

Ai Cove

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INTRODUCTION

WELCOME

Welcome to the Ai Cove range from Acclaim Lighting. Available in 1' and 4' lengths, these sturdy LED fixtures can operate directly from dimmed mains inputs and are designed to closely mimic the dimming response of incandescent lamps. For further information about dimming, please see *Dimming control* on page 7.

Separate Ai Cove models are available for use with three distinct voltage levels:

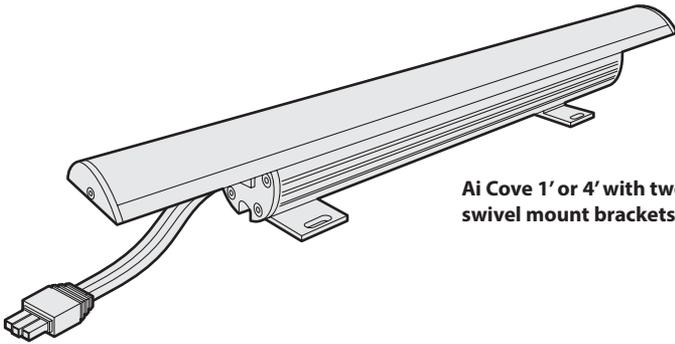
- 120VAC
- 220-240VAC
- 277VAC

Ai Cove fixtures can be directly connected in series up to lengths of 100 feet (50 feet maximum when used with 120VAC inputs) to greatly simplify installation.

SAFETY

- Ensure that the power input is supplied from a correctly fused, earthed and environmentally protected location.

SUPPLIED ITEMS



Ai Cove 1' or 4' with two swivel mount brackets

OPTIONAL EXTRAS



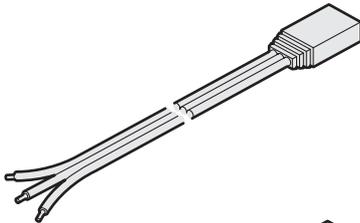
90° bracket (single)

[AIC90]



End cap

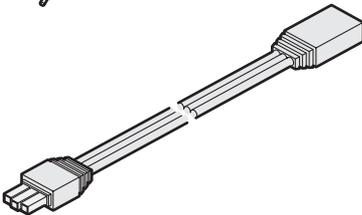
[AICEC]



Feed cable

10' (3m)

[AICFC10]



Link cables

1' (30cm)

[AICLC1]

5' (1.5m)

[AICLC5]

10' (3m)

[AICLC10]



Universal Dimming Module

[UDM]

INSTALLATION

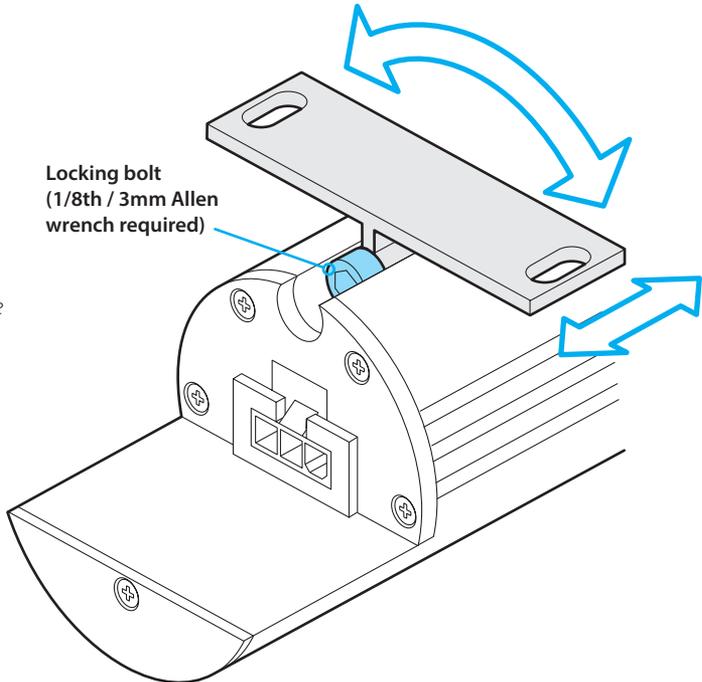
When installing each Ai Cove fixture, ensure that the surface is level and that nothing is protruding to damage the mounting bracket(s). Suitable mounting surfaces include steel, aluminum, concrete or wood structures.

MOUNTING

Each mount bracket has two slots measuring 0.39" x 0.18" (10 x 4.5mm) and the base has a thickness of 0.08" (2mm). Select bolts or screws (not supplied) that fit the mount bracket base(s) correctly and are particularly suited to the mounting surface.

Ensure that each mount bracket is securely fixed to the mounting surface with appropriate screws/bolts. If necessary, use a 1/8th (3mm) Allen wrench to loosen each mount bracket to allow them to slide along the length of the fixture to the required position before re-tightening.

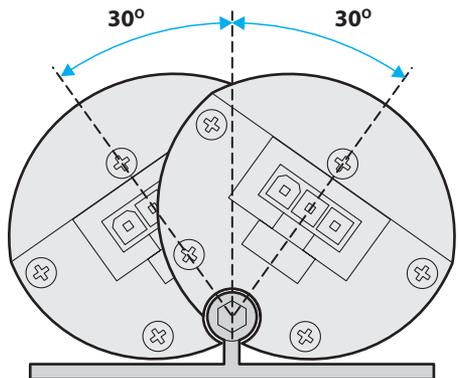
Note: It may be necessary to temporarily remove the mounts from the Ai Cove unit in order to fix them to the surface. Once the locking bolts are loosened, the brackets should slide out quite easily.



MOUNT ADJUSTMENT

The two standard swivel mount bracket(s) supplied attached to each Ai Cove fixture allow tilt angles, in both directions, of roughly 30 degrees from vertical to be achieved. Use a 1/8th (3mm) Allen wrench to adjust the tilt angle.

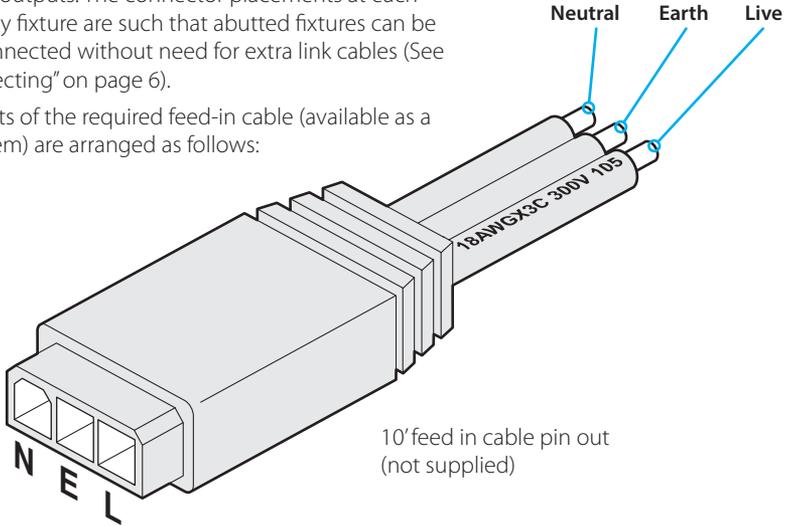
Optional brackets that allow tilt angles up to 90 degrees from vertical [Part#: AIC90] are also available.



POWER CABLING

Ai Cove fixtures use proprietary 3-pin connectors for their inputs and outputs. The connector placements at each end of every fixture are such that abutted fixtures can be directly connected without need for extra link cables (See "Interconnecting" on page 6).

The contacts of the required feed-in cable (available as a separate item) are arranged as follows:



IMPORTANT: Ai Cove fixtures are available in three separate voltage categories: 120VAC, 220-240VAC and 277VAC. Ensure the input voltage does not exceed the rating of your fixtures.

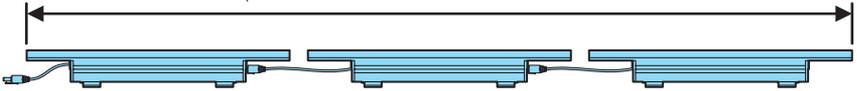
MAXIMUM NUMBER OF FIXTURES

The maximum number of fixtures that can be connected in a single series is determined by the supply voltage:

Maximum length of Ai Cove fixtures:

Up to 50 feet (15m) at 120VAC

Up to 100 feet (30m) at 220/240 or 277VAC

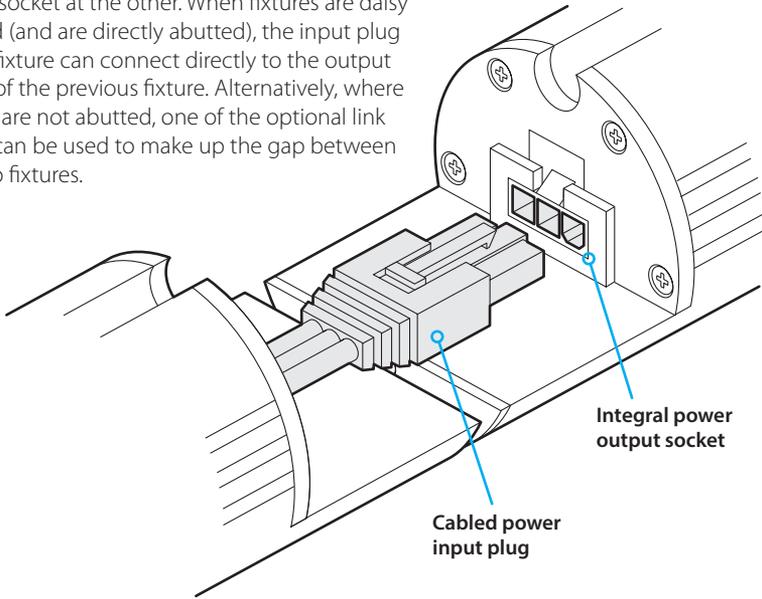


Runs can consist of mixtures of 1' and 4' fixtures, as required, providing the total length of fixtures is not exceeded.

See "Interconnecting" on page 6.

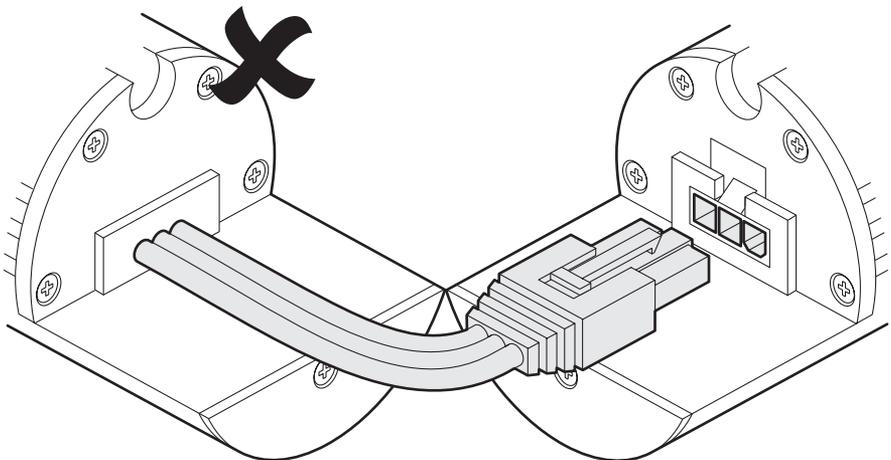
INTERCONNECTING

Each Ai Cove fixture has a short cabled power input plug at one end and an integral power output socket at the other. When fixtures are daisy chained (and are directly abutted), the input plug of one fixture can connect directly to the output socket of the previous fixture. Alternatively, where fixtures are not abutted, one of the optional link cables can be used to make up the gap between any two fixtures.



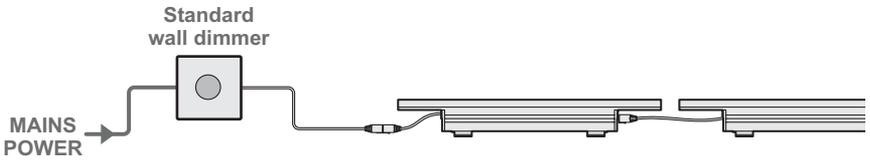
IMPORTANT: Do not exceed the stated maximum fixtures in a daisy chain. See "Maximum number of fixtures" on page 5.

When mounting Ai Cove fixtures in a 90 degree corner-to-corner arrangement, do not attempt to interconnect them using only the cabled power input plug as it is not long enough to reach. Always use a 1' (30cm) link cable [Part#: AICLC1].



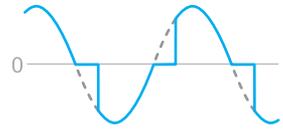
DIMMING CONTROL

All Ai Cove fixtures can accept dimmed mains power (at the appropriate voltage level for the chosen model) originating from various types of dimmers, such as a standard domestic wall dimmer:

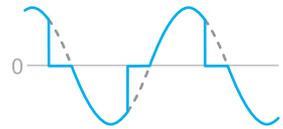


There are three main types of dimmer circuits; Ai Cove can operate from any of them:

TRIAC dimming - (*TRIode for Alternating Current*) - Dimmers that use TRIACs for mains dimming operate by delaying the switch-on point until later in each half-wave cycle, thus they affect the leading edge of the mains sinewave and are best suited to dimming resistive loads such as traditional tungsten lamps. This style of dimming is also called *Forward phase-control* or *Leading-edge dimming*.



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*.

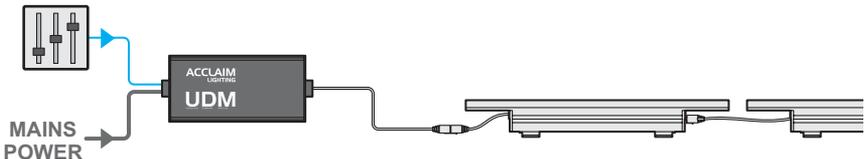


Sinewave dimming - These dimmers use an IGBT (*Insulated Gate Bipolar Transistor*) to switch the mains output at high frequencies such that they can recreate a dimmed mains sinewave with a varying overall amplitude. These dimmers produce the smoothest output of all types.



DMX or 0-10V control - Additionally, Ai Cove fixtures can be controlled by either DMX or 0-10V inputs by using the optional Acclaim Lighting UDM (Universal Dimming Module).

DMX or 0-10V CONTROL



The UDM runs from a standard mains input (100 - 277VAC) and uses a DMX or 0-10V (source or sink) input to create a dimmed mains output from which the Ai Cove fixture(s) can operate.

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

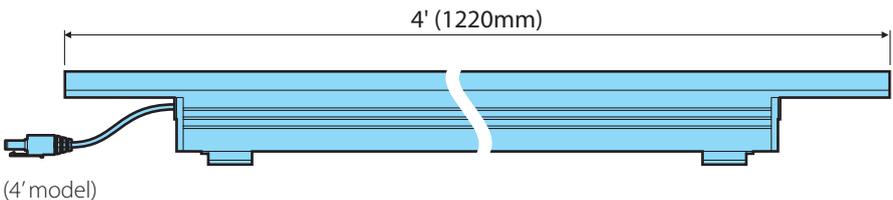
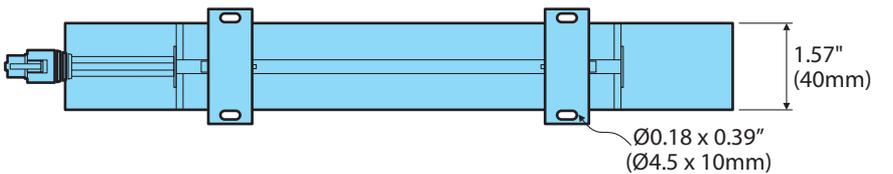
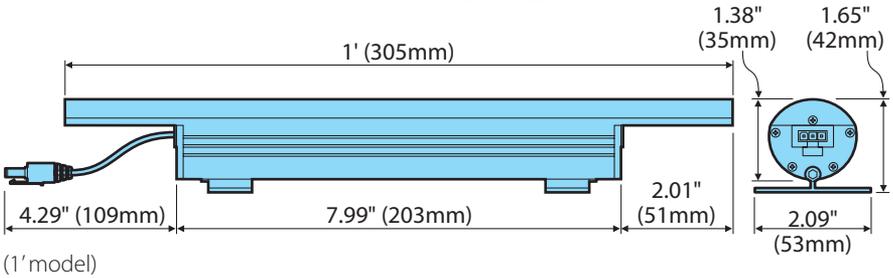
OPERATION

In operation, each Ai Cove efficiently harvests the available power from the dimmed input and produces a simulated color shift (with Correlated Color Temperatures between 1800K and 3000K) to accurately mimic the response of a tungsten source. Such is the efficiency of power harvesting that Ai Cove fixtures can dim smoothly down to zero without a telltale 'LED snap-off' at the lower end.

FURTHER INFORMATION

SPECIFICATIONS

Correlated Color Temp	3000K to 1800K
Color Rendering Index	93
Beam angle	120°
Lumen maintenance (L ₇₀)	150,000 hours (25°C)
Control	TRIAC (forward phase), ELV (reverse phase), 0-10V*, DMX* * requires the use of the optional UDM module
Maximum lengths in series	50' (15.2m) @ 120VAC, 100' (30.4m) @ 240VAC
Ingress protection	IP20, dry location
Operating voltage	120VAC, 240VAC or 277VAC
Power consumption	13.5W (1' model), 53W (4' model)
Connectors	Attached 3 conductor AC lead input and socket output
Housing	Aluminum body with polycarbonate lens
Finish	White standard, black, gray or custom optional
Mounting	30° swivel mounts included, 90° swivel mounts optional
Operating temperature	-4°F to 113°F (-20°C to 45°C)
Weight	0.65 lbs/0.29 kg (1' model), 2.75 lbs/1.25 kg (4' model)
Certifications	



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.

www.acclaimlighting.com