

LUMINO

alphaHELIX

INSTALLATION MANUAL

IMHXA_R2202

TECHNICAL SUPPORT

+44(0) 1279 635 411
www.lumino.lighting

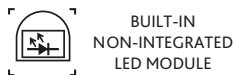
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United Kingdom

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LDL LIGHTING EUROPE LIMITED
The Black Church, St Mary's Place
Dublin, D07 P4AX
Ireland

Installers must read this document and any other referenced documents in full before commencing installation work. Failure to observe all installation guidance in this document may result in unsafe installation, cause permanent product damage and void product warranty.

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HANDLING PRECAUTIONS

LED PROFILE

To avoid permanent damage, do not allow small or sharp objects to apply pressure on to any part of the LED tape.

STRESS

Never stand or place weighted items on the product. The product is not vandal resistant and has no IK rating. Do not subject the product to impact forces.

POWER CABLES

The product end caps, power cables and connectors must not be pulled or twisted. Never pull the product by its power cables or hang it from its power cables or connectors.

CUTTING AND SAWING

The product must not be sawn, drilled or otherwise modified in any way.

DAMAGES

Inspect the product. If you see any damage upon unpacking, report to LUMINO immediately and do not install the product.

LOCATION

Suitable for wet locations. IP67 rated for temporary submersion for no more than 30mins. Ensure there is adequate drainage made available for the product.

Protect product from dust, paint and harmful substances during installation and use. Ensure product is not exposed to VOC gases. Do not obstruct the product and its light output.

SAFETY GUIDANCE

LED MODULE

The product is classed as a built-in, non-integrated LED module and therefore must be mounted into an enclosure, box, luminaire or the like. Do not use the product mounted directly to a wall, ceiling or other surface without some kind of enclosure.

WIRING GUIDE

Follow the guidance shown in the provided wiring guide, including maximum cable lengths, cable sizes and other wiring instructions. When running cables through an enclosure, ensure cables are protected from damage, separated from mains voltage cables and anchored against being pulled. Make connections appropriate for the IP rating of the product.

QUALIFIED INSTALLER

Installation must be carried out by a qualified person and conducted in accordance with local regulations and applicable standards.

THERMAL MANAGEMENT

Ensure ambient temperature (Ta) does not exceed 25°C (77°F) and case temperature (Tc) does not exceed 70°C (158°F). Exceeding max Tc will cause permanent damage and void the product warranty. Allow sufficient clear air space for the LED drivers, and suitable access to the drivers as specified on installation instructions.

REPAIR AND REPLACEMENT

If the product is not functioning, contact LUMINO to register a Service Call for factory repair or replacement. Light source is not user replaceable. See page 5 for Ecodesign and end of life information.



DRIVERS

POWER OFF

Product and driver must not be live wired. Switch off power before work begins. Follow instructions and guidance for the make and model of driver being used.

24VDC SELV

Only use drivers with a maximum output of 24VDC. Drivers must be SELV, constant voltage with both overload and short-circuit protection.

DIMMERS

Check dimmer is compatible with the driver and certified to local regulations.

INRUSH CURRENT

Many constant voltage LED drivers can have high inrush current at power-on. Driver's inrush current can be many times the normal operating current. Use a suitable MCB. Type C MCBs are normally suitable but if inrush current is a persistent problem an inrush suppressor may be required.

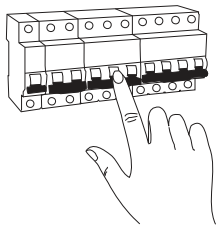
PROTECTION

Use only with 24VDC Class 2 power unit to UL1310 standard with overload and short-circuit protection. Rate drivers for at least 10% above load. Driver protection circuitry must not be relied upon to protect secondary 24VDC electrical circuits from damage caused by over-current or short circuit. DC fuses or DC electronic circuit breakers are recommended for full protection. Allow for access to drivers for maintenance and sufficient clear air space for ventilation.

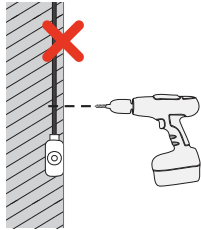
CABLING

Do not overload the driver. Damage will be caused by incorrect input voltage, reverse polarity or short circuit. Plan for loads, driver locations, dimming and cabling prior to start of work. Ensure basic insulation is maintained between mains and dimming control wires.

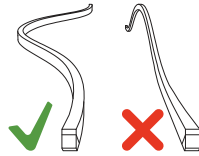
IMPORTANT!



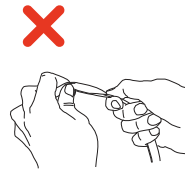
TURN POWER OFF!



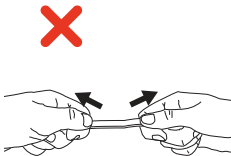
CHECK THE WALL



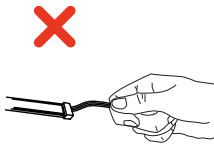
SIDE-TO-SIDE
BENDING ONLY



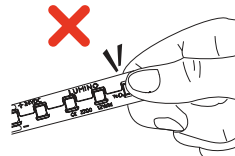
DO NOT TWIST



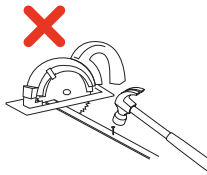
DO NOT PULL LED
PROFILE



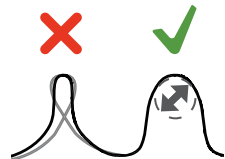
DO NOT PULL
CABLE



DO NOT APPLY
PRESSURE OR
WEIGHT



DO NOT HAMMER
OR SAW



BENDING BREAKS
CIRCUIT! MIN BEND
RADIUS Ø100MM



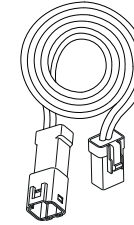
Over bending may cause damage. Support the product during installation (two people recommended) to avoid it over bending under its own weight. Do not power on the product while coiled or while wound onto a reel.



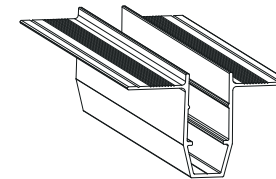
The product must not be cut, sawn or torn in any way. Even small cuts or tears in the silicone rubber can become larger if stressed and result in a failure of the IP rating. If you see any such damage upon unpacking or during installation report this to LUMINO immediately and do not install the product.

ACCESSORIES

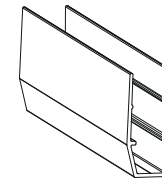
Cable & Connector
HXA1-PC_____
IP67 power link
300mm / 1000mm cable



Recessed Plaster-in Channel
HXA1-MA005
White channel
2 metres



Surface Channel
HXA1-MA006
White channel
2 metres



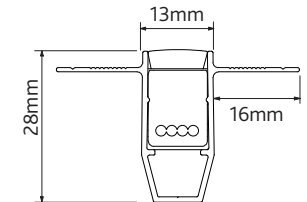
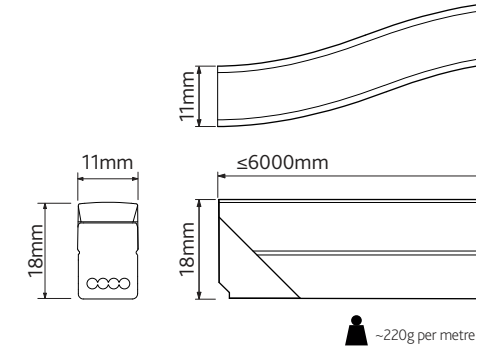
Surface Clip
HXA1-MA521-R1
20pcs White clips
Allow 4 clips per metre



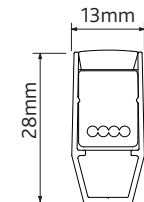
INSTALLATION

1. Plan Installation

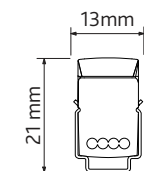
Check product and its dimensions against the planned installation. Runs of LEDs may have to be installed in a particular sequence.



Recessed Plaster-in Channel



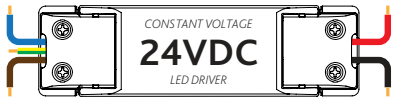
Surface Channel



Surface Clip

2. Prepare Power Supply

This product requires a 24VDC power supply. Please refer to provided wiring guide document. Failure to follow guide may result in damage to the product and voiding of warranty.

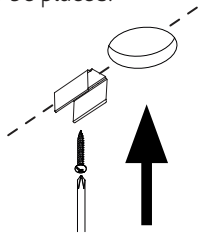


Skip ahead to the relevant fixing option...

SURFACE CLIPS HXA1-MA521-R1

1. Cable Exit

Plan cable entry and exit points before installing the product. Make a suitably sized hole for the cable/s to pass through, and position beneath where the product is planned to be placed.



2. Mount Clips

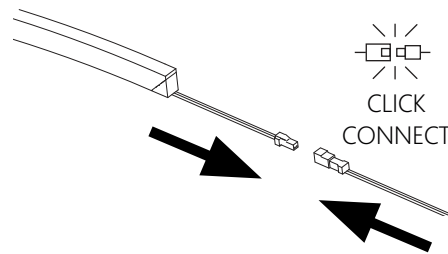
Fix all the clips securely to the mounting surface. Recommended screw size is a $\varnothing 3.5\text{mm}$ / N^o 6 gauge screws. If necessary, use alternative fixings of a similar gauge and size suitable for the material being fixed into.

Products should be held by at least 4 equally spaced clips per metre. Clips spaced no more than 500mm apart.

3. Connect to LED Driver

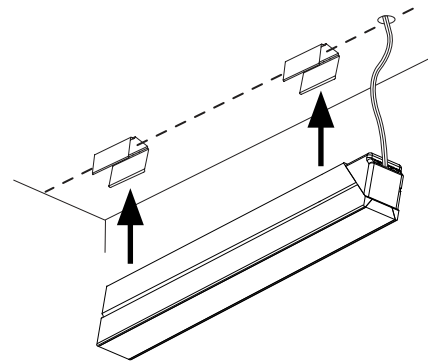
With the power off. Feed the power cables to the alphaHELIX, connecting the product to the LED driver.

Finalise all electrical connections and test the circuit. If the product does not function as expected, turn power off immediately and check all connections.



4. Install into Surface Clips

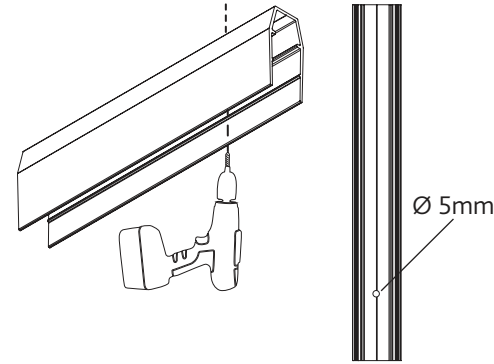
Align clips and carefully push the product into the clips. Ensure the product is fully clipped in place and check it is not misaligned or misplaced due to screw heads or wires. Ensure that cables are not pinched when installed.



SURFACE CHANNEL HXA1-MA006

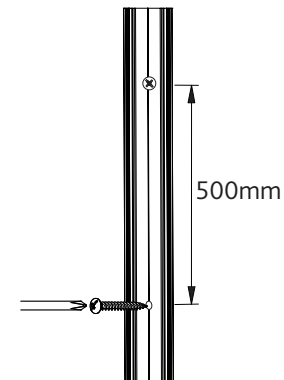
1. Drill Holes

Drill 5mm holes on the centre line, spacing them no more than 500mm apart. Plan for cable entry and exit points.



2. Mount Channel

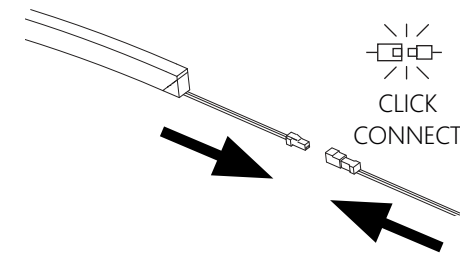
Fix channel securely to the mounting surface. Recommended screw size is a $\varnothing 3.5\text{mm}$ / N^o 6 gauge screws. If necessary, use alternative fixings of a similar gauge and size suitable for the material being fixed into.



3. Connect to LED Driver

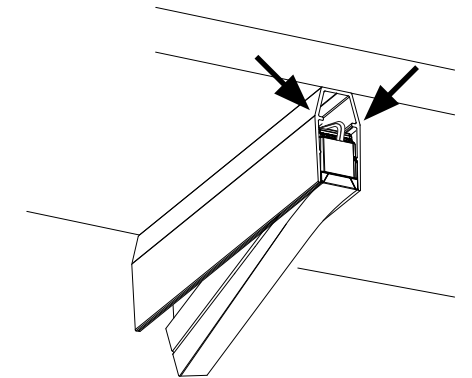
With the power off. Feed the power cables to the alphaHELIX, connecting the product to the LED driver.

Finalise all electrical connections and test the circuit. If the product does not function as expected, turn power off immediately and check all connections.



4. Silicone Channel & Install

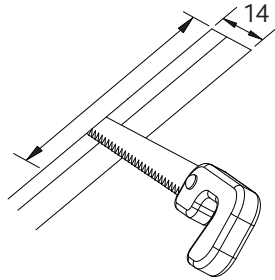
Apply two small bead lines of silicone sealant inside the channel before pushing the alphaHELIX to bond in place.



RECESSED PLASTER-IN CHANNEL HXA1-MA005

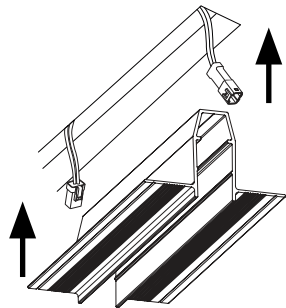
1. Cut-out Requirements

Saw cut-out using dimensions below.
Surface thickness of 12.5mm MIN and be able to support both the weight of the product and channel.



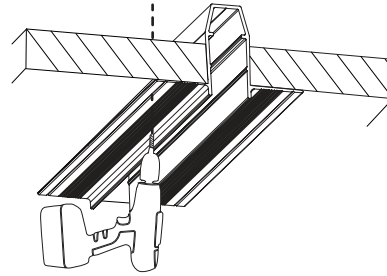
2. Install Channel

With cables out, insert the profile into the cut-out.



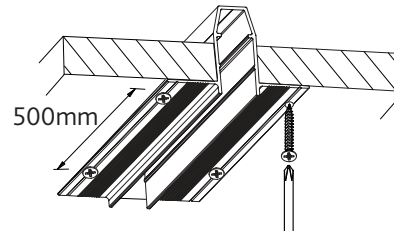
3. Mounting Holes

Drill 5mm holes on the centre line, spacing them no more than 500mm apart.



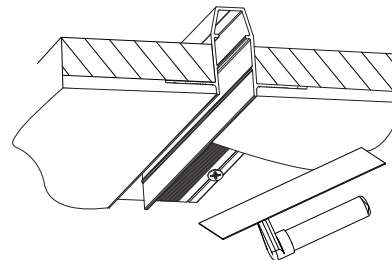
4. Fix Channel to Surface

Securely fix channel to the mounting surface.
Recommended plasterboard/drywall screws size of Ø3.5mm, or gauge N°6.



5. Plaster

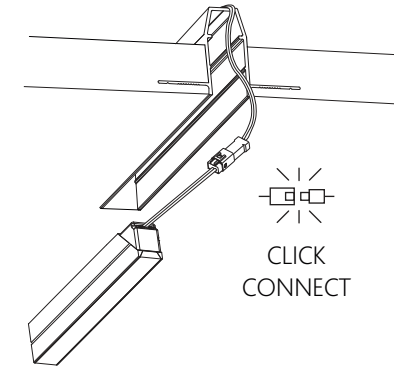
Finish any surface preparation and skim mounting surface in plaster, taking care not to get any plaster in the channel.



6. Connect to LED Driver

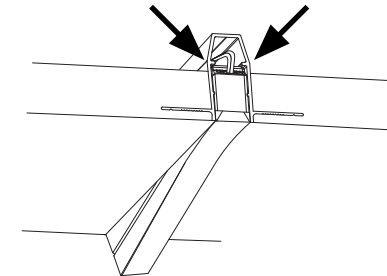
With the power off. Feed the power cables to the alphaHELIX, connecting the product to the LED driver.

Finalise all electrical connections and test the circuit. If the product does not function as expected, turn power off immediately and check all connections.



7. Silicone Channel & Install

Apply two small bead lines of silicone sealant inside the channel before pushing the alphaHELIX to bond in place.



LUMINO

LED MODULE

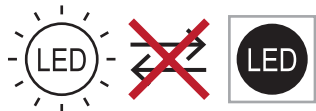
This product is classed as a built-in, non-integrated LED module in accordance with the LED Modules for General Lighting standards BS EN 62031:2008, AMD1:2012, AMD2:2014, AMD2:2015 and BS EN 62031:2020. Therefore, it must be mounted into an enclosure, box, luminaire or the like. Do not use the product mounted directly to a wall, ceiling or other surface without some kind of enclosure.

ECODESIGN REGULATION

This product is considered to be a "containing product" in the sense of Regulations (EU) 2019/2020 and (EU) 2019/2015.

The contained light source is an integrated part of the containing product and its removal can only be done by causing permanent damage to the containing product.

Therefore, replacement of the light source with the use of commonly available tools is not justified due to its restricted mechanical, electrical, optical, thermal and/or environmental protection requirements.



DISMANTLING

Dismantling of light source from the containing product at end of life:

The containing product shall be cut to the length of the contained light source and the light source mechanically detached from the containing product. Containing product component parts shall then be disassembled.

Containing products shall be separated from building material and/or from other additional mounting accessories by means of a professional installer.

Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK.

LUMINO is a member of the WEEE producer compliance scheme.
Registration number: WEE/MM8138AA

ENERGY RATING

This product is a light source of energy efficiency classes as shown:

LED	CCT	6W/m	12W/m
EQ	4000K	F	F
	3000K	G	G
	2700K	G	G