims arising from a poor installation.
- The light source of this luminaire is not replaceable: when the light source reaches end of life, the whole luminaire must be replaced.

#### Important User Advice

- The ambient room temperature should not exceed 35°C.
- Ensure that there is adequate free air ventilation around the fitting.
- It may be necessary to uprate your MCBs to allow for increased inrush current.
- · Always switch off mains supply before installing.

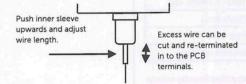
This product may contain substances that can be hazardous to the environment if not disposed of properly. Electrical and electronic equipment should never be disposed of with general household waste but must be separated for its correct treatment and recovery.

Where possible recycle your packaging.

# Read these instructions before installation and retain for future reference This equipment should be installed by a competent electrician

#### INSTALLATION

- Remove the cover on the base. On the hanging range/recessed the cover is held on by screws.
   On the wall mounted unit the cover is held on by 4 recessed lugs
- 2. Fix base to wall or ceiling using appropriate fixing method
- ISOLATE THE A.C. SUPPLY and connect unit. An unswitched 240 V A.C. supply must be connected.
- Fit battery plug onto the two protruding metal pins on edge of PCB. Then, replace and secure cover.
- 5. On hanging signs the length of each hanging wire can be adjusted.



- Operational Check Restore the A.C. supply for 30 minutes and then isolate. The LEDs should illuminate for at least 10 seconds.
- 7. Restore the A.C. supply and check that the charge indicator LED is 'on'.

#### **OPERATION**

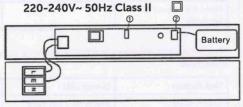
The Blade Range is normally operated in the maintained mode.

#### MAINTAINED

Emergency LEDs normally on, when the supply is applied. The battery is on automatic charge (Charge LED 'on'). LEDs will remain on if A.C. supply is interrupted.

#### NON-MAINTAINED

Emergency LED's normally off, the battery is on automatic charge (charge LED on). LED's will turn on if AC supply is interrupted. The black jumper SP1 on PCB need to be removed for non maintained (see Fig 1)



Remove 2-pin connector for Non-maintained operation
 Connect battery lead

Fig 1

#### **TEST BUTTON**

Press the test button for 5 seconds. The green charge LED will extinguish and the main LEDs will illuminate. Release the button to restore the mains supply

### MONITORING

Green indicator LED (Charge LED) normally continuously 'on'. Indicator LED goes out if A.C. supply or charger fails.

#### BATTERY

LiFePO4 3.2V 1500mah.

#### **TEMPERATURE**

Performance figures measured at 25 degrees C.

## FAULT FINDING AND CORRECTIVE ACTION MONITORING LED NOT ILLUMINATED

A.C. supply not healthy. Battery not connected. Charger failed.

## UNIT NOT MEETING REQUIRED EMERGENCY PERIOD

May need cycling: Discharge then recharge for 24 hours. Re-test, battery pack may need replacing if emergency duration still not achieved.

The instruction of the switch on PCB.
On indicates standard mode
1 indicates self-test mode

Pls make sure that switch position is set before installation.



#### RECOMMENDED ROUTINE TEST PROCEDURE

The following test are designed to ensure the continued protection of your premises and occupants. Because of the possibility of a failure of the normal lighting supply occurring shortly after a period of testing, all tests should, whenever possible, be undertaken at times of least risk, e.g. during daylight hours.

#### ONCE A DAY

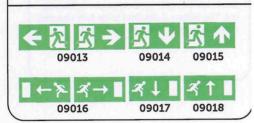
Visual inspection of battery charge led.

#### **ONCE A MONTH**

Each unit should be energised from it's battery for adequate time to ensure, by simulation of a failure of the normal lighting supply, the emergency mode is functioning correctly.

#### ONCE EACH YEAR

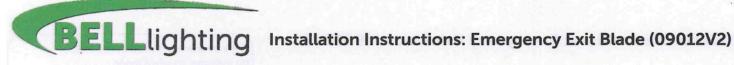
All units should be placed into emergency mode and checked that the duration provided by the battery meets the specified time period.



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#### Self-Test

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

A single bi-colour indicator LED is fitted in all Self-Test products. This LED is clearly visible for manual inspection. It indicates the module status. The LED shows permanent green or flashing green when conditions are normal and flashing red if a fault condition is present

#### **Function test**

A function test is a 2 minutes test that simulates a mains failure and checks the operation of the emergency light source from the battery supply.

The local indicator LED slow flashes green whilst the 2 minutes function test is in progress.

If there is a failure during a function test the local indicator LED changes to a flashing red.

#### **Duration test**

A duration test simulates a mains failure. It also checks the operation of the emergency light source from the battery supply for the rated duration of the module.

The local indicator LED fast flashes green whilst the duration test is in progress.

If there is a failure during a duration test the local indicator LED either changes to flashing red. The battery is required to be fully charged before a duration test can be started.

### The test button of the unit has the following functions:

<b>Test Button</b>	Green LED	Status
Press for approx 1 Second	Off	Emergency mode for 1 second
Press for approx 5 Seconds	Slow flash	Function for 30 seconds
Press for approx 7 Seconds	Fast Flash	3 Hour duration test
Press for approx 10 Seconds		End the duration test

Please refer to following chart below for more complete description/fault indication:

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

Conducting additional manual tests of self-test fittings may significantly reduce battery life

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