

LXR EMERGENCY REMOTE BOX



Product Description

Luxbox remote emergency boxes for LED panels and downlights are an effective solution for converting mains luminaires to emergency lighting operation. The LXR ensures consistency of your lighting scheme, with guaranteed reliability and 100% compliance.

Available in basic, Self Test and Dali testing protocols and LiFePO₄ battery technology. The emergency lighting unit and battery pack are mounted in a polycarbonate housing with strain relief and are suitable for protection class I and II luminaires. The combination of emergency lighting unit and battery reduces the installer's workload.

Designed in accordance with EN61347-1, EN61347-2-7 and EN61347-2-13. For maintained operation in conjunction with the existing drivers in mains luminaires. In normal mains operation the LED array is powered by the existing mains driver and in emergency operation by the LXR and associated battery.

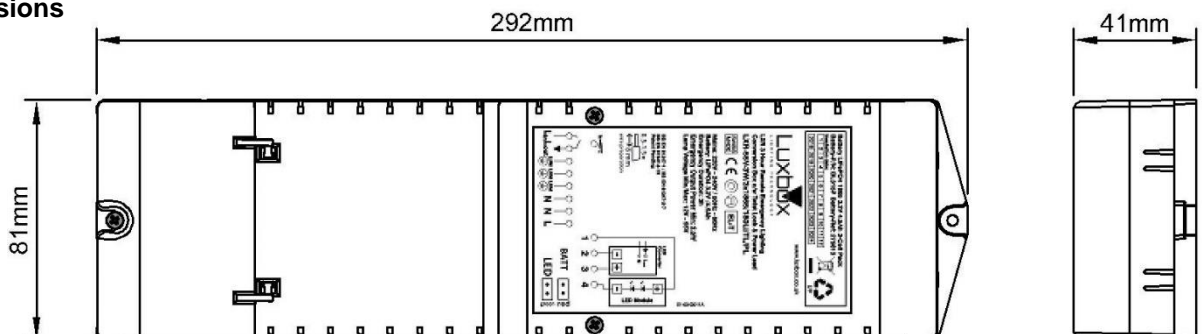
Properties

- Non-maintained mode
- Self-contained
- Electronic: 5 years warranty
- Maintained mode in combination with luminaire mains driver
- 3Hr operating time (variant upon request)
- Self-testing as per IEC 62034 and in accordance with EN62034
- Indicator LED
- Compatible with dimmable & non-dimmable LED-drivers
- Easy ceiling installation with strain relief
- 5-pole technology: LED module changeover and delayed power switching for the LED-driver
- Constant power output in emergency mode
- Specific charging regime depending on the battery technology
- Deep discharge protection
- Ground connection for LED-driver and LED module on mains terminal
- Suitable for emergency escape route lighting, back up lighting and open area lighting

Technical Specifications

Input voltage	220V - 240Vac +/- 10%
Mains input frequency	50 – 60Hz
Ambient temperature (unit and batteries) <i>ta</i>	<i>ta</i> = 0°C to + 50°C
Unit <i>max.</i> case temperature <i>tc</i>	<i>tc</i> = 65°C
Safety class	II
Battery technology	LiFePO ₄
Battery capacity	3.2V-3Ah
Emergency duration	3Hr
Battery recharge period	24Hr for rated duration
Regulated Output Power	3W
LED array max. voltage	55V
Max. unit output voltage (with LED-array disconnected)	60V
Approval	CENELEC (pending)
Enclosure material	Self-extinguishing polycarbonate
Indicator LED for standard type LXR	5mm green LED on 500/1000mm cable with connector
Indicator LED for self-testing and Dali type LXR	5mm red/green LED on 500/1000mm cable with connector
Switchover time mains to emergency	< 0.5 s
Functionality test (Self Test)	Randomised every 8 to 8.25 days throughout 2 min.
Duration test	Four full battery discharges annually
Protection type	IP20
Unit case size	L 292 x W 81 x H 41 mm
Weight	393g
Mounting holes	260mm

LXR-Case dimensions



Batteries

- LiFePO₄ (18650 Cells)
- High temperature cells 5-50°C
- Charging time to achieve rated duration - 24Hr
- 3 year warranty
- Battery regeneration for capacity optimisation

Certification mark

- CENELEC certificate (pending)
- CE



Safety

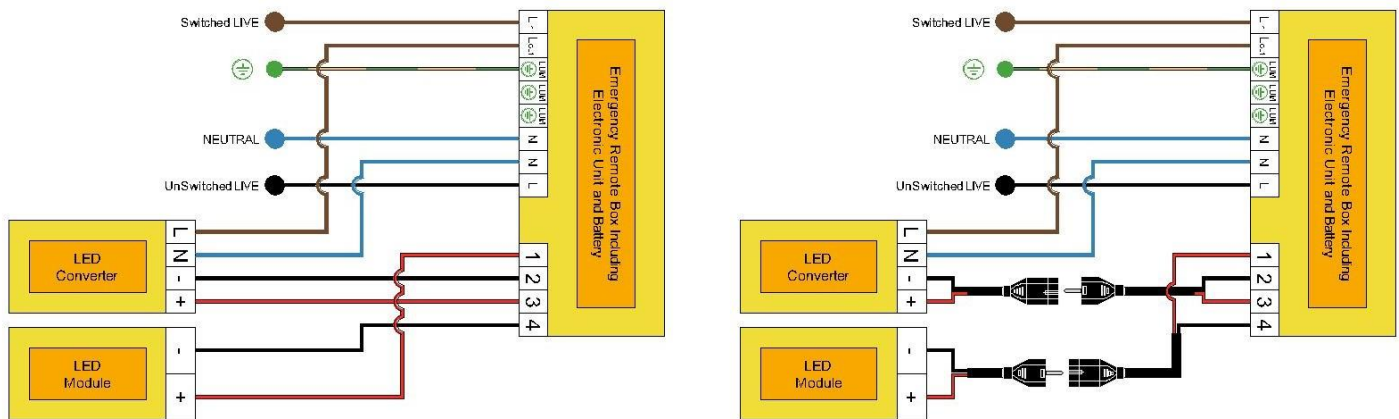
- Protection class II
- Protection type IP20
- SELV

Standards

Designed to enable the manufacture of emergency lighting luminaires conforming with EN60598-2-22.

- EN 61347-1
- EN 61347-2-7
- EN 61347-2-13
- EN 62386
- EN 62034
- EN 55015
- EN 61000-3-2
- EN 61000-3-3
- EN 61547
- Suitable for systems according to VDE 0108 or EN 50172

Connection diagram



Technical Data

Type	Module reference	Emergency duration	Power output in emergency mode	Light output in emergency mode (assumption: LED-Efficiency = 100 lm/W)	Battery	LED array voltage
BASIC						
LXR-55V-3W/3x1865/180		3Hr	3W	300lm	LiFePO ₄ – 3.2V-3Ah	min 10V / max 55 V
LXR-55V-3W/3x1865/180/1		3Hr	3W	300lm	LiFePO ₄ – 3.2V-3Ah	min 10V / max 55 V
LXR-55V-3W/3x1865/180/3		3Hr	3W	300lm	LiFePO ₄ – 3.2V-3Ah	min 10V / max 55 V
SELF-TESTING						
LXR-ST-55V-3W/3x1865/180		3Hr	3W	300lm	LiFePO ₄ – 3.2V-3Ah	min 10V / max 55 V
LXR-ST-55V-3W/3x1865/180/1		3Hr	3W	300lm	LiFePO ₄ – 3.2V-3Ah	min 10V / max 55 V
LXR-ST-55V-3W/3x1865/180/3		3Hr	3W	300lm	LiFePO ₄ – 3.2V-3Ah	min 10V / max 55 V
DALI						
LXR-DALI-55V-3W/3x1865/180		3Hr	3W	300lm	LiFePO ₄ – 3.2V-3Ah	min 10V / max 55 V
LXR-DALI-55V-3W/3x1865/180/1		3Hr	3W	300lm	LiFePO ₄ – 3.2V-3Ah	min 10V / max 55 V
LXR-DALI-55V-3W/3x1865/180/3		3Hr	3W	300lm	LiFePO ₄ – 3.2V-3Ah	min 10V / max 55 V

Properties

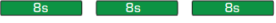





It must be kept in mind that the maximum voltage which can appear on the LED-array in case of LED-array failure, can reach 60 V when using 55 V. The requirements of the standard EN 60598-1 regarding security have still to be fulfilled. The user of the emergency lighting unit has the full responsibility of compliance to the EN 60598-1 standard. Any liability regarding this compliance or to the LXR-type selection will be denied by the emergency lighting unit manufacturer.

The LED-array current under maintained mode and when the LED is turned <on> should not exceed 2.5A









Self-testing

- Self-test in accordance with EN62034
- Bi-coloured LED
- Status of battery

Visual status indicator for Self-Testing models

	LED intermittently flashing green – commissioning/battery regeneration after initial connection.
	LED green: no fault/normal state.
	LED continuous red: battery fault – either insufficient battery capacity or interrupted connection. The fault indication is reset once the fault is cleared.
	LED intermittently flashing red: Lamp fault. Please note that the fault is not indicated (or reset) immediately when it occurs (or is cleared), but after the next self-test.
	LED flashing green/momentary red – duration test interrupted and postponed or self-testing failure
	LED off: If the LED is still off after more than 5 minutes of switching on the mains, then the mains or the unit is faulty

Visual status indicator for DALI addressable models

	LED intermittently flashing green – commissioning/battery regeneration after initial connection. Function test (fast flash 100ms on/off) or duration test (slow flash 1s on/off)
	LED regularly flashing green – inhibit
	LED green: no fault/normal state.
	LED continuous red: battery fault (fast flash 100ms on/off) or test failed (slow flash 1s on/off). The fault indication is reset once the fault is cleared.
	LED luminaire fault
	LED flashing green/momentary red – duration test interrupted and postponed or self-testing failure
	LED alternately flashing red/green – identification switched on to locate individual unit address (DALI only)
	LED off: If the LED is still off after more than 5 minutes of switching on the mains, then the mains or the unit is faulty