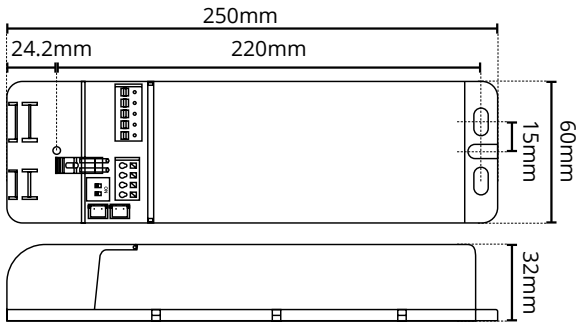
integral LED

INSTALLATION INSTRUCTIONS
FOR INTEGRAL EMERGENCY CONVERSION KIT

Integral Product Code
ILEMPK010



Thank you for purchasing an INTEGRAL LED product. When installed correctly this unit will provide years of service. For support or warranty information please see integral-led.com.

Important Details – Please read prior to installation

1. This product has been tested and approved to work ONLY with Integral LED edge-lit panels and downlights (see compatibility table). Integral LED does not take responsibility if this product is wired up to another LED light not specified in the compatibility table.
2. This product must be installed by a qualified electrician in accordance with instructions provided and in compliance with recognized electrical and safety regulations relevant to the country it is being installed.
3. The product is designed to operate on 220-240V AC 50Hz.
4. This emergency conversion kit is to be installed according to the installation guide below.
5. This product is for indoor use only and it should not be covered with insulation material.
6. This emergency product contains a 6.4V/1500mAh LiFePO4 battery.
7. A permanent live connection is required for this emergency product to operate normally.
8. To maintain the integrity of the battery and the battery design life, this product should be installed within 6 months of purchase. If not installed and charged within six months we advise the product is connected to live supply and receives a full 24 hour charge. To reset the system please remove the plug, then insert the plug again (see system reset). This to be repeated regularly once every six months until installation.

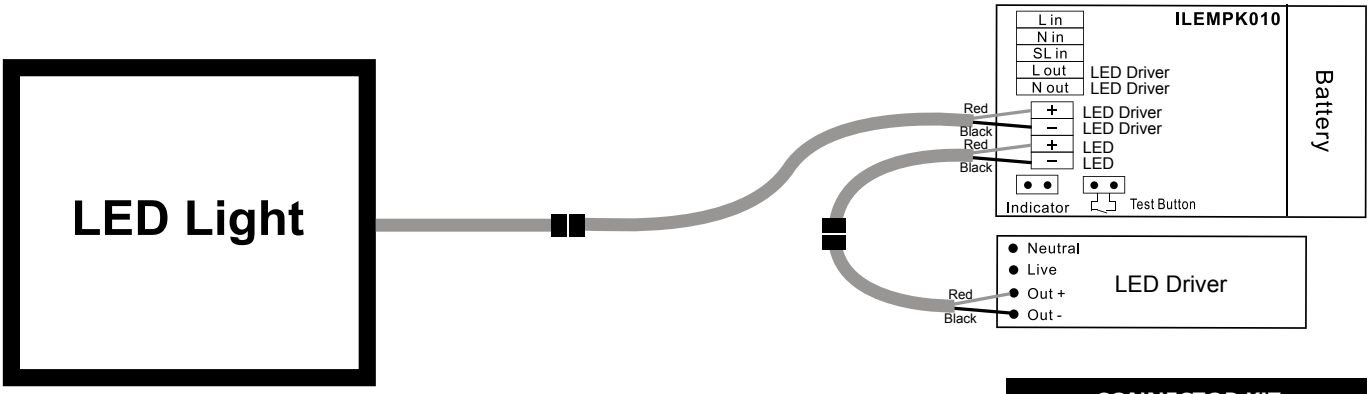
INSTALLATION: DANGER!
Please ensure you isolate live supply before you undertake any work on the emergency conversion kit and luminaire.

Installation Instructions

1. Ensure the AC/mains power is not connected and cannot be reconnected during installation.
2. Connect the LED light to the emergency converter as indicated in the installation guide step 1 using a suitable connector kit (see compatibility table).
3. The length of the output cable to the LED lamps should be kept to a minimum and should not exceed 3m according to the EMC standard.
4. Connect LED charge indicator and test switch provided (if required) to the emergency converter as indicated in the installation guide step 2.
5. Select the emergency output power and charge current as required using the 2 small switches (see installation guide step 3). Please note that for 3hr duration and shorter charging time please put switches 1 and 2 on.
6. Mark the installation date on the product.
7. Connect the emergency converter AC power (see installation guide step 4) ONLY after the wiring between emergency converter and LED light have been completed in step 1.
8. Fit LED indicator and test button (if required) in a suitable position then fix the product in the ceiling.
9. Switch on the mains power supply.
10. A green LED indicator light will be present to show that the batteries are charging. Full charge can take up to 24 hours (see Installation guide Step 3). On first installation, ensure fittings have received a full charge before testing.
11. If there is power supplied to the product and the LED indicator light is off, then there is a battery failure.
12. Please always pay attention to the polarity.

STEP 1 - Connect LED Light and LED Driver to EM converter.

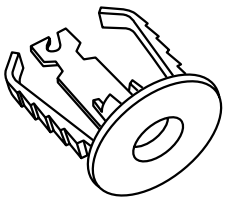
Choose a suitable connector kit for edge-lit panels or downlights (see compatible cable)
and connect the LED light, LED Driver and EM converter as shown below.



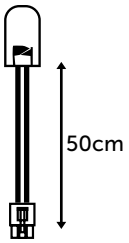
CONNECTOR KIT	
ILEMAK015	
ILEMAK012	
ILEMAK013	
ILEMAK016	
ILEMAK025	

STEP 2 - Connect LED charge indicator and test button.

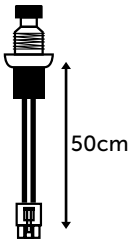
An emergency LED indicator with mount and a test button are included in the kit.
Please connect them as indicated in the drawing below.



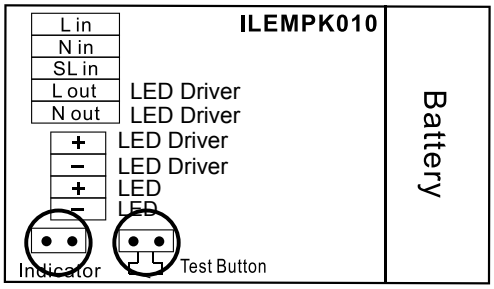
RECESSED MOUNTING FOR CHARGE LED



LED INDICATOR



TEST BUTTON

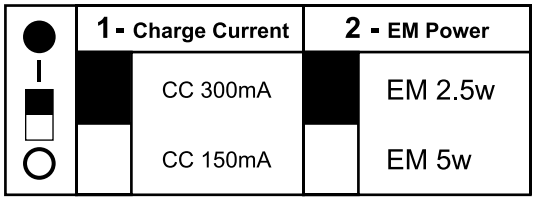


STEP 3 - EM power and charge current selection*.

Position the 2 switches according to the emergency power and charge current desired.
Please use the table bellow for guidance.

EM power	Charge current	Charge time	EM Light duration
2.5W	150mA	24hr	3hr
2.5W	300mA	16hr	3hr
5W	150mA	24hr	1.5hr
5W	300mA	16hr	1.5hr

Please follow the table above to select the desire EM light duration and charge time.



Note: For 3hr emergency light duration and shorter charging time please put switches 1 and 2 in the up position.

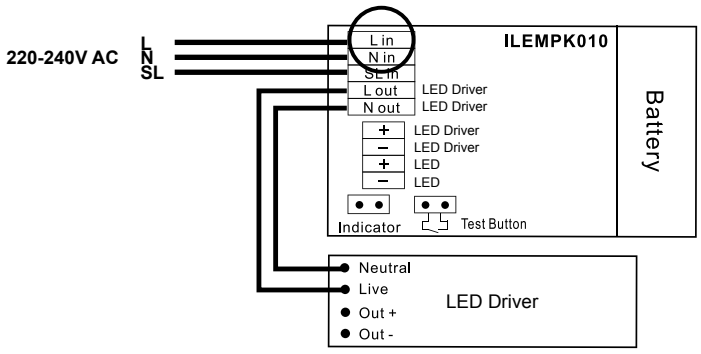
* Please note that in accordance with BS 5266-1 9.1 three hour duration is recommended unless evacuation is immediate in a supply failure and re-occupation is delayed until the system has fully recharged in which one hour duration may be used.

Warranty/technical and contact information are all available at www.integral-led.com

STEP 4 - Connect the converter.

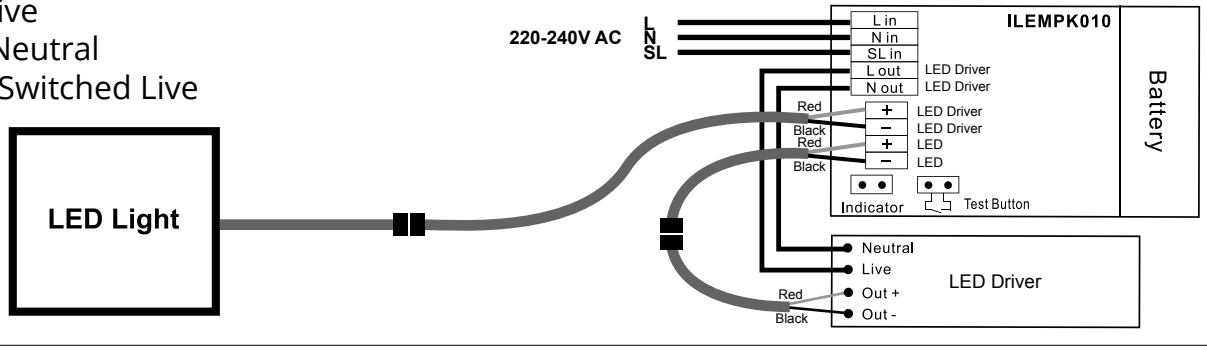
Connect **L**out and **N**out from the converter to Neutral and Live in the LED Driver.

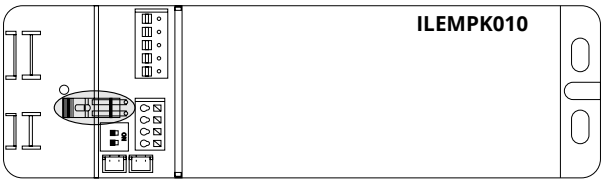
L - Live
N - Neutral
SL - Switched Live



Final Configuration

L - Live
N - Neutral
SL - Switched Live





The function of the system reset is to ensure that the convertor is fully disconnected from the LED lights.

A system reset is required in the following situations:

• After any storage charging prior to installation or during commissioning.

COMPATIBILITY TABLE

Integral-LED Edge-lit panels					Integral-LED downlights			
ILP6060E001	ILP6060E002	ILP6060E003	ILP1260E001	ILP6060E010	ILDL200F001	ILDL245F005	ILDL150E001	ILDL105A1001
	ILP6060E007	ILP6060E004	ILP1260E002	ILP6060E010-4	ILDL200F002	ILDL245F006	ILDL200E007	ILDL131A1001
	ILP6060E008	ILP6060E005	ILP1230E001	ILP6060E011	ILDL200F003	ILDL245F007	ILDL200E008	ILDL160A1001
	ILP6060E012	ILP6060E006		ILP6060E011-4	ILDL200F004	ILDL245F008		ILDL225A1001
ILEMAK016	**ILEMAK015**	**ILEMAK025**		**ILEMAK017**	**ILEMAK012**			**ILEMAK013**

Connector Kit

When powered by a constant mains supply, the battery will be constantly charged.

On failure of the constant mains supply, the fitting will switch automatically from battery charging to battery discharge powering the LED luminaire.

IP20

This luminaire conversion kit is designed according to BS EN 60598-2-22

version 5

Test Schedule to record monthly functional test and yearly 3 hour duration test.
All testing should be planned and incorporated as part of a managed programme with appropriate risk assessment to ensure operational emergency function is not compromised during testing.

Panel Ref/Location	In case of difficulty, contact the Installation Engineers: ..... tel. .....
Full Recharge Time 24 Hours	Duration 3 Hours

TEST RECORD

	Year 1		Year 2		Year 3	
Monthly Test	**Signed**	**Date**	**Signed**	**Date**	**Signed**	**Date**
Functional						
Functional						
Functional						
Functional						
Functional						
Functional						
Functional						
Functional						
Functional						
Functional						
Functional						
Functional						
Three Hour						

The battery should be reviewed for replacement after 4 years of installation.

All Trademarks Acknowledged

Integral LED is a division of Integral Memory
Unit 6 Iron Bridge Close, Iron Bridge Business Park
London - NW10 0UF