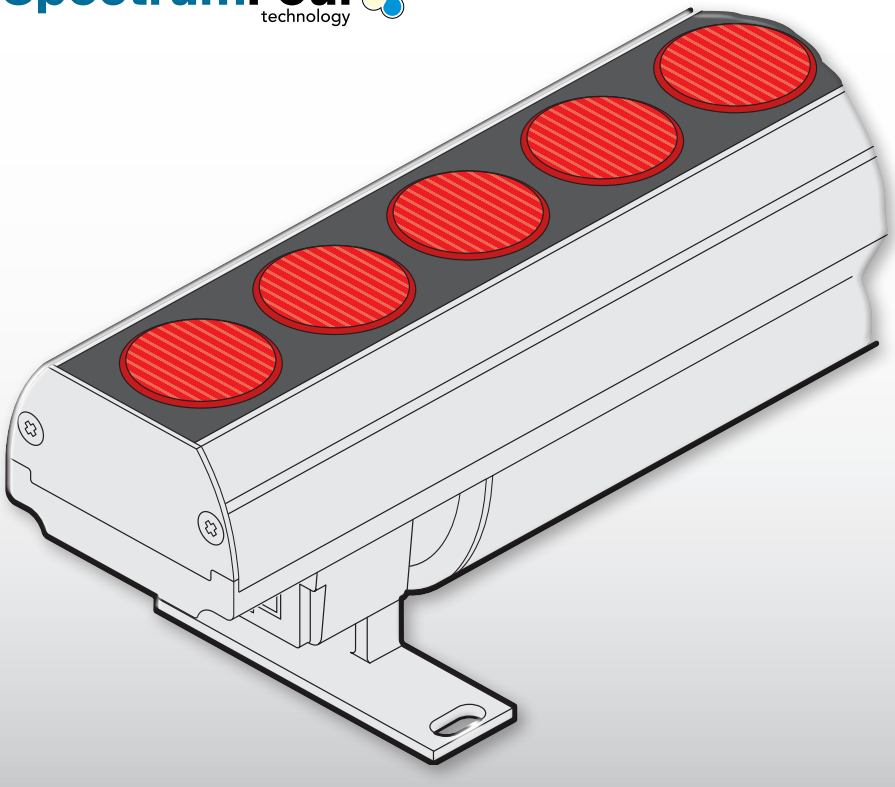
Acclaim™

AcclaimModular systems

SpectrumFour technology



Adapt Linear DMX™

User guide

Contents

Introduction

Welcome

Welcome to the Adapt Linear DMX™ range from Acclaim Lighting. Available in 1' and 4' lengths and built to order at our Los Angeles, CA. U.S.A. headquarters, these fixtures provide maximum flexibility to match your installation. Choose between a wide range of beam angle options and emitter types.

Adapt Linear DMX fixtures can be directly connected in series up to lengths of 140 feet/42m (or up to 70 feet/21m at the highest power setting) to greatly simplify installation. Power and DMX control are combined within the feed cable and are jointly passed from fixture to fixture when connected in series.

Safety

- When fixtures are mounted off-ground, ensure they are securely fitted to an appropriate mounting surface.
- Ensure that the power input is supplied from a correctly fused, earthed and environmentally protected location.

Maintenance

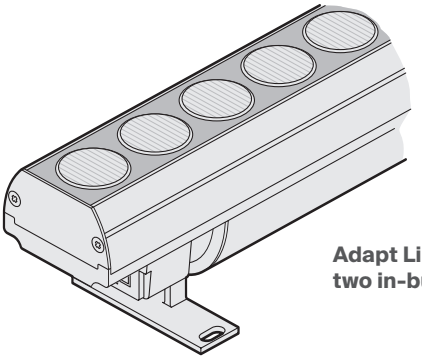
CAUTION: Always isolate mains power before starting maintenance operations.

- 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

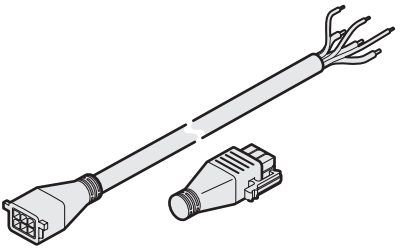
- Use a moist, lint-free cloth along with warm water when cleaning each fixture.
- Never use alcohol or solvents.

Supplied items



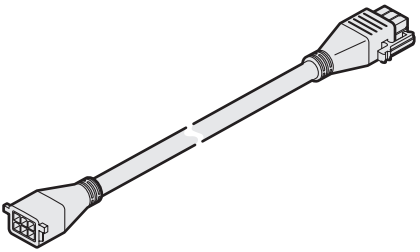
Adapt Linear DMX 1’ or 4’ with two in-built swivel mounts

Optional extras



Feed cables *(plus DMX terminator end cap)*

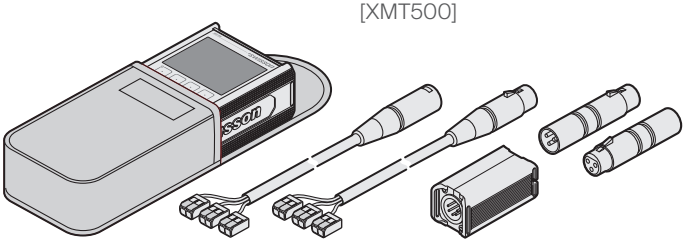
10’ (3m)	[APXFC10]
50’ (15m)	[APXFC50]



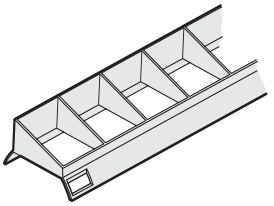
Link cables

6” (15cm)	[APXLC05]
1’ (30cm)	[APXLC1]
5’ (1.5m)	[APXLC5]
10’ (3m)	[APXLC10]

DMX/RDM/Art-Net/sACN tool
(incl cable dongle, 3/5-pin converters, bare cable connectors and pouch
[XMT500]



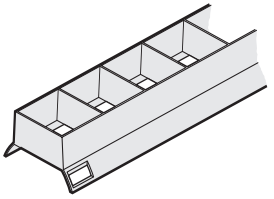
Optional accessories (continued)



Half louvers

1' (30cm)	[ADLHLV1#]
4' (122cm)	[ADLHLV4#]

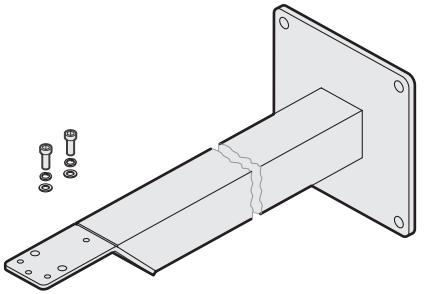
 # = W (white), G (gray), B (black) or C (custom)



Full louvers

1' (30cm)	[ADLLV1#]
4' (122cm)	[ADLLV4#]

 # = W (white), G (gray), B (black) or C (custom)



Aluminum extender bars *(plus 2x fixings)*

6" (15cm)	[ADLEB05#]
1' (30cm)	[ADLEB1#]
2' (61cm)	[ADLEB2#]
3' (91cm)	[ADLEB3#]

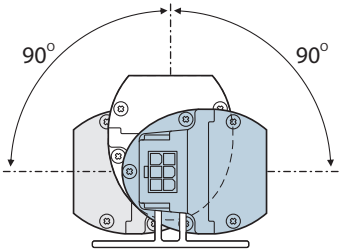
 # = W (white), G (gray), B (black) or C (custom)

Installation

When installing each Adapt Linear DMX fixture, ensure that the surface is level. Suitable mounting surfaces include steel, aluminum, concrete or wood structures.

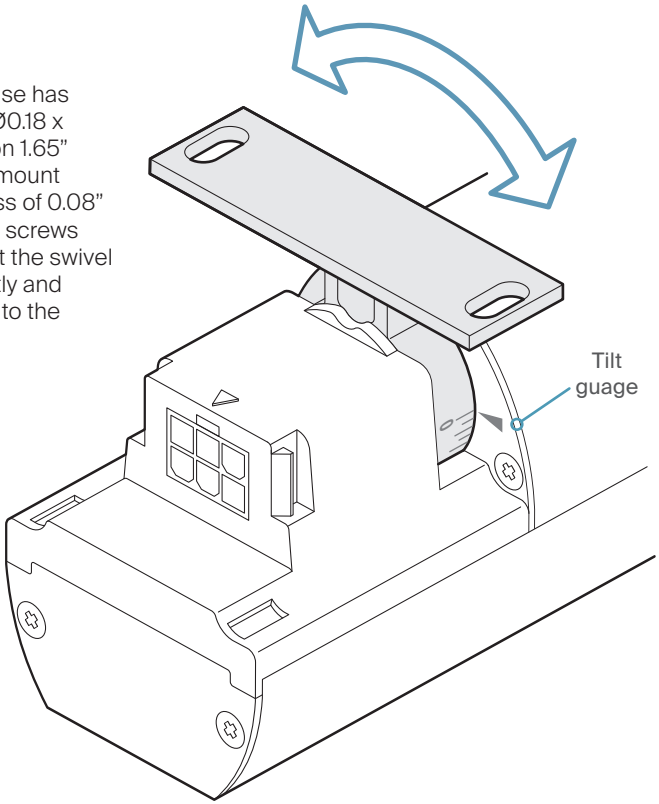
Mounting

Each Adapt Linear DMX is supplied with two in-built swivel mounts (see “Dimensions” on page 21) which allow you to attach the fixture to suitable surfaces.



The fixture body can be tilted in either direction from vertical to horizontal in thirteen steps, with each step roughly equaling 7° of rotation. Tilt gauges are located both sides of each swivel mount. Internal ratchets in each swivel mount ensure that the chosen angle is retained without the need for tools.

Each swivel mount base has two slots measuring Ø0.18 x 0.39” (Ø4.5 x 10mm) on 1.65” (42mm) centers. The mount bases have a thickness of 0.08” (2mm). Select bolts or screws (not supplied) which fit the swivel mount base(s) correctly and are particularly suited to the mounting surface.



To mount the fixture

1 Where necessary, prepare four pilot holes in the mounting surface which align with the swivel mount base slots (see “Dimensions” on page 21).

2 Rotate both swivel mounts all the way to one side to allow access to the slots on one side.

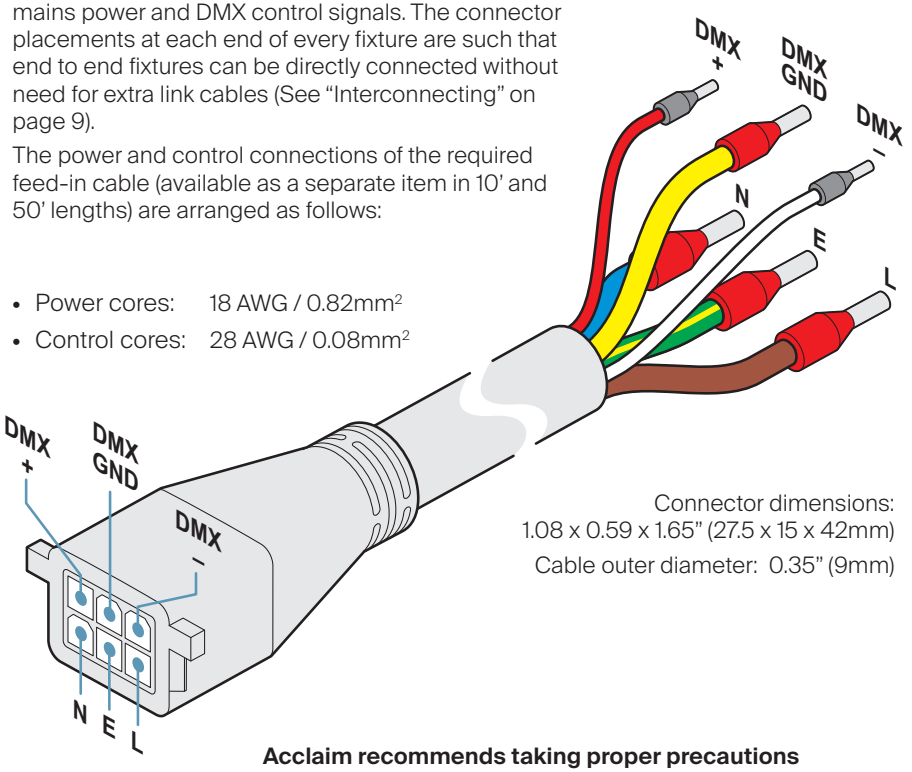
3 Secure the two slots and then carefully rotate the fixture body all the way in the other direction to gain access to the slots on the other side.

Feed in cabling

Adapt Linear DMX fixtures use proprietary 6-way connectors for their inputs and outputs, which combine mains power and DMX control signals. The connector placements at each end of every fixture are such that end to end fixtures can be directly connected without need for extra link cables (See “Interconnecting” on page 9).

The power and control connections of the required feed-in cable (available as a separate item in 10’ and 50’ lengths) are arranged as follows:

- Power cores: 18 AWG / 0.82mm^2
- Control cores: 28 AWG / 0.08mm^2



Connector dimensions:
1.08 x 0.59 x 1.65” (27.5 x 15 x 42mm)

Cable outer diameter: 0.35” (9mm)

Acclaim recommends taking proper precautions for external surge protection, as control and power electronics can be damaged by major events.

IMPORTANT: These connectors are not rated for live connection or disconnection. Check that power is isolated before making or breaking any links. Ensure the connectors have locked and are seated correctly before applying power.

Maximum fixture runs and feed cable lengths

- **EO** and **LO** power settings - do not exceed 140' (42m) of fixtures.
- **SO** power settings - do not exceed 70' (21m) of fixtures.
- **Feed cable** - regardless of power settings, do not exceed 300 feet (91m) from the power source.

Note: Acclaim strongly recommends the following cables for various DMX wiring applications:

- *For indoor or in conduit, above grade* *Belden 9842*
- *For indoor plenum* *Belden 82842*

Tips for achieving successful DMX control

- Do not exceed a total control cable length of 3,900 ft (1200m) without buffering.
- Use only connection cables with a characteristic impedance of 120Ω, preferably where the DMX + and DMX – data lines are twisted around each other and the ground link exists as a coaxial screen surrounding the inner cores.
- Ensure that the final fixture in a run has a terminator end cap fitted.
- Do not introduce a passive Y-split into the control cabling. If it is necessary to split the control link in order feed fixtures located in different directions, use a powered DMX splitter/buffer.
- Ensure that the DMX + and DMX – connections do not become crossed at any point.

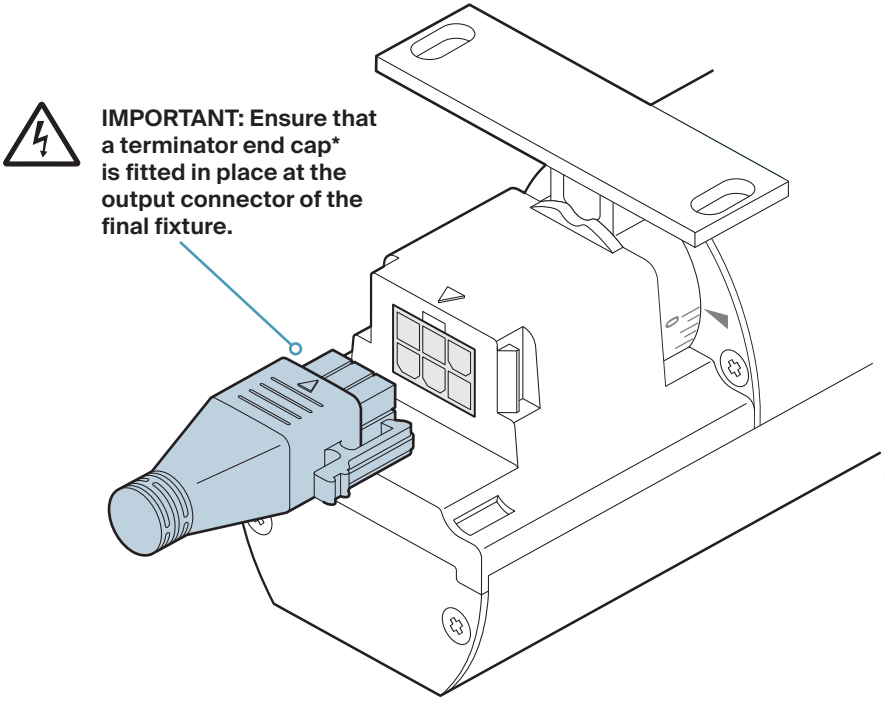
Cabling protection

Ensure that appropriate care is taken to protect the junction where the mains and control inputs are joined to the fixture's feed in cable(s).

Ensure that:

- The mains input is derived from a suitable overload-protected supply.
- Only suitable cable connectors are used within the junction boxes; Acclaim Lighting recommends Wago® 221-series splicing connectors (or similar).
- Local codes are followed during planning and installation. Some municipalities have specific requirements when wiring low and high voltage cables in close proximity. Such requirements could include the use of a barrier within combined junction boxes (if used) or particular minimum spacings between the control and power cables.
- Connections are made, inspected and certified by a qualified electrician.

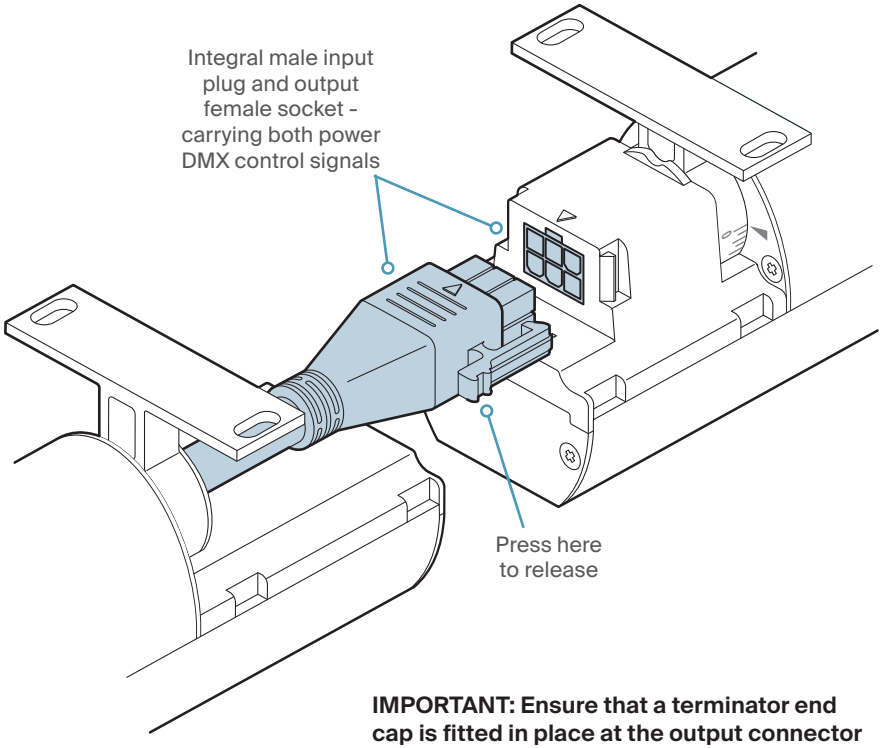
Note: Acclaim offers the AJBOX1 as an IP66 junction box with divided sections for low voltage and high voltage.



** Note: A terminator end cap is supplied with each feed cable.*

Interconnecting

Each Adapt Linear DMX fixture has a male input plug at one end and a female output socket at the other. When fixtures are daisy chained in an end to end configuration, 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.



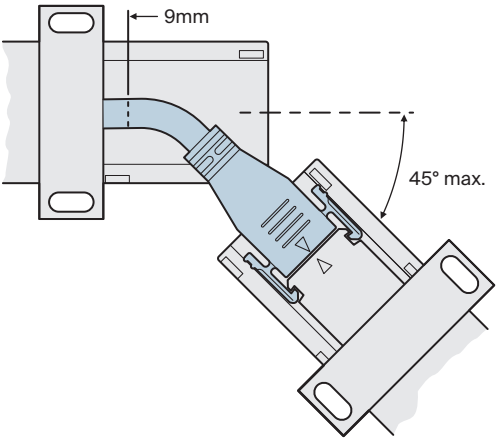
IMPORTANT: Ensure that a terminator end cap is fitted in place at the output connector of the final fixture. See page 8.

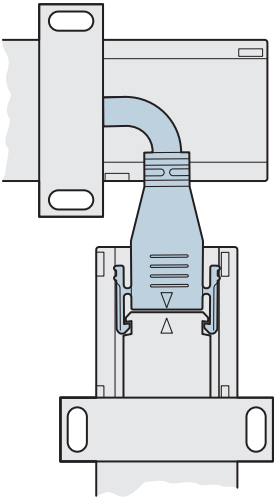
Maximum fixture runs and feed cable lengths

- **EO** and **LO** power settings - do not exceed 140' (42m) of fixtures.
- **SO** power settings - do not exceed 70' (21m) of fixtures.
- **Feed cable** - regardless of power settings, do not exceed 300 feet (91m) from the power source.

Curved runs

The short power/signal input cable at one end of each fixture can extend by 0.35" (9mm) to assist with connection/disconnection and also to permit a small amount of angular alignment (up to 45° max) between neighboring units.





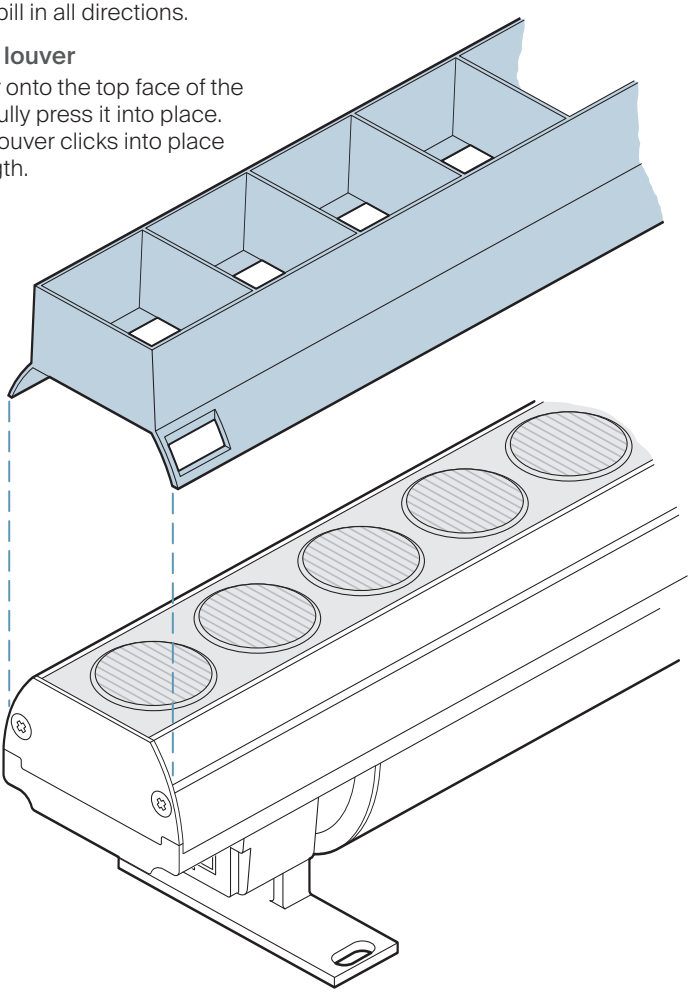
Take care not to stress the cable when connecting in this way. Use optional link cables to achieve greater separation/angles.

Fitting an optional louver

Optional louvers (half or full) are available to eliminate side spill in all directions.

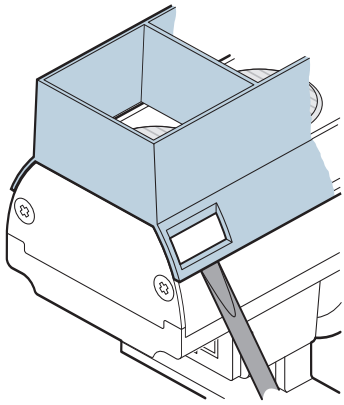
To fit an optional louver

1 Lower the louver onto the top face of the fixture and carefully press it into place. Ensure that the louver clicks into place along its full length.



To remove a louver

1 Working in sequence along one side of the louver, use a small flatblade screwdriver to carefully lift out each of the three small apertures so that they disengage from the fixture. Maintain a little outward pressure on the louver side as you work along in order to prevent it clicking back into place.

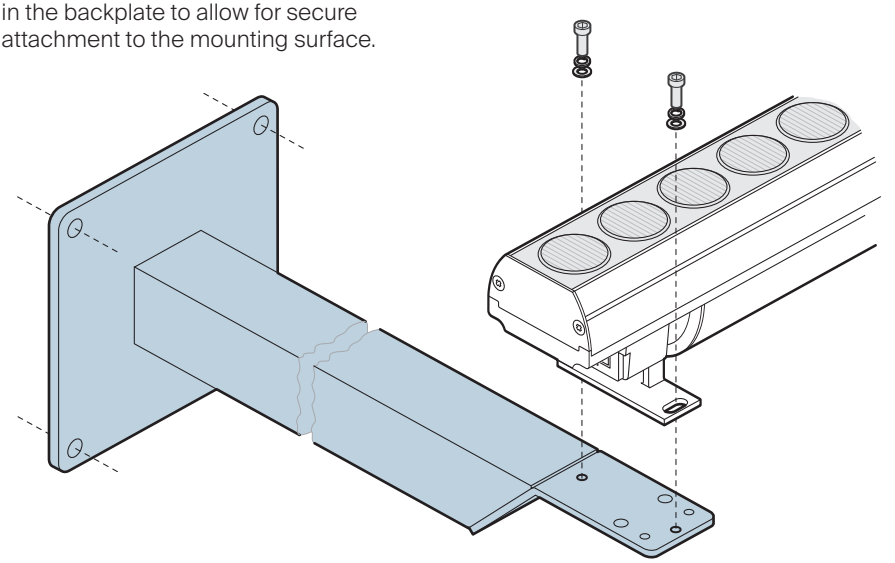


Using optional extender bars

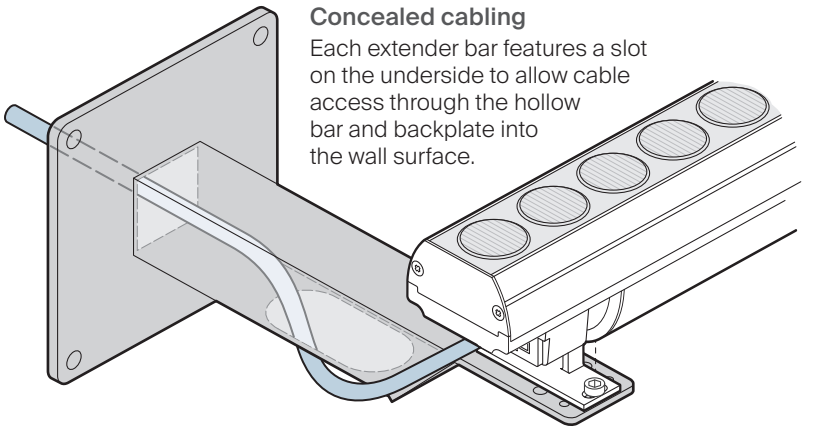
Optional extender bars are available to allow each Adapt Linear DMX fixture to be held a certain distance from a vertical mounting surface. Four extender bar lengths are available (see page 3 for part numbers and page 21 for dimensions). Each Adapt Linear DMX fixture requires two extender bars of equal length.

Each extender bar is manufactured entirely from aluminum to minimize weight and is supplied with two sets of bolts, spring washers and standard washers to secure the fixture swivel mount base (see note below).

There are four Ø0.26" (Ø6.5mm) holes in the backplate to allow for secure attachment to the mounting surface.



Always place the spring washer on each bolt first and then add the standard washer, before inserting into the swivel mount base. This will prevent the steel spring washer from denting the softer aluminum body of the swivel mount base.



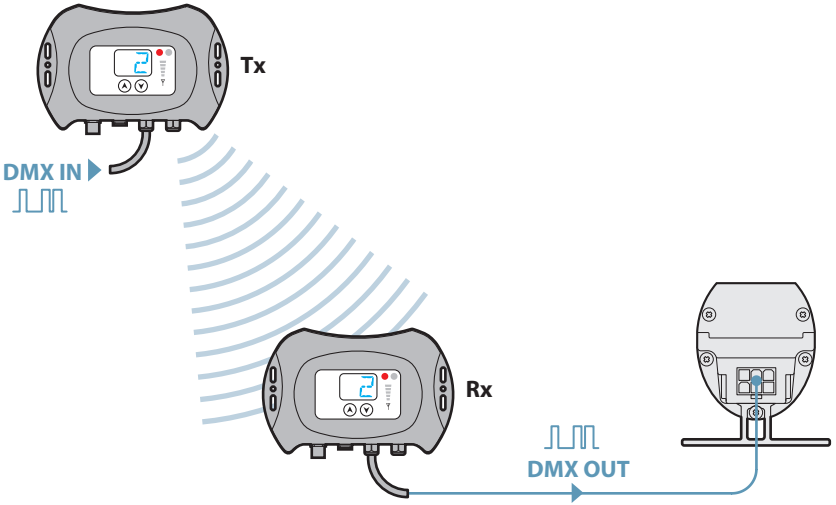
Concealed cabling

Each extender bar features a slot on the underside to allow cable access through the hollow bar and backplate into the wall surface.

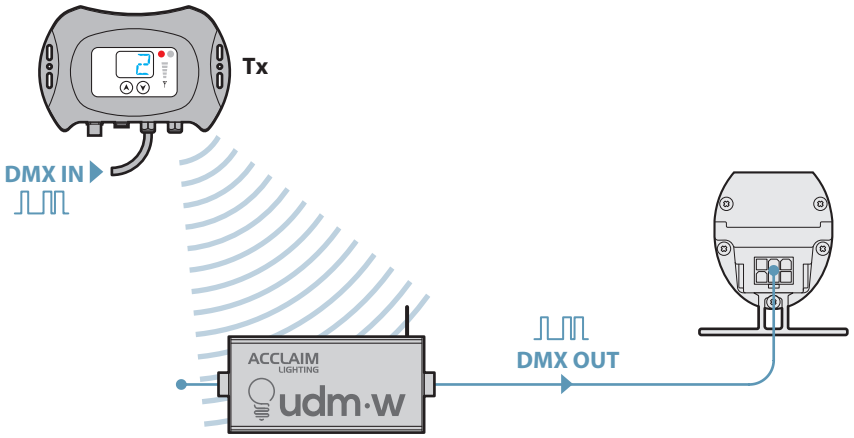
Optional wireless control

Using optional units it is possible to wirelessly transmit and receive a DMX signal over distances up to 2600 feet (792m):

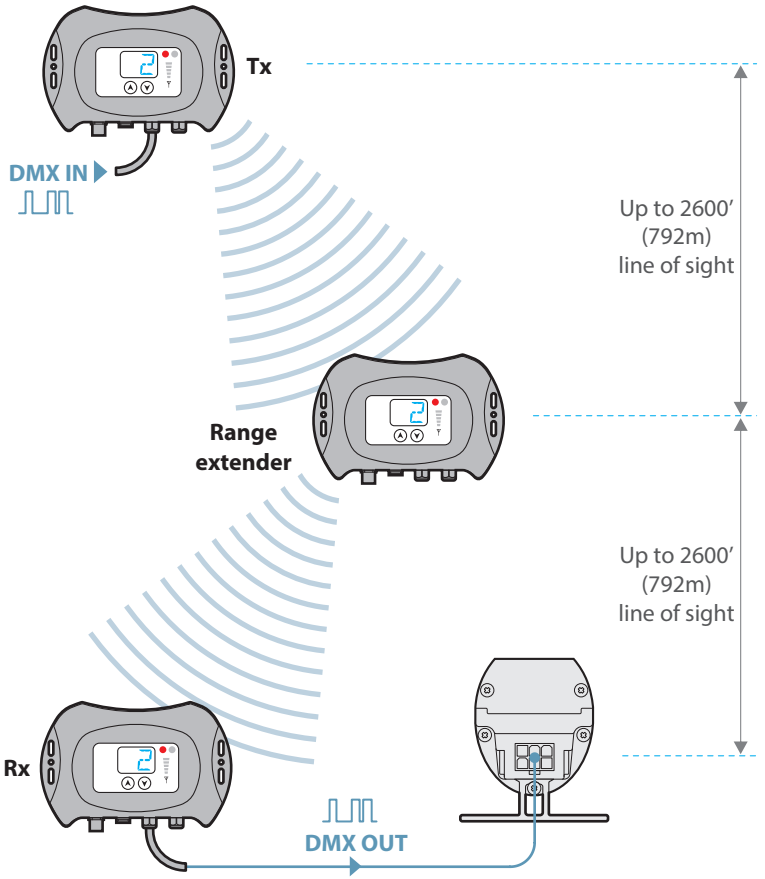
Using two Aria modules



Using a combination of Aria and UDM•W modules



Using two Aria modules plus one or more range extenders



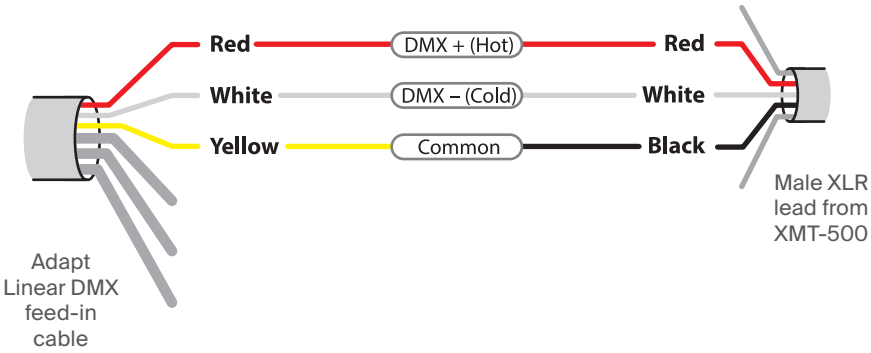
Operation

Adapt Linear DMX fixtures have no external controls and instead rely on RDM (Remote Device Management) for all configuration via the DMX interface. This allows multiple devices to be configured either before or after installation.

Various third party DMX/RDM tools are available; we recommend the XMT-500 for this task.

Making a temporary control link with the XMT-500

Each Acclaim lighting XMT-500 DMX/RDM tool is supplied with a 5-pin male XLR lead that can be used to make a temporary control input link with the Adapt Linear DMX feed-in cable. Use a 3-pin terminal block, wire nuts, conn blocks or Wago® connectors to temporarily join the two cables:



Addressing fixtures

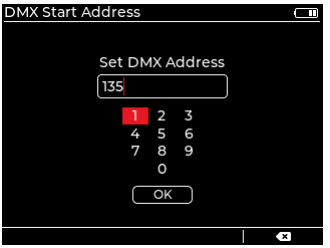
To configure the DMX address using the XMT-500

1 Connect the XMT-500 to the DMX input line of the Adapt Linear installation.

2 On the XMT-500 main menu, highlight the RDM app and press ☑ - the XMT-500 will search for RDM devices and after a short while it will display a list of all located fixtures:

3 Highlight the required fixture and press ☑ to view the fixture details:

4 Press the • **[Start Addr]** softkey to set the address:



- Use the arrow buttons to move the red highlight between digits.
- Press ☑ to enter a digit into the address box.
- Use the • [⌫] softkey to delete a digit.

5 When the address is complete, either long press ☑ or highlight **OK** and press ☑.

6 Press ↩ to return to the RDM app.

DMX channels

The number of DMX channels required per fixture depends on the emitter choice and, for 4ft models, also the chosen cell group mode (see next page):

Emitters	1ft *1 Group*	4ft *1 Group*	4ft *2 Group*	4ft *4 Group*
DW	2 channels	2 channels	4 channels	8 channels
RGBW/A	4 channels	4 channels	8 channels	16 channels

Setting the cell and standalone test modes

The Adapt Linear 4' (1.2m) models offer a choice of modes that determine whether all of the emitters act as a single 4' cell, as two cells or as four separate 1' cells, each with their own set of DMX addresses:

1 GROUP

2 GROUP

4 GROUP

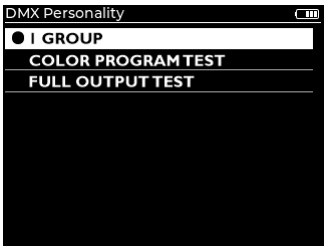
You can also choose from two test modes (both of which drive the emitters at full power): *Color Program Test* produces a slow continual color chase and *Full Output Test* takes all emitters to full.

To set the cell mode using the XMT-500

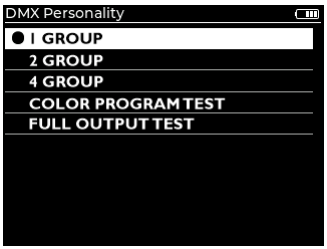
1 Connect the XMT-500 to the DMX input line of the Linear One installation.

2 On the XMT-500 main menu, highlight the RDM app and press ☑ - the XMT-500 will search for RDM devices and after a short while it will display a list of all located fixtures. Highlight the required fixture and press ☑ to view the fixture details:

3 Press the • **[Personality]** softkey to view the options:



◄ 1 foot models
4 foot models ►



4 Highlight the required personality mode.

5 Press ☑ to select your choice and return to the previous page.

6 Press ↩ to return to the RDM app.

Testing emitter output via RDM

After you have addressed each Adapt Linear DMX fixture we recommend that you also test each one prior to installation. This can be achieved with your RDM (Remote Device Management) tool. Various third party DMX/RDM tools are available; we recommend the XMT-500 for this task.

To test emitter output using the XMT-500

1 Connect the XMT-500 to the DMX input line of the Adapt Linear DMX installation.

2 On the XMT-500 main menu, highlight the Send app and press ☑:

3 Use the XMT-500 buttons to determine the values sent out to the fixture(s):

- Choose DMX channel: CH+ CH–
- Change the value: + −
- Use preset values: • [0%] [50%] [100%]
- View the Settings page: ⚙

Note: If you wish to send DMX values to all addresses simultaneously (rather than cycling through them individually), when the XMT-500 is showing address 001, press the left button once to change to ***ALL CHANNELS****. Now when you set the level it will affect all emitters equally.*

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.
- Use an RDM tool to perform an emitter test.
- Check that the DMX address set within the fixture matches that being output by the controlling source device.
- If wired DMX control is being used, check the DMX output near to the source to confirm a valid signal is being originated.
- If wired DMX control is being used, check that the DMX + (hot) and DMX - (cold) lines have not been crossed.
- If optional Aria wireless DMX control is being used, check that the receiver is set to the same wireless address as the transmitter (the wireless address is independent of the DMX address). Try changing the transmitter and receiver(s) to different (but equal) wireless channels to check for clear space in the radio spectrum from interference by other devices, such as WiFi.

Dimming and/or chase changes are pulsing when using Aria

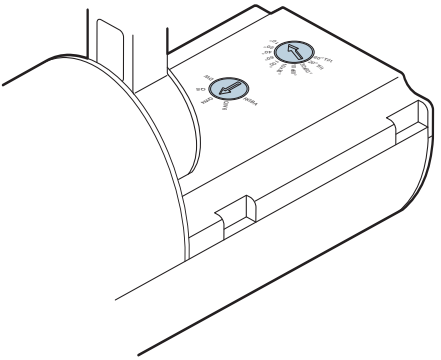
- Check for WiFi sources near to the transmitter or receiver devices. Try changing the transmitter and receiving fixture(s) to different (but equal) wireless addresses to check for clear space in the radio spectrum from interference by other devices.

Specifications

Emitters	QW24 (RGBW, W=2400K), QW27 (RGBW, W=2700K), QS (RGBW, W=3000K), QW35 (RGBW, W=3500K), QW4 (RGBW, W=4000K), QW6 (RGBW, W=6000K), RGBA or Dynamic White
Optics	10° x 10°, 10° x 35°, 10° x 60°, 20° x 20°, 30° x 10°, 30° x 60°, 40° x 40°, 60° x 10°, 60° x 30°, 60° x 60°, 90° x 10°, 100° x 100° or Asymmetric wall wash (60° x 60° + 20° tilt left or right)
Lumen maintenance	L_{70} 130,000 hours (@ 25° C)
Control	0-100% dimming via wired DMX (with RDM configuration)
Maximum fixtures in series	**SO**: 70' (21m), **EO & LO**: 140' (42m) (see page 6)
Housing lengths	1' (305mm) or 4' (1220mm)
Operating voltage	100-277VAC, 50/60Hz
Power consumption	**SO** *(10W per ft)*: 1': 10W 4': 40W, **EO** *(5W per ft)*: 1': 5W 4': 20W, **LO** *(2.5W per ft)*: 1': 2.5W 4': 10W
Connection	Retractable end to end connection for straight or curved runs, optional link cables available
Mounting	Two built-in ratcheted (tool-free) swivel mount brackets
Material	Aluminum body with polycarbonate top lens
Finish	White standard (AMS quick ship). Optional black, gray, or custom (supply RAL #)
Ambient temp. range	-4° F to 113° F (-20° C to 45° C)
Ingress protection	IP40, dry location
Impact protection	IK10, protection against 20 joule impact (40cm distance)
Warranty	5 years, limited
Weight	**1'**: 0.8 lbs (0.36 kg) **4'**: 3.2 lbs (1.45 kg)
Dimensions	**L**x**W**x**H**: 12 or 48" x 1.97" x 2.17" (305 or 1220 x 50 x 55mm)
Certifications	Intertek, FC, CE, UK CA, RoHS COMPLIANT

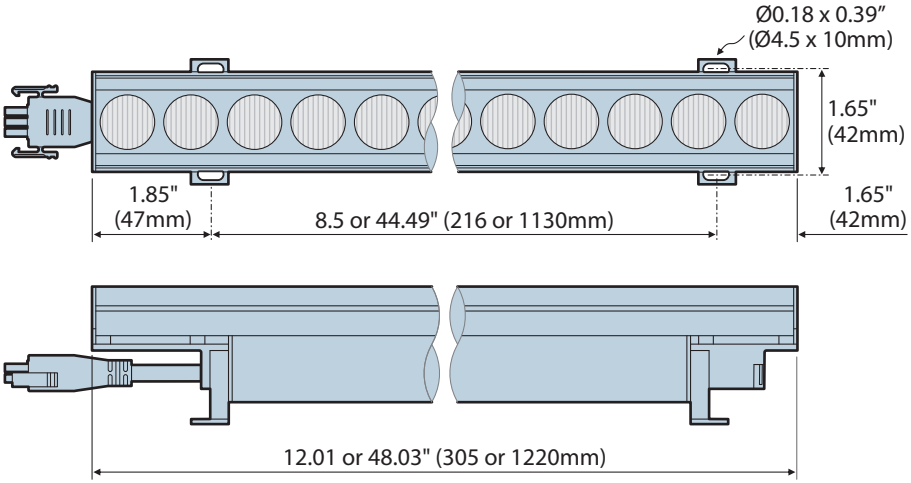
Spec dials

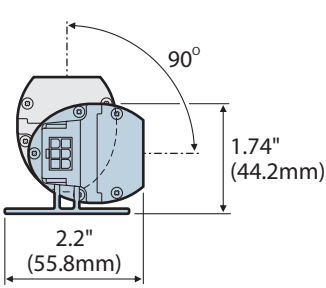
At one end of the fixture are located two dials which indicate the fitted emitters and lens types. These are for information purposes only and have no effect on operation if altered.

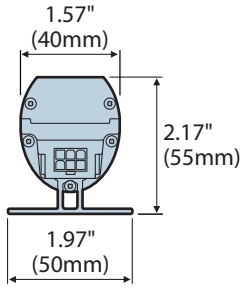


Release 3.0b

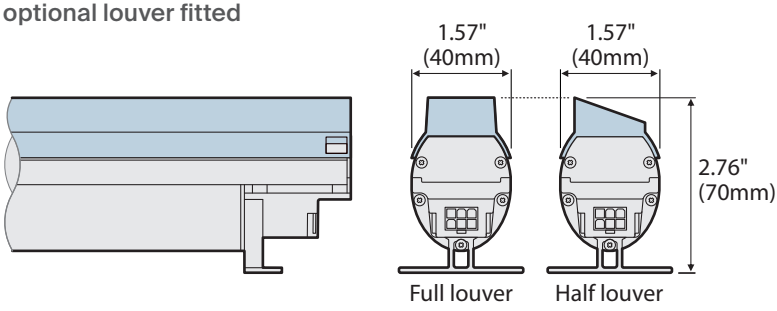
Dimensions



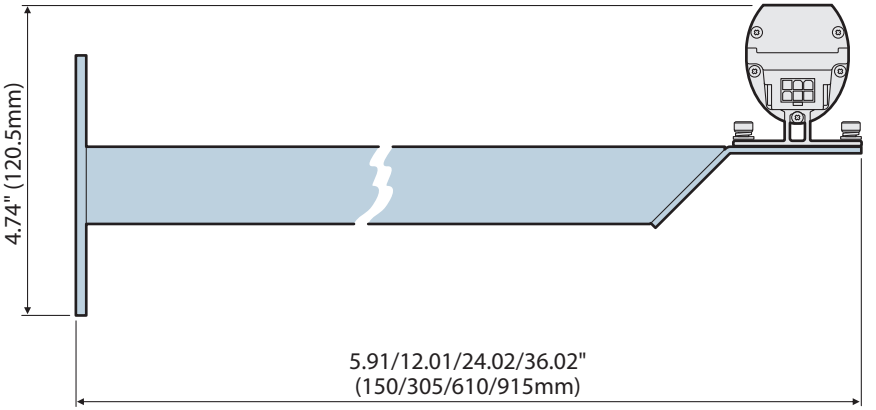


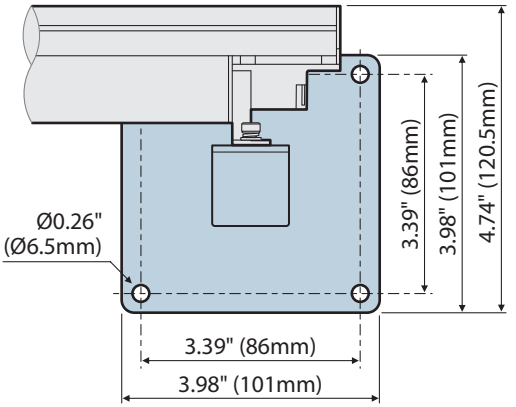


With optional louver fitted



Fitted to optional extender





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 there of. 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