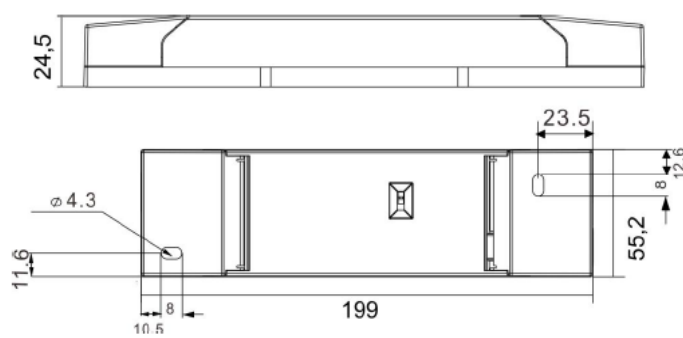# LED Panel 2.5W IP20 3Hr Emergency Pack

Features	Dimensions
• Brackenheath's universal 3 hour emergency pack for LED panels provides a consistent power output in emergency mode. • 2.5W output power, 3.2V, 3000mAh LiFePO4 battery. • Operates in both maintained and non-maintained emergency modes. • Includes 2-in-1 design featuring both a manual test switch and self-test operation. • Features a discharge protection circuit, along with safeguards against overload, short circuits, and low battery voltage. • Includes a trailing LED indicator for positioning alongside panel and universal connectors. • Remote mounting. • IP20 rating, suitable for indoor use.	

Safety Instructions

1. These instructions should be read carefully and retained after installation for future reference and maintenance.
2. Ensure that the mains power is isolated before carrying out installation or maintenance.
3. Check that the total load on the circuit including this luminaire does not exceed the rating of the circuit cable, fuse or circuit breaker.
4. It is recommended that this product is installed and fitted by a qualified electrician ensuring the installation complies with the current edition of IET wiring regulations - BS 7671.
5. Please note the IP (Ingress Protection) rating of this product when deciding the location for installation.
6. This product is IP20 rated.
7. This product is Class II double insulated.
8. This product is for indoor use only.

Environmental Instructions

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.

This product should be recycled in the correct manner when it reaches the end of its life. Check local authorities for where facilities exist.

The batteries in this luminaire are Lithium Ion and must be disposed of correctly. Please contact the local authorities for disposal of this toxic waste

Installation Instructions

Note - If this product is being used in conjunction with a non Brackenheath luminaire, please confirm with the manufacturer of the luminaire that it is compatible with this emergency pack.

- Provide power to the required point of installation (refer to BS7671 for correct cabling methods).
- With the aid of a small terminal screwdriver open the terminal covers by pressing into the securing slots at either end to release the covers. (see Fig. 1)
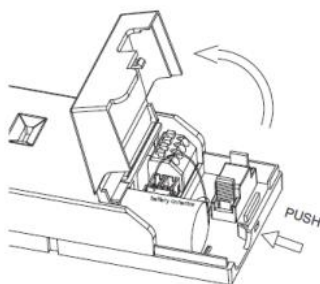
Fig. 1

- For switched maintained mode Connect the cable marked "L in" to the permanent Live (Brown), "N in" to Neutral (Blue) and "SL in" to the Switched Live.
- For maintained operation add a link between "L in" and "SL in"
- For Non-maintained operation do not connect "SL in"
- Connect "L out" and "N out" to L and N in on the primary side of the LED panel driver. (see Fig. 2)

INS 1054   03/25 V1.0 NPD 0931

Note - The Emergency pack is pre-wired with a 3 way switch to connect to connect to Brackenheath CCT3 panels which have a CCT3 switch on the driver supplied with the LED panel.

Connecting to LED Panels with CCT switch incorporated into the LED Driver
- Switch the LED driver into the CW position.
- Plug the male connector from the secondary side of the LED panel driver into the female connector lead on the emergency pack marked 'controlgear'.
- Plug the CCT3 switch lead from the emergency pack marked 'LED' into the female connector on the LED panel.
- Ensure the battery is plugged in then switch on the power supply and check for correct operation.

Connecting to LED Panels with CCT3 switch attached to an LED Panel
- Remove the cable clamp securing the male and female connector leads on the emergency pack, then press down on the terminal securing clamps to release the cable and remove.
- Replace the 2 cables with the male and female jack plug and socket cables supplied with the emergency pack with the female lead connected to the LED terminals and the male lead connected to the controlgear terminals then secure in place with the cable clamp and securely close the lid ensuring not to crush any cables.
- Plug the LED leads in lead from the panel and the controlgear lead into the lead from the panel driver.
- Ensure the battery is plugged in then switch on the power supply and check for correct operation ensuring the green LED indicator is illuminated.
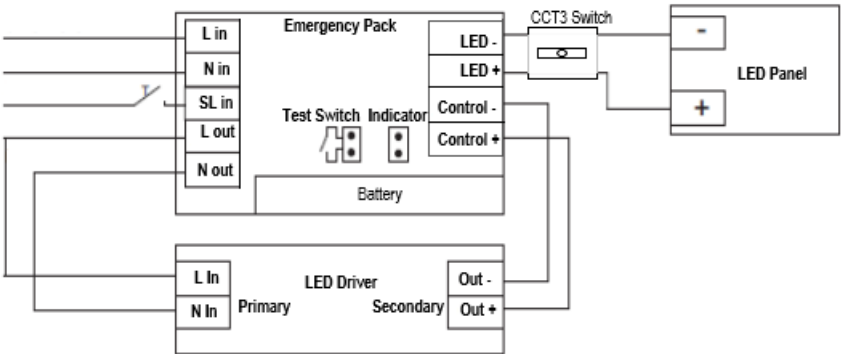

Fig. 2

- To install the LED indicator holder mark the location of the holder and drill a 6.5mm/18mm hole ensuring it does not infringe with any joists, gas/water pipes or electrical cables then place the LED indicator into the holder
- Switch between Self Test (ST) mode and Standard emergency battery mode (BS) using the switch on the front of the emergency pack module.

We recommend, on commissioning the installation, a minimum charge period of 24 hours before carrying out an emergency duration test

This product must be disconnected from the circuit if subjected to any high voltage or insulation resistance testing. Irreparable damage will occur if this instruction is not followed.

Specification			
Input Voltage:	220-240VDC	Battery	LiFePO4 3.2V 3000mAh
Electrical Classification:	Class II	IP Rating:	IP20
Warranty	5 Years	Standard:	BS EN IEC 61347

Testing For Emergency luminaires

Manual/Self test Functions

- A short press (>1s) on the button starts a function test lasting 5 seconds (The battery's capacity unit, the batteries and LED module should have more than 30 minutes of charging before this is tested.
- Holding down the button(>10s) resets the timer

If a mains supply failure occurs whilst a functional test is in progress, the test shall be postponed and the system shall enter emergency operation. Following restoration of the mains supply, a postponed functional test shall re-commence automatically as soon as conditions permit.

Self test Duration Test

- Initial 3 hour duration test: The test will be carried out 16-24 hours after the initial installation.
- Half year 3 hour duration test: The test will be carried out 175-180 Days after initial installation
- A duration test shall only be started when the battery is fully charged if a mains supply failure occurs whilst a duration test is in progress, the test shall be postponed and the system shall enter emergency operation. Following restoration of the mains supply, a postponed duration test shall re-commence automatically when the battery supply is fully recharged.
- Whilst a Duration test is being successfully completed the led will slow flash green until fully recharged.

Led Indicator status

LED Indicator	Status	Reason
Permanent green	Fully charged/Operating correctly	Mains Operation, battery is charged
Fast flash green	Function test underway	Function test underway
Slow flash green	Duration test underway	Duration test underway
Permanent red	Lamp failure	Open Circuit/Short Circuit or LED failure
Fast flash red	Battery capacity failure	Battery failed duration test
Slow flash red	Battery fault	Incorrect voltage / Short circuit or Open circuit
Off	Battery/LED fault	Battery/LED indicator disconnected / Mains disconnected and battery depleted

Note – After a failed duration test hold down the button for >10 seconds before recharging the battery to reset the LED.

If the luminaire fails any of the above tests, please contact a qualified electrician. Results should always be recorded. See below for test record sheet.

TEST RECORD SHEET

INITIAL COMMISSIONING 3 HOUR TEST	SIGNED		DATE	

MONTH	TEST	FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH 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	3 HOUR										

Installed by:

Installation date:

Contact number: