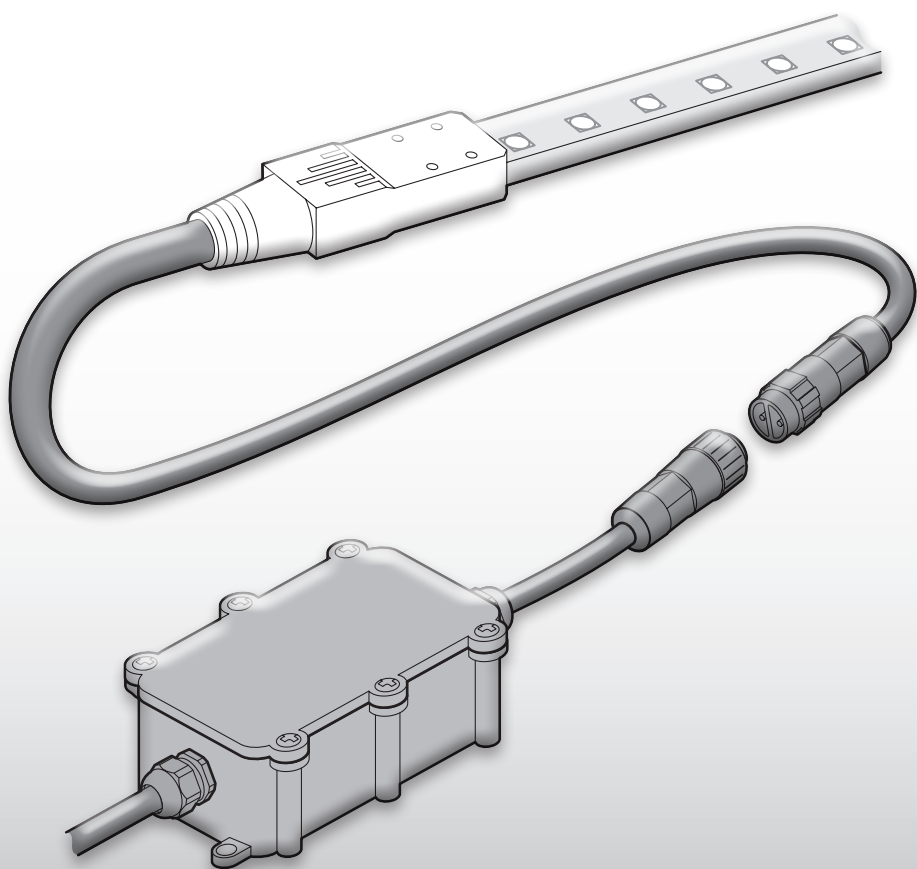




Acclaim™



Flex 120™

User guide

Contents

Introduction.....	2
Welcome	2
Safety	2
Maintenance	2
Cleaning	2
Safety, maintenance and cleaning	2
Supplied items	3
Accessories	3
 Installation.....	 4
Mounting	4
Inserting a strip into a channel	5
Flex 120 strip lengths	6
Connections	7
Internal fuse	7
Dimming control	8
 Further information.....	 9
Troubleshooting	9
Specifications	10
Dimensions	11
Limited product warranty	12

Introduction

Welcome

Welcome to Flex 120™ from Acclaim Lighting. Flex 120 is a low profile, exterior-rated linear LED strip that can be directly powered from AC mains dimmers to eliminate the need for external power supplies and fit seamlessly with existing control systems. Fully sealed lengths are supplied from 1.64 feet (0.5m) up to 65 feet (20m). Open-ended Flex 120 strips are also available to allow multiple strips to be daisy-chained to a maximum overall length of 131' (40m). As an integral part of each installation, all Flex 120 strips must be mounted and protected within matching aluminum channels (two styles and three lengths available) with the option of matching diffusion lenses.

Numerous emitter choices are available, with white color temperatures from 2700K to 5000K as well as saturated red, green, blue or amber colors.

DMX or 0-10V control can be added by using the optional Acclaim Lighting UDM unit.

Safety

- The supply circuit must be fed via a Ground-Fault Circuit Interrupter (GFCI) / Residual Current Device (RCD) breaker.
- Ensure that the power input is supplied from a correctly fused and environmentally protected location.
- This product is rated at IP66 for wet and dry locations, however, it must not be installed where water can accumulate.
- Ensure that each Flex 120 strip is fully protected within matching aluminum mounting channels.

Maintenance

CAUTION: *Always isolate mains power before starting maintenance operations.*

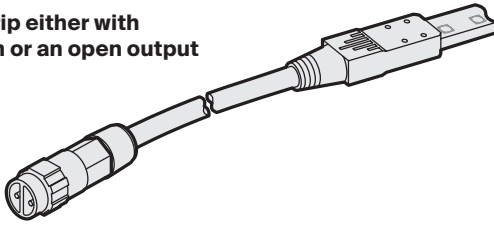
- Ensure that all mounting (and device) screws/bolts are fully tight and free of corrosion.
- Ensure there is no deformation to the housing, lenses or fixing points.
- Check that all power supply cables are free from physical damage or material fatigue.
- Use only genuine spare parts supplied by Acclaim Lighting.

Cleaning

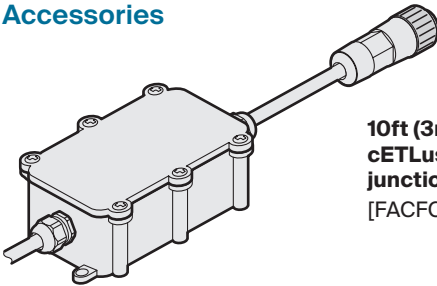
- Use a moist, lint-free cloth when cleaning each fixture.
- Never use alcohol or solvents.

Supplied items

Flex 120 strip either with termination or an open output connection



Accessories

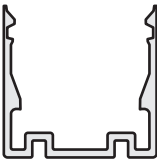


10ft (3m) feed cable with cETLus-listed IP66-rated AC junction box
[FACFCB10]



Low profile aluminum channel

1.64' (0.5m) [FACLPC500]
3.28 (1m) [FACLPC1000]
6.56' (2m) [FACLPC2000]



Tall profile aluminum channel

1.64' (0.5m) [FACTPC500]
3.28 (1m) [FACTPC1000]
6.56' (2m) [FACTPC2000]

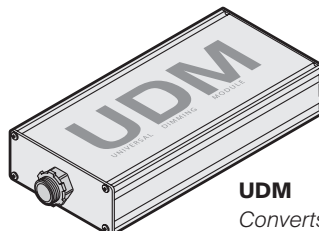


Lenses for all channels

	Clear	Frosted	Opal
1.64' (0.5m)	[FACCL500]	[FACFL500]	[FACOL500]
3.28 (1m)	[FACCL1000]	[FACFL1000]	[FACOL1000]
6.56' (2m)	[FACCL2000]	[FACFL2000]	[FACOL2000]



Rolling wheel install tool
[FACIT]



UDM
Converts 0-10V or DMX to mains dimming

Installation

Flex 120 strips are supplied in lengths ranging from 0.5m (1.64') to 20m (65.6') and are fully sealed at manufacture. Custom lengths are also available to order.

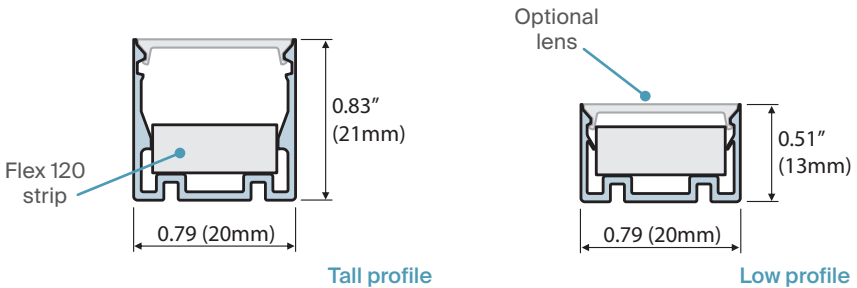
Important

- **Flex 120 strips MUST NOT be cut after manufacture** - doing so will expose mains level power rails and will void your warranty.
- Flex 120 strips are rated at IP66 for wet and dry locations, however, they must not be installed where water can accumulate.

Mounting

Flex 120 strips must be installed within specially designed aluminum channels in order to provide protection as well as a neat finish.

Aluminum channels are supplied in two heights: Tall profile (20mm) and Low profile (12mm):

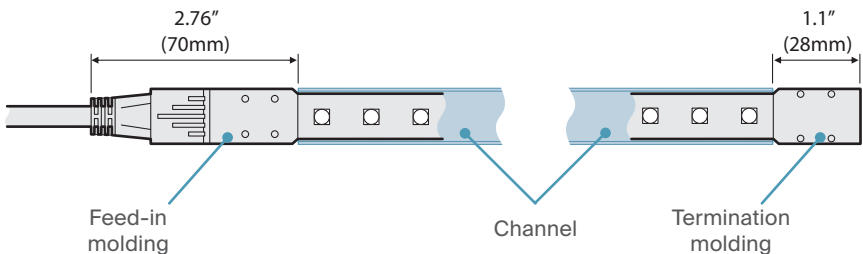


Each style of channel is available in three lengths: 0.5m, 1m and 2m. Each can be cut to length as required.

All channels have pre-drilled mounting holes (Ø3mm) located at 200mm centers and are supplied with a matching number of screws (M3 x 15): 3, 5 or 10 as appropriate to the chosen channel length.

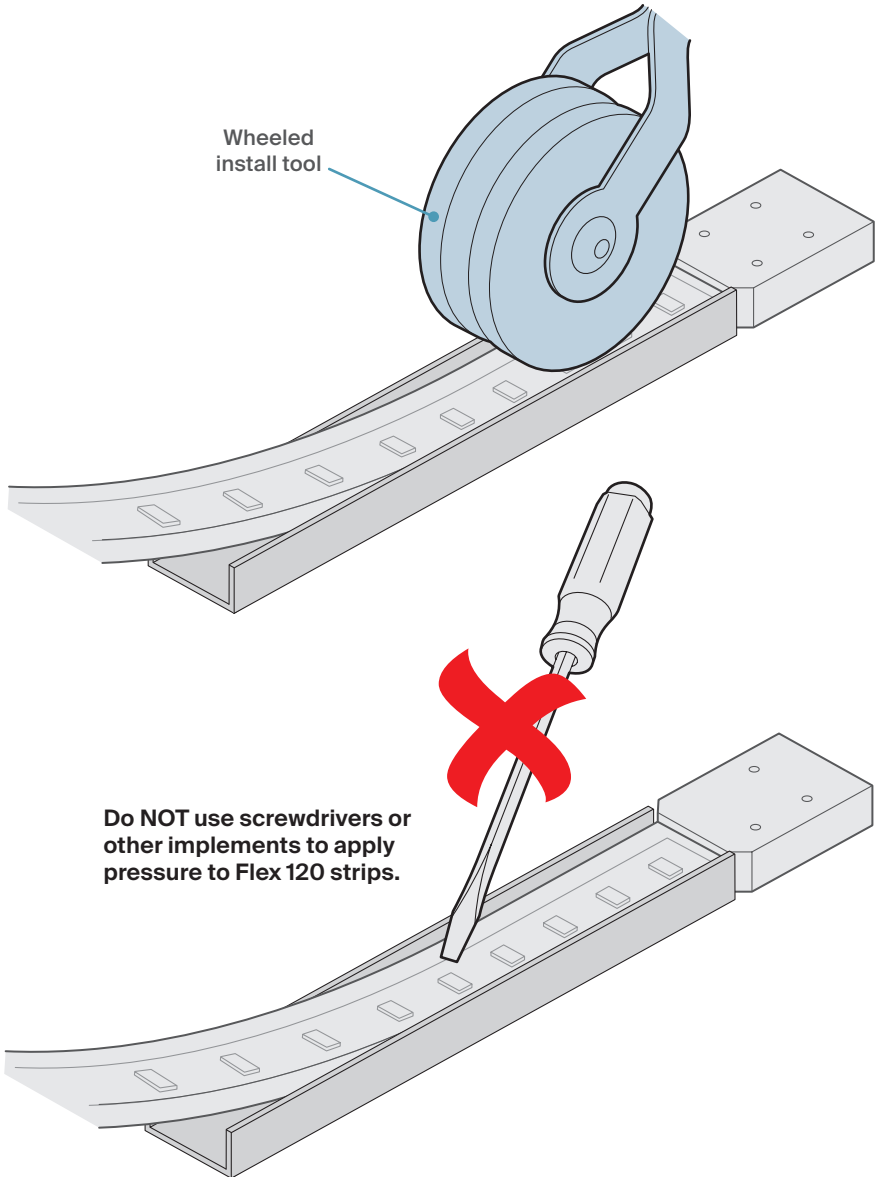
Note: If you need to use alternative mounting screws, ensure that the screw heads do not rise more than 2mm, otherwise they will not fit flush within the channel and will interfere with the Flex 120 strip when it is installed.

When installing in precise or tight spaces, ensure that sufficient clearances are left at either end of the channels to accommodate the feed-in and termination moldings. At the feed-in end you will also need to allow extra space for the cable access as well as the 70mm molding:



Inserting a strip into a channel

Lay one end of the Flex 120 strip into the channel and gently push the strip down to seat it in place. For best results use the wheeled install tool [part #: FACIT] to run along and position the strip correctly. The tool has an indented center so that it places pressure onto the outside edges of the strip without stressing the LED emitters.

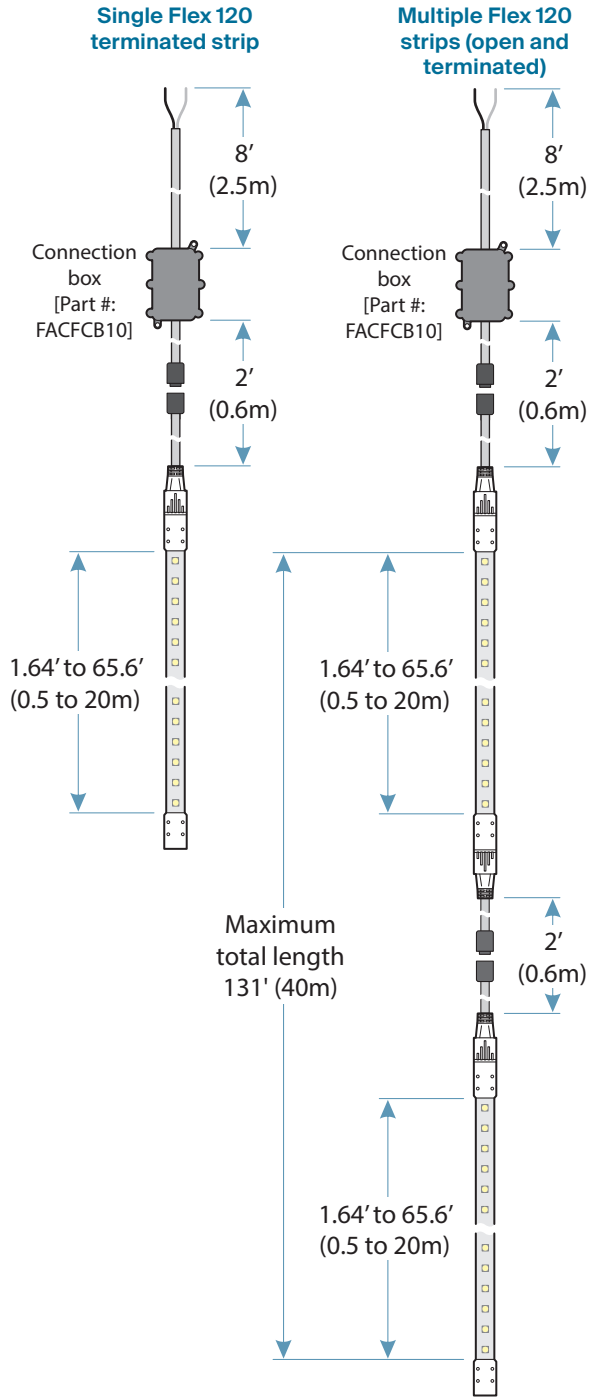


Once the Flex 120 strip is in place you can fit the lens(es), if used. Insert the lens at one end of the channel and gently press it down until it clicks into place. Then run your hand along the lens to clip the remainder into place.

Flex 120 strip lengths

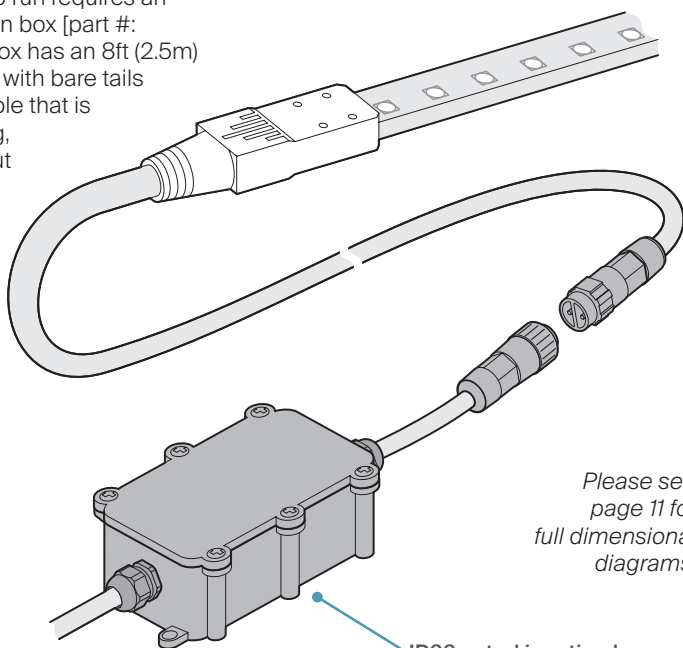
Flex 120 strips are fully created and sealed at manufacture to ensure the integrity of the mains level power rails located within. Two styles of Flex 120 strip are available:

- **Terminated strips** - used in isolation or as the final item in a multi-strip chain, or
- **Open strips** - with input and output connections, these strips can be daisy-chained with others, up to a maximum length of 131' (40m).



Connections

Each Flex 120 strip run requires an IP66-rated junction box [part #: FACFCB10]. The box has an 8ft (2.5m) mains input cable with bare tails plus an output cable that is 8.6" (220mm) long, with an IP67 output connector. The connector links directly with those on each Flex 120 strip.



Please see page 11 for full dimensional diagrams.

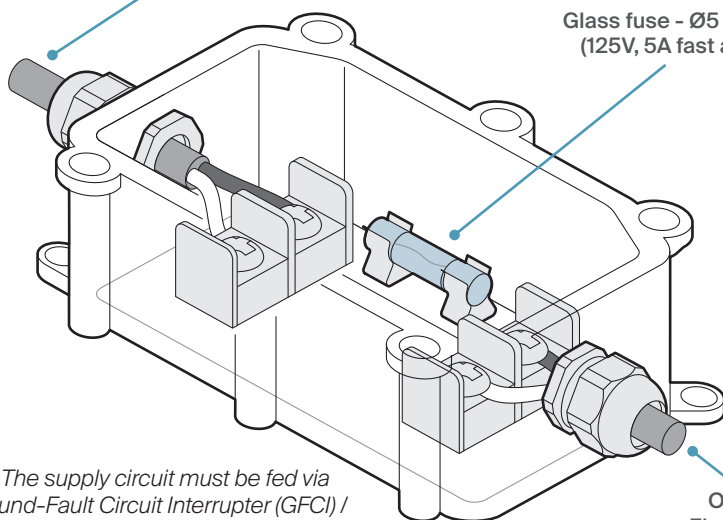
IP66-rated junction box
[Part #: FACFCB10]

Internal fuse

The junction box should not be opened unless access to the internal fuse is required. Remove the six screws securing the lid to reveal the glass fuse (Ø5x20mm, 125V, 5A fast acting).

Mains input - 120VAC (RMS) maximum.
Earth connection not required.

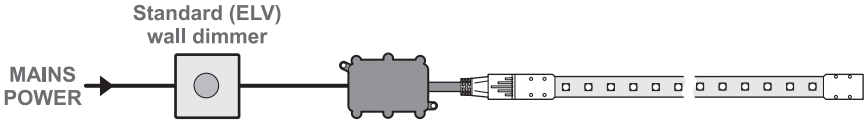
Glass fuse - Ø5 x 20mm
(125V, 5A fast acting)



Note: The supply circuit must be fed via a Ground-Fault Circuit Interrupter (GFCI) / Residual Current Device (RCD) breaker.

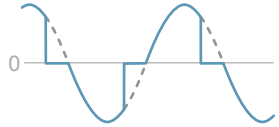
Dimming control

Each Flex 120 strip can accept dimmed mains power at 120VAC (RMS) originating from certain types of dimmers, such as domestic (ELV) wall dimmers (connect according to dimmer specifications):

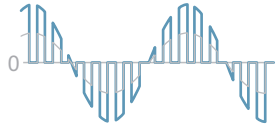


Flex 120 strips are compatible with the two types of dimmer circuits shown below. However, they are NOT suitable for use with TRIAC-based dimmers, also known as Forward phase-control or Leading-edge dimmers.

ELV dimming - (*Electronic Low Voltage*) - These dimmers use a transistor type device to cut off the mains output before the zero point of each half-wave cycle, thus they affect the trailing edge of the mains sinewave. These dimmers avoid the voltage spikes associated with TRIAC-switched leading edge dimmers and are best suited to dimming capacitive loads such as the electronic transformers used with low voltage lighting. This style of dimming is also called *Reverse phase-control* or *Trailing-edge dimming*.



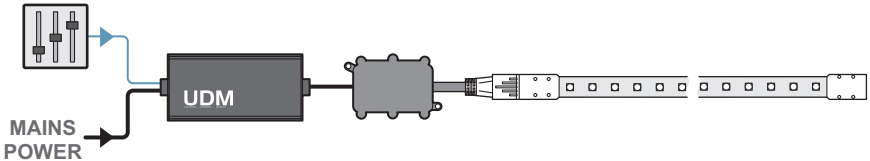
Sinewave dimming - These dimmers use an IGBT (*Insulated Gate Bipolar Transistor*) to switch the mains output at high frequencies such that they can recreate a dimmed mains sinewave with a varying overall amplitude. These dimmers produce the smoothest output of all types.



DMX or 0-10V control

Additionally, Flex 120 strips can be controlled by either DMX or 0-10V (source or sink) inputs by using the optional Acclaim Lighting UDM (Universal Dimming Module):

DMX or 0-10V CONTROL



The UDM runs from a standard mains input (120VAC) and uses a DMX or 0-10V (source or sink) input to create a dimmed mains output from which the Flex 120 strip(s) can operate.

The UDM is able to provide fully dimmed output power from 0-100%.

Further information

Troubleshooting

No light output is visible when expected.

- Check that power is correctly applied to the fixture and that there is no damage to the power input cord.
- If external DMX control is being used, check that the DMX address set within the fixture matches that being output by the controlling source device.

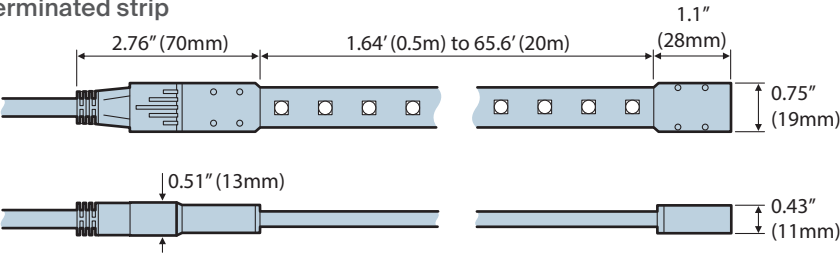
Specifications

Colors	2700K, 3000K, 3500K, 4000K, 5000K, Red, Green, Blue or Amber
Photometrics	Up to 371 lumens per 1.64' (0.5m) section, CRI >80
Beam angle	160°
Lumen maintenance (L ₇₀)	50,000 hours (@ 25°C)
Strip length	Built to order: 1.64' (0.5m) minimum, 65.6' (20m) maximum
Max fixtures in series	Interconnect lengths up to 131' (40m) maximum
Operating voltage	120VAC
Power consumption	3.8W per foot, 12.4W per meter
Control	10-100% dimming via ELV (reverse phase) or sinewave dimming <i>0-10V or DMX control also available using optional UDM module</i>
Ingress protection	IP66, wet and dry location - not for use where water can accumulate. GFCI/RCD breaker required
Impact protection	IK08, protection against 5 joule impact
Connection	ETL-listed AC junction box with 10' (3m) feed cable (required)
Material	PVC, UV stabilized
Finish	Transparent sleeve, white PCB
Mounting	Via aluminum channel (required)
Operating temperature	-40°F to 122°F (-40°C to 50°C)
Certifications	

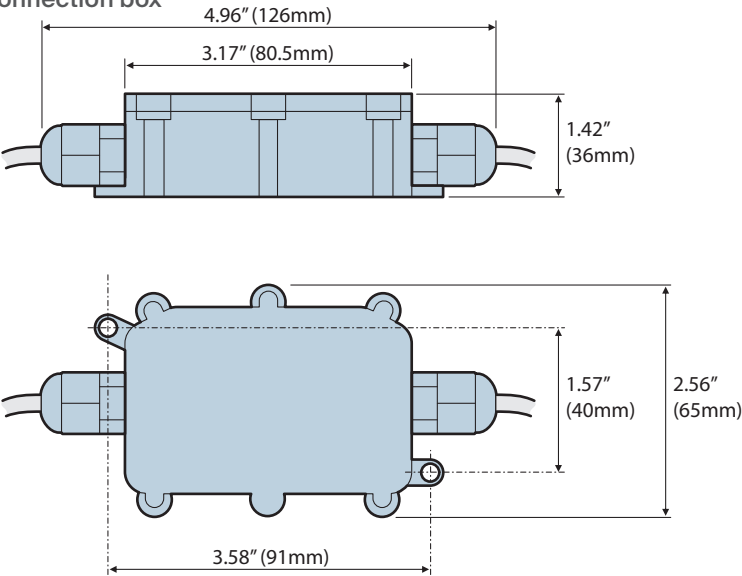


Dimensions

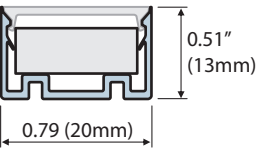
Terminated strip



Connection box

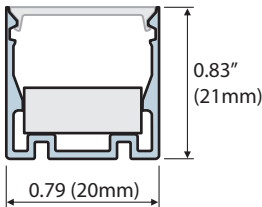


Low profile channel (end view)



Low profile channels have $\varnothing 0.14"$ ($\varnothing 3.5\text{mm}$) mounting holes spaced 7.87" (200mm) apart along the length of their bases.

Tall profile channel (end view)



Tall profile channels have 0.39" x 0.16" (10mm x 4mm) mounting slots spaced 7.87" (200mm) apart along the length of their bases.

Limited product warranty

A. Acclaim Lighting™ hereby warrants, to the original purchaser, Acclaim Lighting finished products to be free of manufacturing defects in material and workmanship for a standard period of:

- Fixtures: 5 Years (1,825 days) from the date of purchase.
- Drivers, power supplies and accessories: 5 Years (1,825 days) from the date of purchase.
- Flex Products: 3 Years (1,095 days) from the date of purchase.
- Controllers: 2 Years (730 days) from the date of purchase.

It is the owner's responsibility to establish the date and place of purchase and warranty terms by acceptable evidence, at the time service is sought.

B. For warranty service, send the product only to the Acclaim factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Acclaim Lighting will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, Acclaim Lighting shall have no liability whatsoever for loss of or damage to any such accessories, nor for the safe return thereof. Acclaim reserves the right to replace the item with same or similar product at its discretion.

C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which Acclaim concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Acclaim Lighting factory unless prior written authorization was issued to purchaser by Acclaim Lighting; if the product is damaged because not properly maintained as set forth in the instruction manual.

D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check-up nor do we guarantee as part of this warranty any lumen performance during period. Parts not covered by this warranty include: fuses, external power supplies, third party items not manufactures by Acclaim lighting. During the period specified above, Acclaim Lighting will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Acclaim Lighting under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Acclaim Lighting. At no time will installation or re-installation or products labor or liability costs will be assumed by Acclaim Lighting. All products covered by this warranty were manufactured after January 1, 2012, and bear identifying serial number marks to that effect.

E. Acclaim Lighting reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products describe above. Except to the extent prohibited by applicable law, all implied warranties made by Acclaim Lighting in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired.

F. Marine or extreme weather location applications using Acclaim lighting products are subject to a 2 year limited warranty and Acclaim must be notified prior to delivery of units for such applications so that preventative treatment can be made to the products to ensure proper performance and product life with a special marine code coating / sealing process at an additional cost.

G. The consumer's and or dealer's sole remedy shall be such repair or replacement as is expressly provide above; and under no circumstances shall Acclaim Lighting be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product. This warranty is the only written warranty applicable to Acclaim Lighting products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

