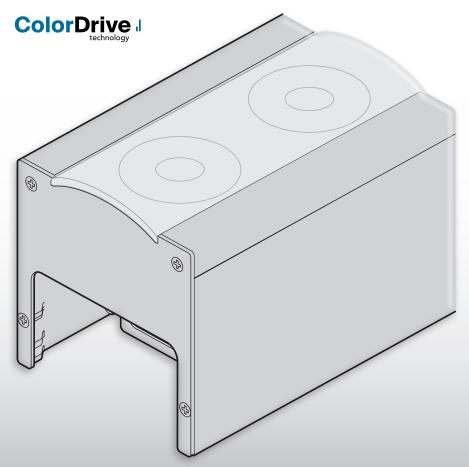


AcclaimModular 🚓





Nova Linear™

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Introduction

Welcome

Nova Linear™ is Acclaim's most powerful linear fixture and has been created to deliver the pure horse power demanded by large installations.

As ever, flexibility is vital and Nova Linear is blessed with a wide array of emitter types, TIR optics and beam modifier options. In addition to fixed white emitters, Nova linear can be ordered with Dynamic White, RGBA or oAur latest RGBL engine with CCT Select to allow any CCT between 1800K and 8000K to be dialled up. The Nova Linear concealed cord configuration allows for seamless runs with no visible cables, helping this power house blend into its surroundings.

The Nova Linear range fully embraces Acclaim Lighting's Modular Systems (AMS) design



standard; AMS allows a wider choice of options to be configured in our Los Angeles headquarters and delivered in industry-leading time.

Control is achieved using the industry standard DMX-512A format, with RDM for remote configuration. The internal auto-sensing power supply within each unit can accept mains inputs between 100 to 277VAC at 50 or 60Hz.

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.



Optional accessories Accessory finishes (# suffix) Aluminum #= A Black (RAL 9005) #= B White (RAL 9003) #= W Custom (provide RAL code) #= C

Glare shield

1' (30cm) [NLGS1#] 4' (121cm) [NLGS4#]

Louvers (plus end panels)

1' (30cm) full [NLFLV1#] 4' (121cm) full [NLFLV4#] 1' (30cm) half [NLHLV1#] 4' (121cm) half [NLHLV4#]

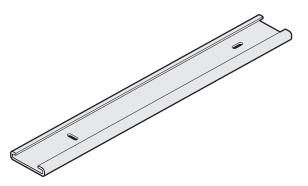
Note: 2x end panels required per fixture



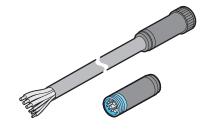
Mounting track

1' (30cm) [NLMT1#] 4' (121cm) [NLMT4#]

Aluminum construction, screws not included. Not required for all installations

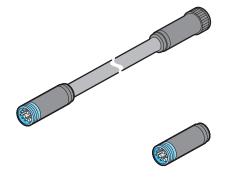


Optional accessories (continued)



Feed cables

(incl terminator end cap) 10' (3m) [TLAFC10] 50' (15m) [TLAFC50]

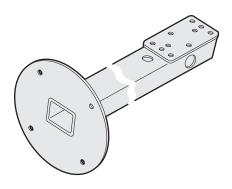


Link cables

1' (30cm) [TLALC1] 5' (1.5m) [TLALC5] 10' (3m) [TLALC10]

Terminator (end cap)

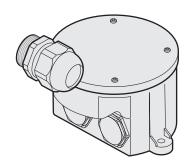
[TLATEC]



Extender bars

6" (15cm) [NLEB05#] 1' (30cm) [NLEB1#] 2' (60cm) [NLEB2#] 3' (91cm) [NLEB3#]

Aluminum construction, 2x M4x15 bolts plus washers supplied per bar



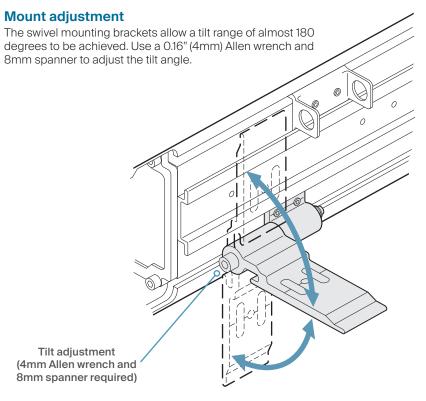
IP66 junction box plus outlet cable gland

See page 15 [AJBOX1]

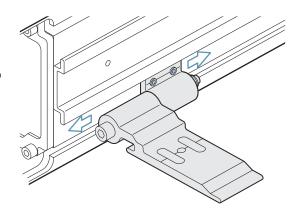
Installation

When installing each Nova Linear 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.

Each Nova Linear fixture is fitted with two swivel mounting brackets, each of which have two slots measuring $0.22^{\circ} \times 0.79^{\circ}$ (5.5 x 20mm), with a base thickness of 0.18" (4.5mm). Select bolts or screws (not supplied) that fit the swivel mounting brackets correctly and are particularly suited to the mounting surface.



If necessary, use a 1/16" (2mm) Allen wrench to loosen the two grub screws on each swivel mounting bracket to allow them to slide along the length of the fixture to the required position before re-tightening.



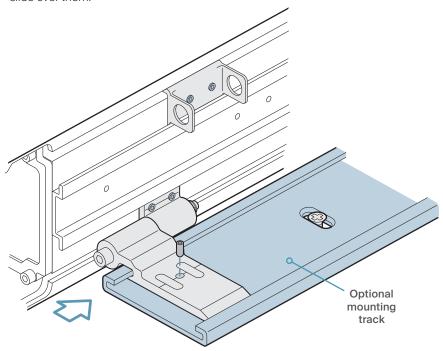
Using an optional mounting track

Mounting tracks are aluminum profiles that provide an additional way to secure Nova Linear fixtures to surfaces. Once attached to the surface, the mounting track allows the Nova Linear swivel mounting brackets to slide into and be fixed to the track.

To use a mounting track

1 Fix the mounting track to your surface using suitable countersunk screws.

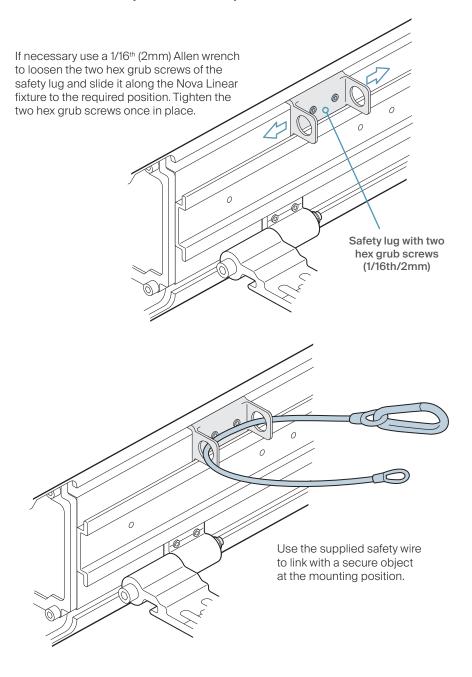
Note: It is important that the countersunk screw heads lie almost flat with the inner surface of the mounting track, otherwise the swivel brackets of the fixture will not slide over them



2 Slide the swivel brackets of the fixture into the mounting track and secure them at the required position using small grub screws (by others).

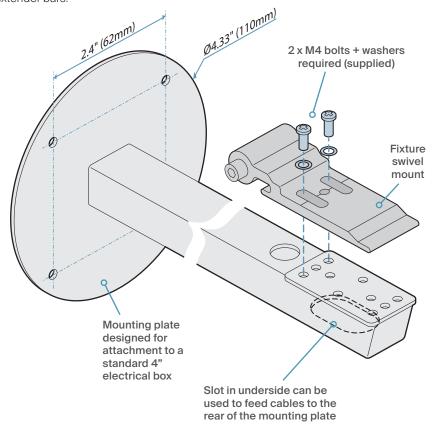
Using the supplied safety wire

Each Nova Linear is fitted with a safety lug and is supplied together with a suitably rated safety wire. When a fixture is mounted above head height the safety wire should be used as a secondary link to a secure object.



Using optional extender bars

A common fixing method is to use optional extender bars. These are available in 6", 1', 2' and 3' (15, 30, 60 and 91cm) standoff lengths. Each Nova Linear fixture requires two extender bars.



Note: When feeding cables through the extender bar, check for any irregularities that may have occurred during the manufacturing process - take care not to snag cables.

Removing and refitting the end panels

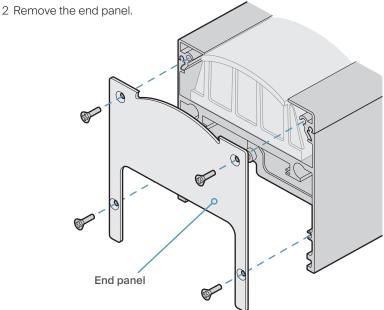
Several alterations to the Nova Linear fixture begin with the removal of the end panels. There are just four screws holding each end panel in place and these require a medium sized Pozi-Drive (Philips) screwdriver.

Please note that removing the end panels in no way affects the integrity of the IP66 rating and there should be no fear of water infiltration in performing this task.

Note: When fitting optional louvers, two replacement end panels are required that have a slightly different profile - these are supplied with each louver set.

To remove the end panels

1 Using a medium sized Pozi-Drive (Philips) screwdriver, remove the four screws and store safely for refitting.



3 Repeat for the other end panel.

To refit the end panels

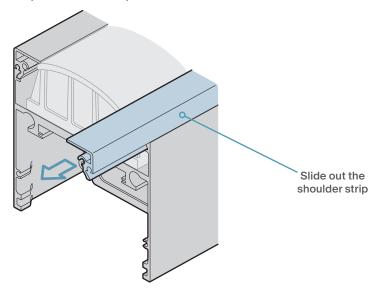
- 1 Position an end panel onto the fixture, ensuring that the countersinks of the four holes are facing outwards.
- 2 Insert the four screws and tighten them using a medium sized Pozi-Drive (Philips) screwdriver.
- 3 Repeat for the other end panel.

Fitting an optional glare shield

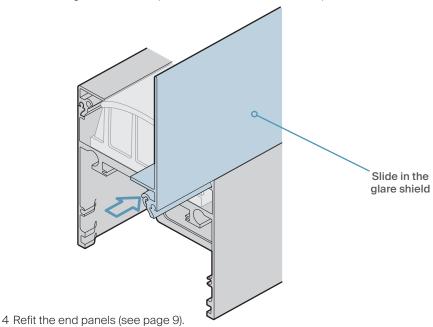
Optional glare shields are available which can be fitted on either side of the emitter housing to help conceal the emitters from side view.

To insert a glare shield

- 1 Remove both of the end panels (see page 9).
- 2 Slide out the required shoulder strip.



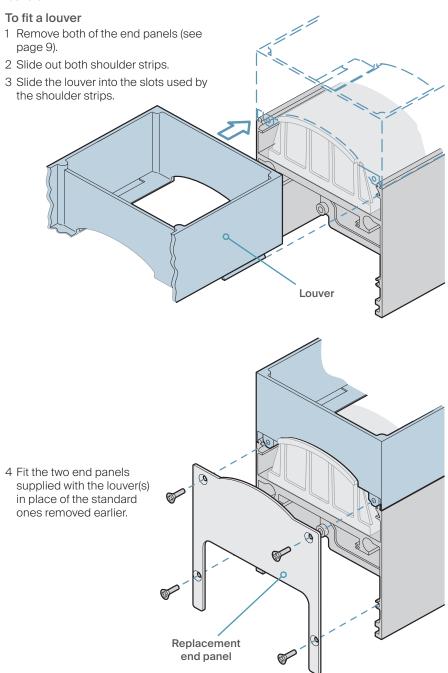
3 Slide in the glare shield to replace the removed shoulder strip.



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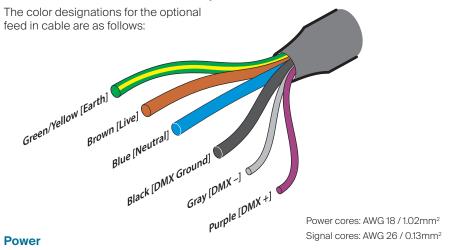
Fitting an optional louver

Optional 1' and 4' louvers (full and half profile) are available, which can be fitted to eliminate side spill in all directions. For 2' and 3' Nova Linear fixtures, use multiple 1' louvers.



Power and control

Power and control are combined within the IP66-rated feed and inter-connect cables. Input and output connectors are proprietary designs, with a male input connector located at one end and female output connector at the other. Connector placements are such that abutted units can be directly connected without need for extra cables.



The power requirements are as follows:

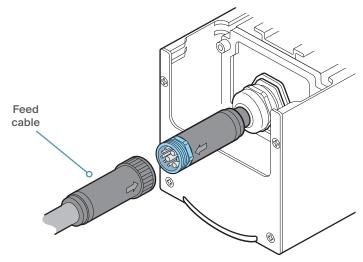
Voltage: 100-277VAC 50/60Hz

Power: 1' models: 50W • 2' models: 100W • 3' models: 150W • 4' models: 200W

Feed cable

Two lengths of feed cable are available (10'/3m - part #: TLAFC10 or 50'/15.2m - part #: TLAFC50). Both are supplied with a terminator, which must be placed on the final Nova Linear fixture in a run - see "Terminating" on page 14.

IMPORTANT: The Nova Linear 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.



In-rush currents

Nova Linear fixtures are specially designed to ramp up their current intake (relatively) slowly in order to prevent in-rush current issues. When first powered on, a Nova Linear DMX fixture should not exceed its standard rating of 50W per linear foot.

Maximum number of Nova Linear fixtures

The total length of Nova Linear DMX fixtures that can be connected in a single series run are as follows:

@ 120VAC 50 feet (15m)@ 230VAC 100 feet (30m)

Note: Do not exceed a total of 32 fixtures on a single line without signal boosting. An Acclaim Lighting RDS-6 RDM/DMX splitter or equal device can be used for this purpose.

General cabling requirements

Ensure that:

- The mains input is derived from a suitable overload-protected supply.
- All cable access points are correctly sealed.
- Local codes are followed during planning and installation. Some municipalities have specific requirements when wiring low and high voltage cables in close proximity. In such cases we recommend using the AJBOX1, see page 15.
- Connections are made, inspected and certified by a qualified electrician.

Control cable selection

We recommend the following Belden signal cables for use in conjunction with Nova Linear feed cable(s):

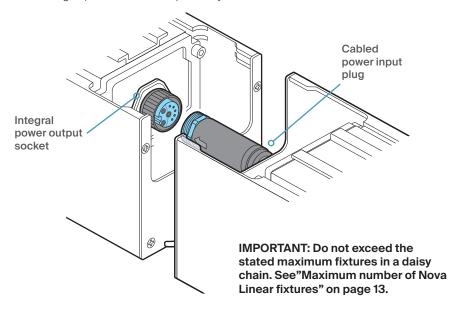
- Indoor exposed or inside conduit above grade:Belden 9842
- Indoor plenum:Belden 82842
- Outdoor exposed, direct burial, or inside conduit below grade: Belden 3107DB Suitable alternative cables must meet all of the following requirements:
- Construction: Shielded, twisted pair (or multi-pair).
- Impedance: Between 90 and 120Ω .
- Capacitance: 15pF or less.

Tips for achieving successful DMX control

- Do not exceed a total cable length of 1,500 ft (457m) without buffering.
- Do not exceed a total of 32 fixtures on a single line 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 - see recommendations above.
- Attach a terminator plug [Part #: TLATEC] to the output connector of the final fixture.
 See "Terminating" on page 14
- 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.

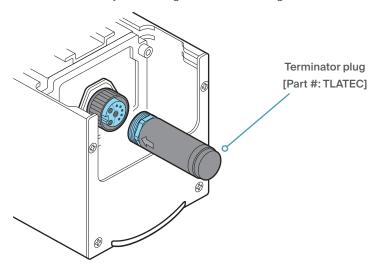
Interconnecting abutted fixtures

Each Nova Linear DMX fixture has a short cabled control/power input connector at one end and an integral control/power output at the other. When fixtures are abutted, the input plug of one fixture can connect directly to the output socket of the previous fixture. Alternatively, where fixtures are not abutted, an optional link cable (available in various lengths) can be used to space any two fixtures.

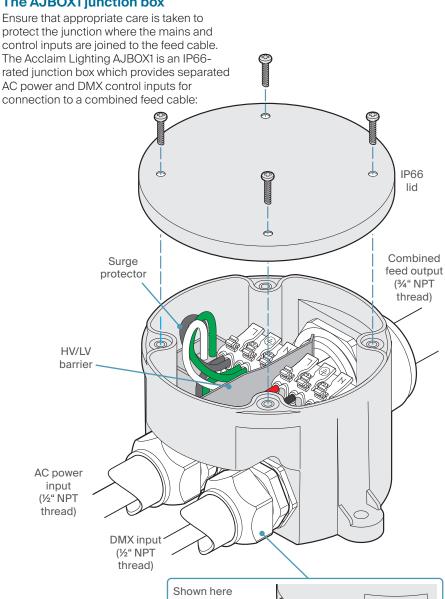


Terminating

Attach a terminator (Part #: *TLATEC - also supplied with each feed cable*) to the output connector of the final fixture. The terminator will cover off the power output connections as well as correctly terminating the DMX control signal.

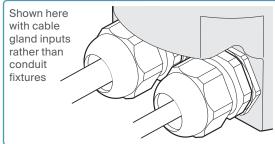


The AJBOX1 junction box



Input fixtures/glands

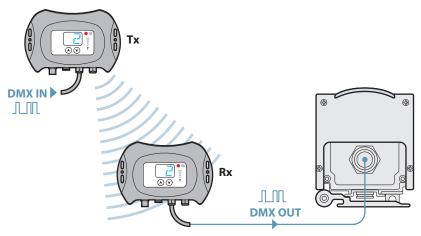
You will need to source 3rdparty conduit fixtures/cable glands for the inputs, as suits your installation. The large cable gland for the output is provided with the AJBOX1.



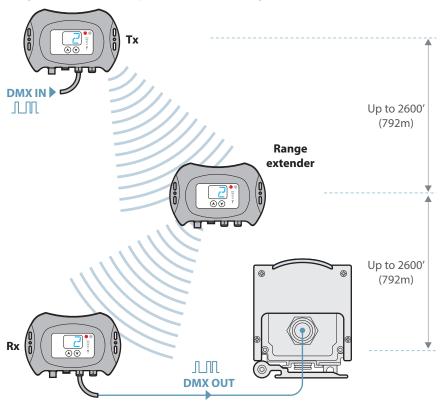
Optional wireless control

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 two Aria modules plus one or more range extenders



Operation

Nova Linear 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 DMXcat-E[™] from City Theatrical[™] for this task.

Addressing fixtures

To configure the DMX address using the DMXcat-E

- 1 Connect the DMXcat-E to the DMX input line of the Nova Linear installation.
- 2 In the DMXcat app on your phone, link to the DMXcat-E unit and then choose the RDM Controller tool:



3 The DMXcat-E will search for RDM devices and after a short while it will display a list of all located fixtures:



4 Tap the icon for the required fixture to view its Device Details:



5 Tap the **DMX Address** entry, enter the new address and tap the



Setting the operation mode

Setting the operation mode involves choosing two aspects at the same time:

- The cell arrangement/color mode STD / EXD / 4CH / 6CH, etc., plus
- The signal loss behavior BlackOut / OutputTest / LastReceived.

The available options will depend on the length of the fixture and the emitters that are installed. See "Aspects of the operation mode" on page 19 for details.

To set the operation mode using the DMXcat-E

Note: If you are setting an **OutputTest** mode, first use your DMXcat-E in DMX controller mode to apply a desired color/intensity mix to the fixture before switching to RDM mode (see "Signal loss behavior" on page 19).

- 1 Connect the DMXcat-E to the DMX input line of the Nova Linear installation.
- 2 In the DMXcat app on your phone, link to the DMXcat-E unit and then choose the RDM Controller tool.
- 3 The DMXcat-E will search for RDM devices and after a short while it will display a list of all located fixtures:



- 4 Tap the icon for the required fixture to view its Device Details:
- 5 Tap the **DMX Personality** entry to view the options:



The displayed options will vary depending on the on the length of the fixture and the emitters that are installed. For each option, the first part determines the cell arrangement or color mode (STD, EXD, 4CH, 6CH, etc) while the second part of the option selects the required signal loss behavior - see "Aspects of the operation mode" on page 19 for details.

6 Tap the required operation mode option to set it.

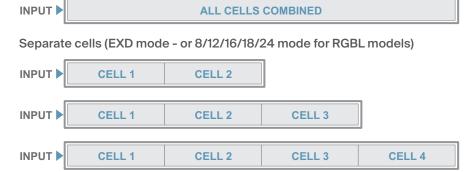


Aspects of the operation mode

Cell arrangements/color mode

The 2ft, 3ft and 4ft models offer a choice of modes that determine whether all of the emitters act as a single combined cell or are separated into individual 1ft cells:

Single cell (STD mode - or 4/6 mode for RGBL models)



Cell 1 is always immediately next to the power/control **input** connector. The cell mode is configured in the same Personality section that deals with signal loss behavior (as discussed on the previous page).

Signal loss behavior

You can choose how the fixture should respond to a loss of the control signal, the options are:

- Black Out if the DMX signal is lost then blackout all emitters until the signal is reestablished.
- Output Test allows you to set a constant color/intensity output that will be shown whenever a DMX signal is not present. Useful when installing isolated fixtures.
- Last Received if the DMX signal is lost then keep displaying the instructions that were last received, until the signal is re-established.

DMX channels

The number of DMX channels required per fixture depends on the installed emitter types and also the chosen operation mode:

		1ft	2ft	3ft	4ft
White	STD	1	1	1	1
	EXD	n/a	2	3	4
Dynamic White	STD	2	2	2	2
	EXD	n/a	4	6	8
Color RGBA (QA)	STD	4	4	4	4
	EXD	n/a	8	12	16
Color RGBL (QL)		4 or 6	4, 6, 8 or 12	4, 6, 12 or 18	4, 6, 16 or 24

Note: For the RGBL-equipped models, the 8, 12, 16, 18 and 24 channel modes are all variants of the 4 and 6 channel modes. The only difference is that each cell of the fixture (on 2ft, 3ft and 4ft lengths) is controlled individually (see also page 21).

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 Aria wireless DMX control is being used, check that the receiver unit is set to the same wireless channel as the transmitter (the wireless channel is independent of the DMX address). Try changing the transmitter and receiving fixture(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.



Color mixing modes [RGBL emitter models only]

Nova Linear fixtures fitted with RGBL emitters provide two main channel modes to determine how received DMX input values are mapped to the various emitter colors. See also "Setting the operation mode" on page 18.

6 Channel mode

Allows you to control the four emitter colors individually or alternatively to choose a particular color temperature of white. An intensity channel is provided.

Mixing colors individually
Use channels 1 to 4 to mix the required shade.

Use channel 6 to determine the overall output intensity.

Note: Channel 5 must be at zero.

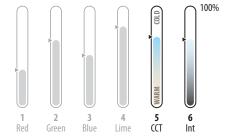
Choosing a temperature of white Use channel 5 to select the required correlated color temperature (CCT) ranging from 1800K (at 1%) to 8000K (at 100%).

See page 22 for a full list of color temperatures and the DMX input values required at channel 5.

Use channel 6 to control the overall output intensity.

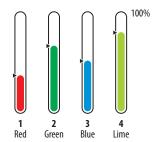
Note: When channel 5 receives any value other than zero, the input values of channels 1 to 4 will be ignored.

1 2 3 4 5 6 Red Green Blue Lime CCT Int



4 Channel mode

Allows you to mix the required shade using the four distinct emitter colors. No intensity channel is used.



2ft, 3ft & 4ft models with RGBL

In addition to the 6 channel and 4 channel modes, the longer length Nova linear fixtures also offer 8, 12, 16, 18 and 24 channel modes. These are all variants of the 6 and 4 channel modes discussed above, except that each cell of the fixture is controlled individually. For instance, a 3ft model offers a 12 channel mode (3 cells of 4 channel control) as well as an 18 channel mode (3 cells of 6 channel control).



Correlated color temperature selection [RGBL emitter models only]

This chart lists the DMX values which must be presented at the fifth channel in order to achieve an output with a particular correlated color temperature (CCT) of white.

'	•	•	,
DMX input value	Color temperature	DMX input value	Color temperature
0	Off	125-128	4900K
001-004	1800K	129-132	5000K
005-008	1900K	133-136	5100K
009-012	2000K	137-140	5200K
013-016	2100K	141-144	5300K
017-020	2200K	145-148	5400K
021-024	2300K	149-152	5500K
025-028	2400K	153-156	5600K
029-032	2500K	157-160	5700K
033-036	2600K	161-164	5800K
037-040	2700K	165-168	5900K
041-044	2800K	169-172	6000K
045-048	2900K	173-176	6100K
049-052	3000K	177-180	6200K
053-056	3100K	181-184	6300K
057-060	3200K	185-188	6400K
061-064	3300K	189-192	6500K
065-068	3400K	193-196	6600K
069-072	3500K	197-200	6700K
073-076	3600K	201-204	6800K
077-080	3700K	205-208	6900K
081-084	3800K	209-212	7000K
085-088	3900K	213-216	7100K
089-092	4000K	217-220	7200K
093-096	4100K	221-224	7300K
097-100	4200K	225-228	7400K
101-104	4300K	229-232	7500K
105-108	4400K	233-236	7600K
109-112	4500K	237-240	7700K
113-116	4600K	241-245	7800K
117-120	4700K	246-250	7900K
121-124	4800K	251-255	8000K

Specifications

Emitters 2100K, 2400K, 2700K, 3000K, 3500K, 4000K,

DW (2100K - 6000K), QL (Quad RGBL with CCT Select),

QA (Quad RGBA)

Optics 10° x 10°, 10° x 25°, 10° x 40°, 10° x 60°, 10° x 90°,

30° x 30°, 30° x 60°, 40° x 10°, 45° x 75°, 60° x 10°,

60° x 30°, 60° x 60°, 90° x 10°, 100° x 100°.

Asymmetric Wall Wash: Left or Right (60° x 60°, 20° tilt)

Lumen maintenance L₇₀ 100,000 hours (@ 25° C)

Control 0-100% dimming via internal DMX driver, with RDM

configuration

Maximum fixtures in series 50' (15m) at 120VAC, 100' (30m) at 230VAC or 277VAC

Housing lengths 1' (305mm), 2' (610mm), 3' (915mm) or 4' (1220mm)

Operating voltage 100-277VAC, 50/60 Hz

Power consumption 1': 50W, 2': 100W, 3': 150W, 4': 200W

Fixture connectors End-to-end linkable cable system with IP67 quick-

release connectors

Mounting 90° swivel mounting brackets included

Material Anodized aluminum body (with marine environment

coating) plus polycarbonate lenses

Finish Finished aluminum or black (RAL 9005) standard,

Custom colors optional (provide RAL #)

Ambient operating temp. -40° F to 131° F (-40° C to 55° C)

Ingress protection IP66, wet location

Impact protection IK10, protection against 20 joule impact (40cm distance)

Vibration protection ANSI C136.31, 3G-rated for high vibration and bridge

applications

Warranty 5 years, limited

Weight 1': 2.64 lbs (1.2kg), 2': 5.29 lbs (2.4kg), 3': 7.93 lbs (3.6kg),

4': 10.58 lbs (4.8kg)

Certifications



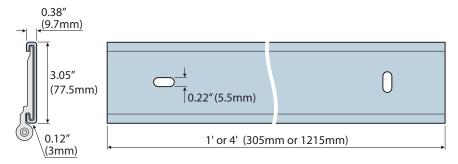






Dimensions

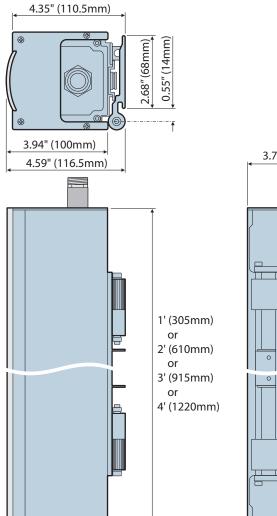
Mounting track

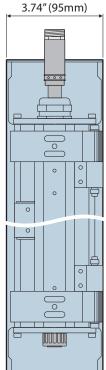




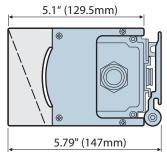
www.acclaimlighting.com

Dimensions

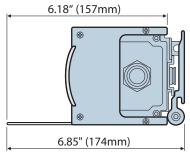




With optional louver fitted



With optional glare shield fitted



Limited product warranty

A. Acclaim LightingTM 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.

