

## INSTALLATION INSTRUCTION

### for Integral Lightspan+ DALI LED Batten Range (Standard, Sensor & Emergency Options) 5 Year Warranty

Part	Description
ILBTC240	LIGHTSPAN+ DALI 4FT LED BATTEN 40W 5800LM IP20 CCT
ILBTC241	LIGHTSPAN+ DALI 4FT LED BATTEN 40W 5800LM DALI SELF-EM IP20 CCT
ILBTC250	LIGHTSPAN+ DALI 5FT LED BATTEN 52W 7540LM IP20 CCT
ILBTC251	LIGHTSPAN+ DALI 5FT LED BATTEN 52W 7540LM DALI SELF-EM IP20 CCT
ILBTC260	LIGHTSPAN+ DALI 6FT LED BATTEN 63W 9130LM IP20 CCT
ILBTC261	LIGHTSPAN+ DALI 6FT LED BATTEN 63W 9130LM DALI SELF-EM IP20 CCT

**Thank you for purchasing and Integral Led product. When installed correctly this unit will provide years of service with no lamp changes required. For support or warranty information please visit [www.integral-led.com/warranty](http://www.integral-led.com/warranty). Always turn off power at the distribution unit before any maintenance or installation. Please ensure the power cannot be re-connected inadvertently.**

#### General Safety Instructions

- This luminaire must be installed by a qualified electrician in accordance with the instructions provided and in compliance with recognised electrical and safety regulations relevant to the country it is being installed.
- This is a Class I luminaire. Earth connection is required.
- The input voltage of this luminaire is 200-240V~ 50/60Hz
- This luminaire is suitable for surface, pendant, conduit and BESA box mountings. Adequate for installation on surfaces with normal flammability e.g. wood, masonry. Before making the fixing hole(s), check that there are no obstructions hidden beneath the mounting surface, such as pipes or cables. It is not suitable for use on highly flammable surfaces or in flammable atmosphere.
- This luminaire is not suitable for dimming.
- No user serviceable parts.
- Ensure mains supply is isolated before starting any work.
- Operating Temperature -20°C to +45°C. Do not exceed.
- Keep away from strong electromagnetic radiation sources.
- Should the unit malfunction, return to distributor or reseller. No user serviceable parts inside. Do not disassemble or attempt to repair the luminaire outside of the installation guidelines
- Do not install or use the luminaire if the housing/diffuser is found to be broken.

#### Installation Instructions

- Ensure the mains power supply is isolated.
- Determine the installation method: surface, BESA box, pendant or conduit mounting. Make sure the fixing devices used are adequate for the substrate where the luminaire will be fixed.
- Press the lateral button of the luminaire to release the lens, which will swing and be hanging by its hinge (See Fig 1).

#### For Surface Mounting (ceiling and walls):

- Mark the fixing points on the substrate, aligning the cable adequately in one of the existing entries.
- Pass the cable through the entry.
- Fix the luminaire to the substrate using adequate fixing devices, so the luminaire body is securely attached to the substrate.

#### For BESA Box Mounting (ceiling and walls):

- Using 1 of the 3 BESA box entries, aligning the cable adequately in one of the existing entries.
- Pass the cable through the entry.
- Fix the luminaire to the BESA box using adequate fixing devices, so the luminaire body is securely attached to the substrate.
- If needed, use additional fixing points directly to the substrate using adequate fixing devices, so the luminaire body is securely attached to the substrate.

#### For Pendant Mounting:

- Using the Accessory ILBTCSK058, fix it adequately to the substrate.
- Fix the other extreme to the luminaire body.
- Adjust the luminaire height to the final position.

#### For Conduit Mounting - Lateral:

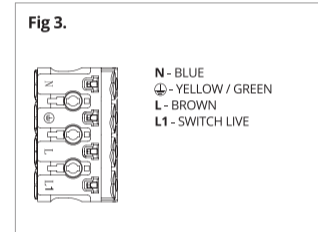
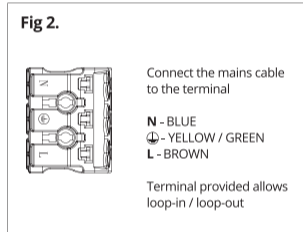
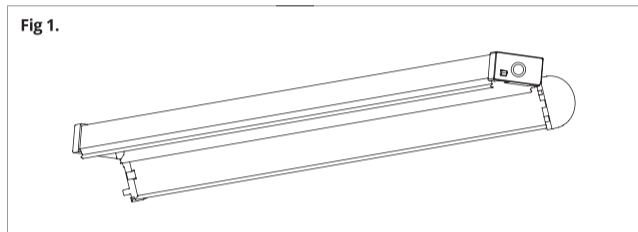
- Knock the plastic entries to be used.
- Fix the luminaire to the substrate as indicated in Surface Mounting, aligning the conduit(s) to the entry to be used.
- Fix the conduit to the luminaire.

#### For Conduit Mounting - Upper Entry:

- Fix the luminaire to conduit using the upper central entry.
- Use adequate means to fix the luminaire to the conduit so it can be securely fastened.
- Is recommended to use an additional safety wire (not supplied) from an adequate position on luminaire to another fixing point.

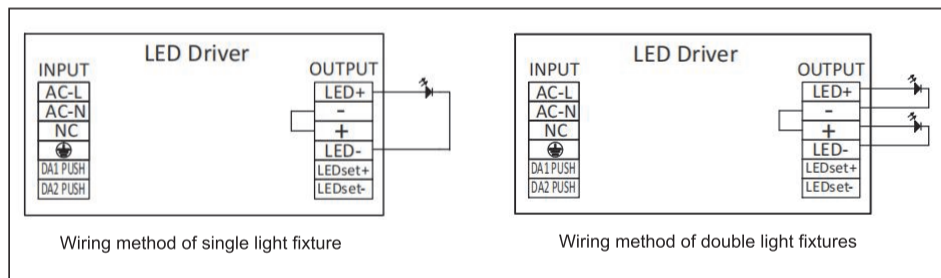
After the luminaire body is fixed, connect the mains supply cable to the terminals, paying attention to the cable polarity: L - Live (Brown), N - Neutral (Blue), - Earth (Yellow/Green) - See Fig 2. For Emergency versions, additionally to L, N and Earth, connect the L1 - Switch Live cable - See Fig 3.

The terminal supplied allows Loop-in / Loop-out wiring. If using this feature, maximum Wattage on a single circuit is 650W. Swing the lens and gently press both ends against the luminaire body, until it clicks.



#### Wiring Diagram For DALI Dimming Version

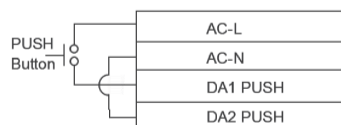
##### Output Terminal Wiring Diagram



**Do not connect LED set+ to LED-, otherwise the LED driver may be damaged.**

##### Dimming Operation Instructions

Wiring diagram of PUSH dimming



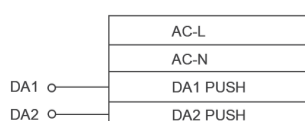
Operation instructions of PUSH dimming

Operation	Duration	Function
Instant Push	0.1-0.5S	LED light on/off
Long Push	0.6-9S	Dim up/down the light in turn-on condition
Long Push	0.6-9S	Synchronous dimming of all LED drivers from the minimum brightness in turn-off condition
Reset Push	>15S	Reset the brightness of all luminaires to 50%

- The PUSH operation won't cause any variations on LED driver if it's less than 0.1S.
- The PUSH switch is connected in series between AC-L and DALI1 PUSH terminals; AC-N and DALI2 PUSH terminals are short-circuited.
  - Minimum dimming depth of PUSH dimming: 1% (maximum output current)
  - The PUSH dimming mode has the memory function in case of any power failure. When the LED driver is powered on again, the light will return to the previous state before power failure.
  - The present dimming direction of PUSH dimming is opposite to the former one.
  - Maximum length of leading wire from the PUSH switch to the farthest LED driver: 135m; wire diameter: 16-22AWG.

Operation instructions of DALI dimming

- DALI signal is connected to DA1 PUSH and DA2 PUSH terminals.
- DALI protocol includes 16 groups and 64 IP addresses.
- Maximum number of LED drivers connected in parallel in DALI dimming mode: 64 pcs.
- Minimum dimming depth of DALI dimming: 1% (maximum output current).



**DALI and PUSH dimming functions cannot be used at the same time, otherwise DALI dimming master may be damaged.**

#### Emergency Operation

The emergency batters can be operated in maintained or non-maintained mode.

- The luminaire delivers 230 lumens in Emergency mode.
- Ensure the emergency battery is connected to the connector on the emergency driver.
- Ensure the status LED and manual test button connector are connected to the emergency driver.

##### For maintained operation:

- Connect the Live cable (Brown) to terminal (L).
- Connect the Switch Live cable to terminal (L1).

##### For non-maintained operation:

- Connect the Live cable (Brown) to terminal (L).
  - Leave terminal (L1) disconnected.
- When powered on, the green LED indicator will illuminate indicating that the battery is being charged.
  - To check that the emergency function is working, press the red test button at any time and the batten should illuminate in emergency mode.
  - On failure of the permanent mains supply the fitting will switch automatically from battery charging to battery discharge powering the LED batten.
  - This luminaire is designed to provide 3hrs of emergency light following a power failure. Please allow a full 24 hour charge before carrying a 3 hour test and mark the installation date on the LED batten label.
  - This luminaire contains a 6.4V V 1500mAh Li-ion battery. For replacement please contact Integral-LED.com
  - Please find Testing Schedule log at the end of this installation guide.

#### Warranty

This unit carries a five year warranty from date of purchase, providing it has been installed correctly and not modified in any way. Should a fault occur please contact the original point of purchase.

#### Important Notes

- The luminaire must be operated within the temperature range defined and avoiding extreme humidity.
- Operation must be within rated voltage.
- Keep away from strong electromagnetic radiation sources and protect from lightning strike.
- Should the unit malfunction, please return it to the distributor or reseller, never attempt repair yourself.
- Do not install the luminaire if any part is broken. Do not apply direct pressure to the front lens.
- The luminaire must be installed by a qualified electrician.
- The luminaire should be positioned away from heat, liquid and vibration. Ensure no contact with any corrosive chemicals.
- The luminaire should be mounted in free air and operated at an ambient temperature of 30 degrees.
- Never cover the luminaire with any covers or insulation materials.
- The luminaire should be positioned at least 1m away from radios as this may affect the signal reception. IP20 rated protection.