Nova Linear™

Acclaim™

PROJECT	FIRM	ORDER #	TYPE	QTY

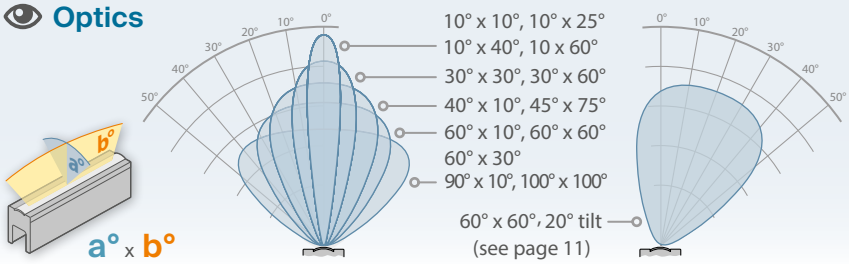
Nova Linear™ is Acclaim's most powerful linear fixture and has been created to deliver the pure horse power demanded by large exterior installations.

As ever, flexibility is vital and Nova Linear features 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 our latest RGBL engine with **CCT Select** to allow any color temperature of white between 1800K and 8000K to be dialled up (see page 12). The Nova Linear concealed cord configuration allows for seamless runs with no visible cables, helping this power house blend into its surroundings.

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.

At a glance

Optics



Emitters

RGBL (with **CCT Select**) or RGBA or **Dynamic White (DW)** (2100K to 6000K) or

2100K **2400K** **2700K** **3000K** **3500K** **4000K**

Power

100 to 277VAC 50/60Hz

Temperature

-40° F to 131° F
-40° C to 55° C

Protection

Ingress: **IP66**
Impact: **IK10**
Vibration: **3G**

Output

Up to **4,238 lumens** per linear foot

Runs

50' (15m) at 120VAC
100' (30m) at 230VAC+

Core technologies

ColorDrive technology
Ai Dim technology
SpectrumFour technology
AcclaimModular systems

Configure your product

NL **-NLL** **-NLO**

Example final code: ***NLAD4-NLLL-NLOK***

Version:
A = Color core kit
(for emitters: L, T or X)
B = White core kit
(for emitters D, E, F or G)

Length:
A = 1' (305mm)
B = 2' (610mm)
C = 3' (915mm)
D = 4' (1220mm)

Finish:
1 = Black (RAL9005)
2 = White* (RAL 9003)
4 = Anodized aluminum
7 = Custom* (Provide RAL #)

Emitters:
B = 2100K
C = 2400K
D = 2700K
E = 3000K
F = 3500K
G = 4000K
L = QL (Quad RGBL, CCT Select)
T = QA (Quad RGBA)
X = DW (2100K-6000K)

Optics:
C = 10° x 10°
N = 10° x 25°
M = 10° x 40°
R = 10° x 60°
W = 10° x 90°
G = 30° x 30°
Q = 30° x 60°
I = 40° x 10°
S = 45° x 75°
J = 60° x 10°
Y = 60° x 30°
K = 60° x 60°
Z = 90° x 10°
L = 100° x 100°
T = Asym. Wall Wash Left (60° x 60°, 20° tilt)
U = Asym. Wall Wash Right (60° x 60°, 20° tilt)

SCAN FOR PRODUCT PAGE

** indicates special order*

Optics T and U: Tilt directions as viewed from the input end of the fixture - see page 11

PROJECT	FIRM	ORDER #	TYPE	QTY

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 - see page 11)
Lumen maintenance	L_{70} 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 - see page 13
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)
Dimensions	See page 7
Certifications	Intertek, FC, CE, 3G LUMINAIRE VIBRATION, UK CA

PROJECT | FIRM | ORDER # | TYPE | QTY

Photometrics

For all available IES files, please visit acclaimlighting.com/nova-linear

Optics	4000K output	4000K lumens	Efficacy (lm/w)	Center Candela
10° x 10° (native)	Full on	**4,238**	85	77,934
10° x 25°	Full on	**4,235**	85	41,612
10° x 40°	Full on	**4,270**	85	24,885
10° x 60°	Full on	**3,543**	79	11,931
10° x 90°	Full on	**4,110**	82	10,200
30° x 30°	Full on	**4,131**	83	10,024
30° x 60°	Full on	**4,041**	81	5,567
40° x 10°	Full on	**4,124**	82	23,298
40° x 75°	Full on	**4,156**	83	4,463
60° x 10°	Full on	**4,028**	81	15,271
60° x 30°	Full on	**4,025**	81	6,677
60° x 60°	Full on	**4,164**	83	3,913
90° x 10°	Full on	**4,102**	82	10,199
100° x 100°	Full on	**4,184**	84	2,208
Asymmetric 60° x 60°, 20° tilt	Full on	**3,537**	71	3,355

To calculate lumen outputs for other emitter types

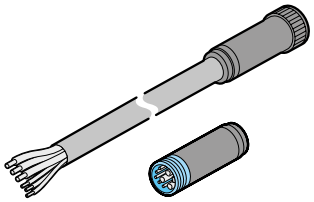
The table above shows the photometric test results for a Nova Linear 1ft fixture fitted with 4000K emitters in combination with each of the various optic options. To calculate the lumen output for any other emitter type, take the **4000K lumens** value for the required optic and multiply it by one of the following:

- 2100K 0.485
- 2400K 0.520
- 2700K 0.596
- 3000K 0.854
- 3500K 0.745
- DW 0.620
- QL 0.508
- QA 0.358

Related components

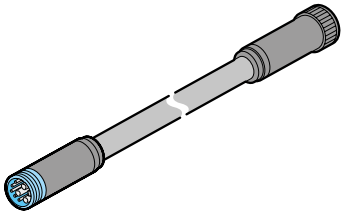
Cables

Feed cables *(including terminator)*



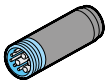
10' (3m) **TLAFC10**
50' (15.2m) **TLAFC50**

Link cables



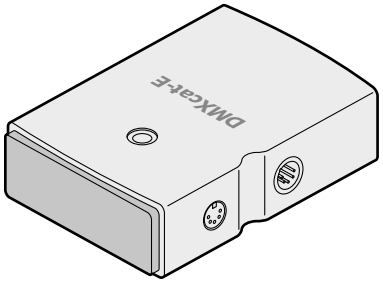
1' (30cm) **TLALC1**
5' (1.5m) **TLALC5**
10' (3m) **TLALC10**

Terminator (end cap)



Terminator **TLATEC**

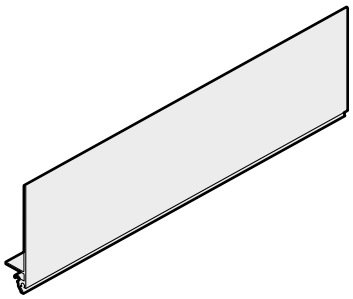
Test and configuration tool kit



DMXcat-E
DMX/RDM, ArtNet, sACN, SMPTE LTC and Midi test/configuration tool

Beam accessories

Glare shields

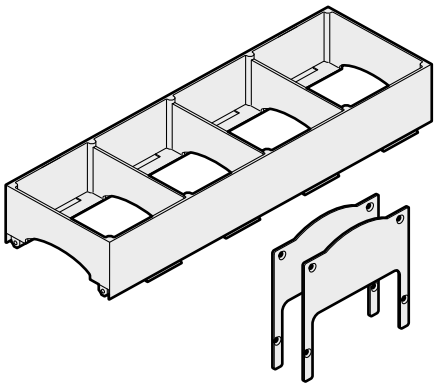


For 2' and 3' Nova Linear models, use multiple 1' glare shields

NLGS1#
1' single-sided glare shield

NLGS4#
4' single-sided glare shield

Louvers *(plus replacement end panels)*



Note: 2x end panels required per fixture

For 2' and 3' Nova Linear models, use multiple 1' louvers

NLFLV1#
1' full louver

NLFLV4#
4' full louver

NLHLV1#
1' half louver

NLHLV4#
4' half louver

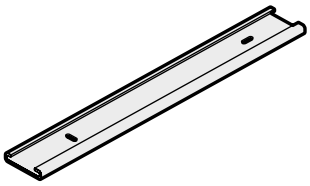
Beam accessory finishes (# suffix)

Aluminum	# = **A**
Black (RAL 9005)	# = **B**
White (RAL 9003)	# = **W**
Custom (provide RAL code)	# = **C**

Related components

Mounting accessories

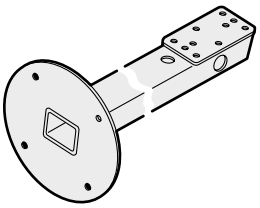
Tracks *(not required for all installations)*



NLMT1#
1' mounting track
Aluminum construction, screws not included

NLMT4#
4' mounting track
Aluminum construction, screws not included

Extender bars



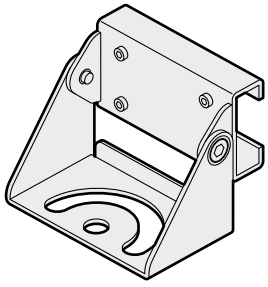
NLEB05#
0.5' extender bar
Aluminum body, 2x M4x15 bolts plus washers supplied per bar

NLEB1#
1' extender bar
Aluminum body, 2x M4x15 bolts plus washers supplied per bar

NLEB2#
2' extender bar
Aluminum body, 2x M4x15 bolts plus washers supplied per bar

NLEB3#
3' extender bar
Aluminum body, 2x M4x15 bolts plus washers supplied per bar

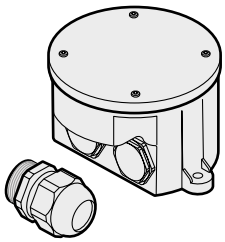
Floodlight mount



NLFLM#

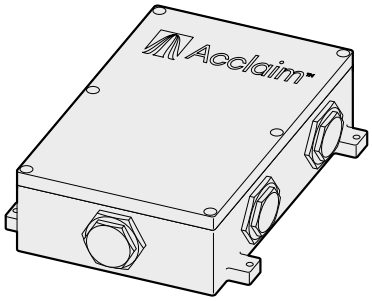
Control accessories

AJBOX1 (IP66) junction box *(plus outlet cable gland)*



AJBOX1
IP66 NEC compliant high and low voltage junction box with two sealed ½" input ports for AC & DMX plus NPT ¾" output port for OLSF# feed cable. Built-in AC surge protection up to 10kV and 10kA

AJBOX1 Extended (IP66) junction box



AJBOX1E# *(# = color)*
IP66 NEC-compliant high and low voltage junction box with six sealed NPT ¾" access ports for conduit fixtures or cable glands (by others) for power and control plus OLSF# feed cable. Built-in AC surge protection up to 10kV and 10kA

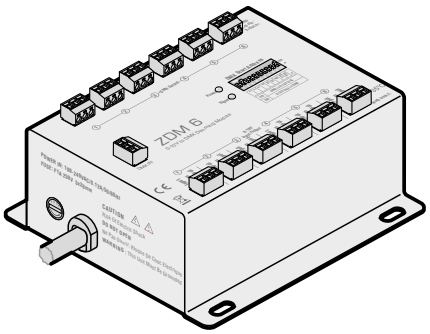
Mounting accessory finishes (# suffix)

Aluminum	# = **A**
Black (RAL 9005)	# = **B**
White (RAL 9003)	# = **W**
Custom (provide RAL code)	# = **C**

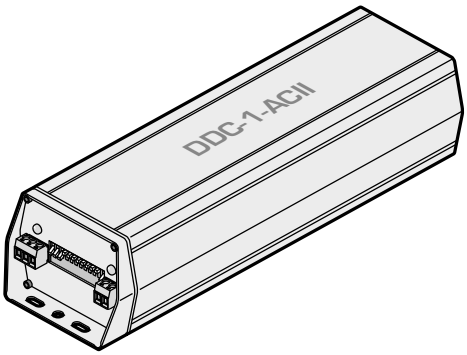
PROJECT	FIRM	ORDER #	TYPE	QTY

Related components

Signal converters (see page 11)



Multi-channel (0-10V) converter **ZDM6**



DALI multiple channel converter **DDC 1 AC**

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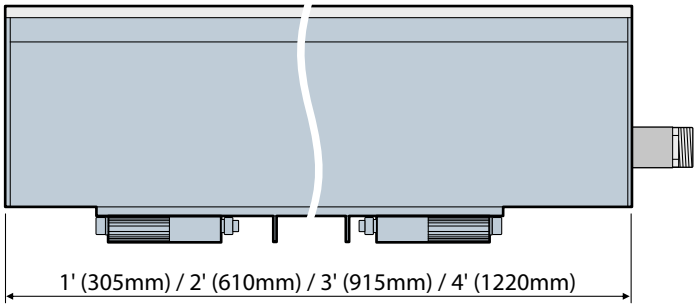
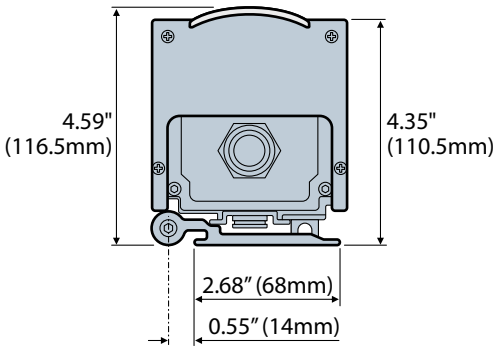
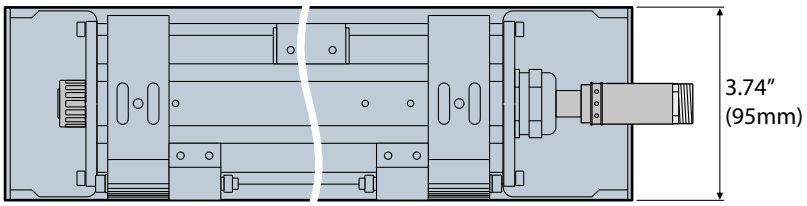
PROJECT	FIRM	ORDER #	TYPE	QTY

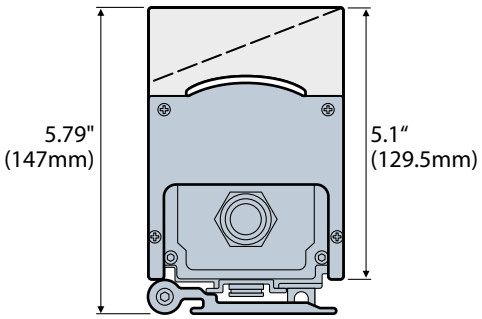
Dimensions



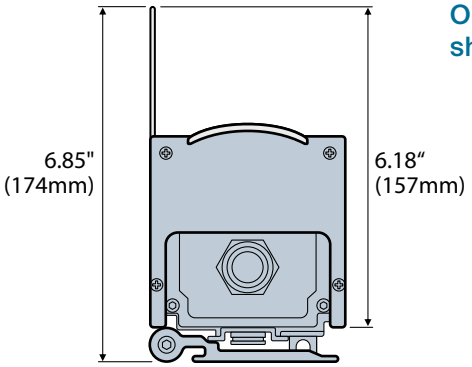




Optional louver fitted



Optional glare shield fitted



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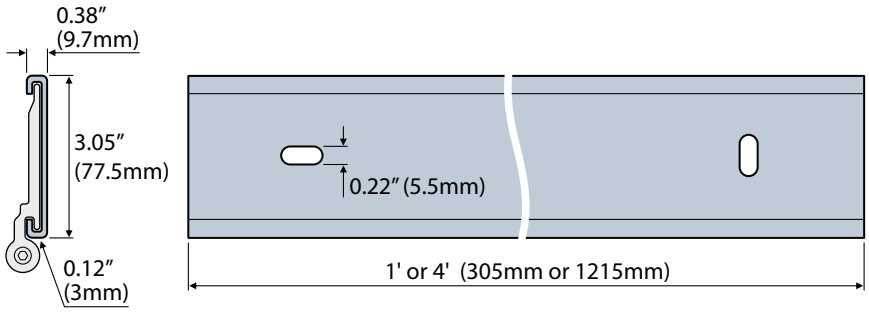
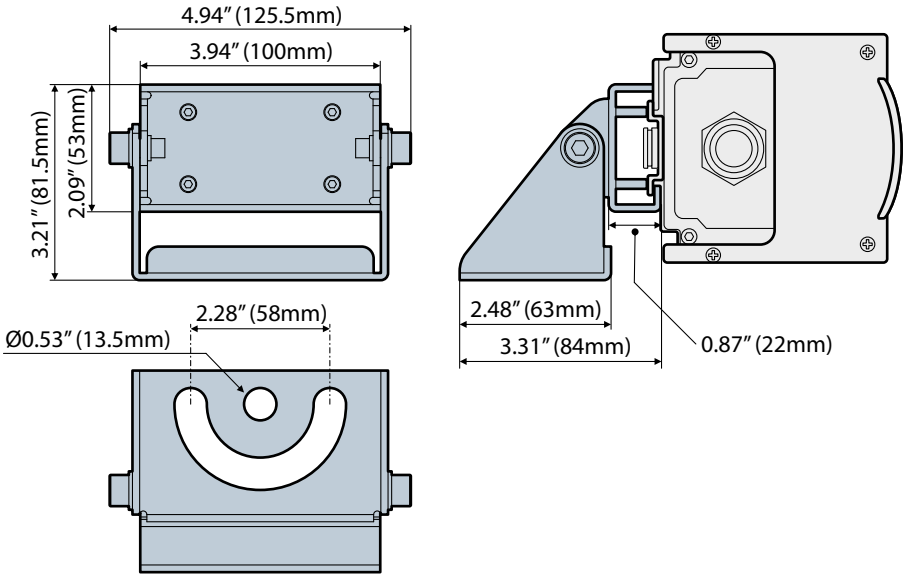
Dimensions

Optional mounting track



Optional floodlight mount (for 1' models)



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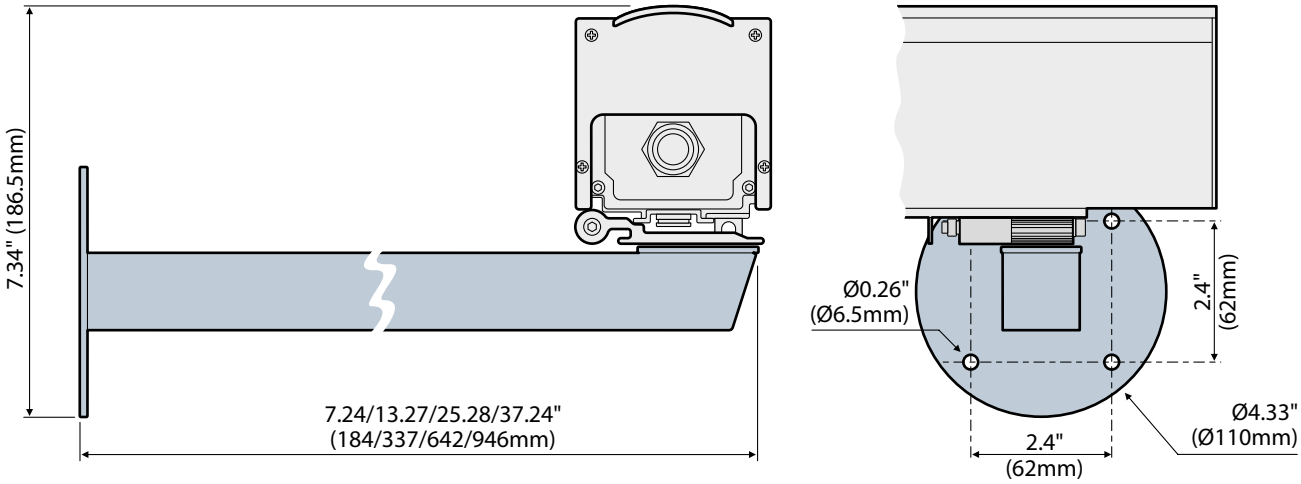
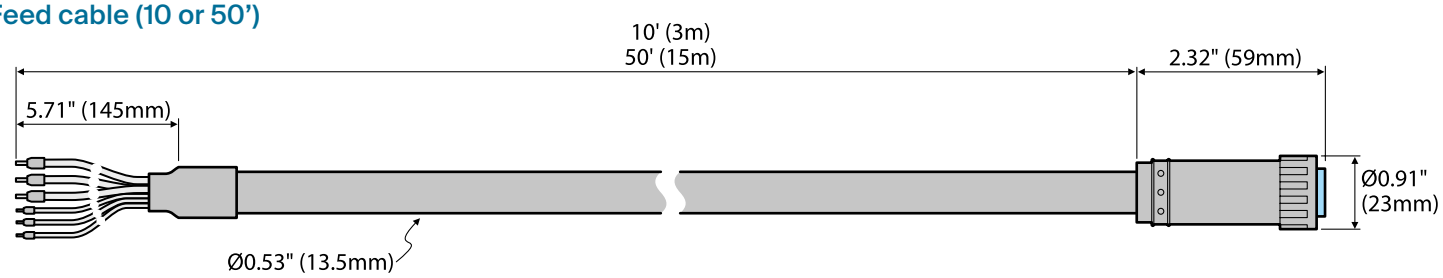
Dimensions

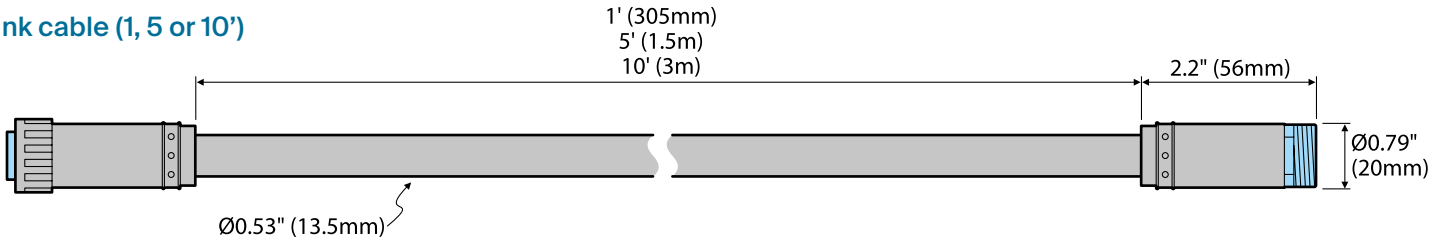
Optional extender bars



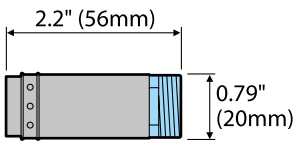
Feed cable (10 or 50')



Link cable (1, 5 or 10')



Terminator (end cap)



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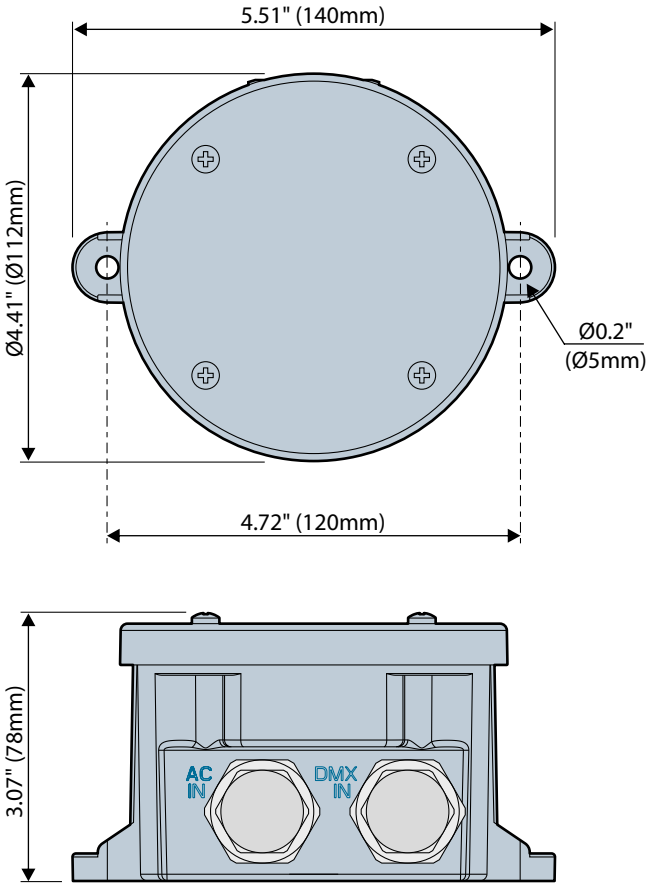
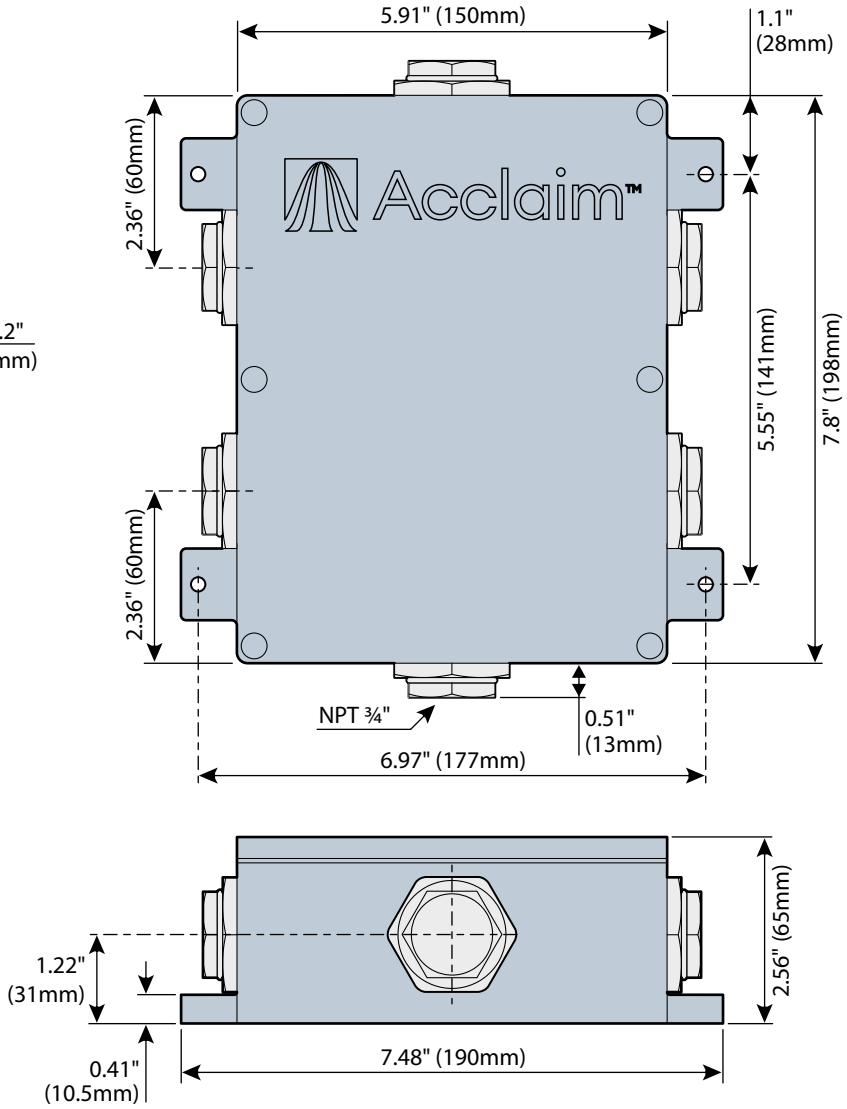
PROJECT | FIRM | ORDER # | TYPE | QTY

Dimensions

AJBOX1



AJBOX1 Extended



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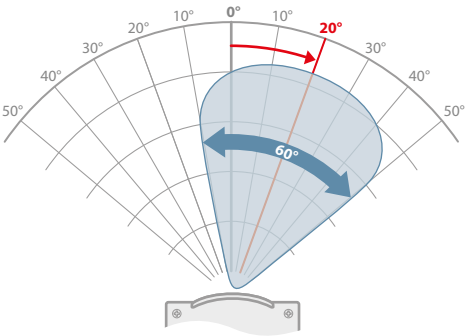
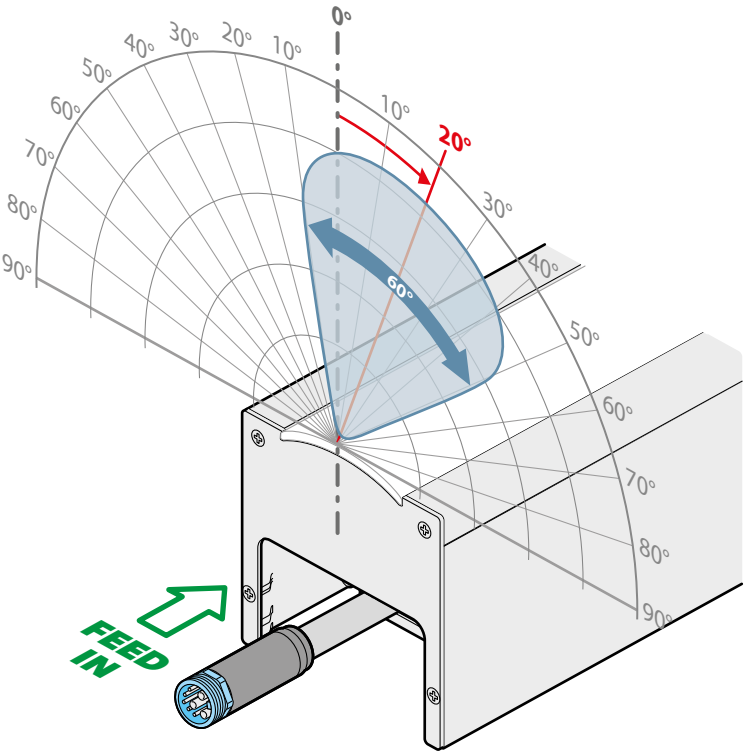
Asymmetric wall wash lens options

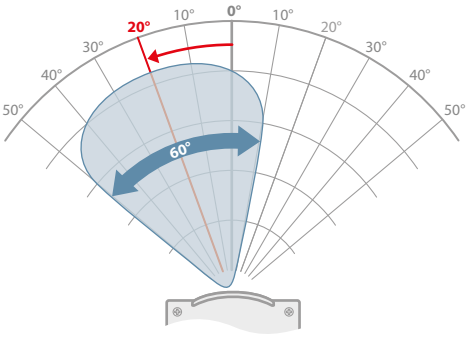
Two special lens options are available, both of which provide a 20 degree side-bias to the direction of the emitted output. Both lens options produce a 60 x 60 degree main beam angle; the difference is whether those beams are biased to the left or to the right of the fixture, in relation to the feed in connection.

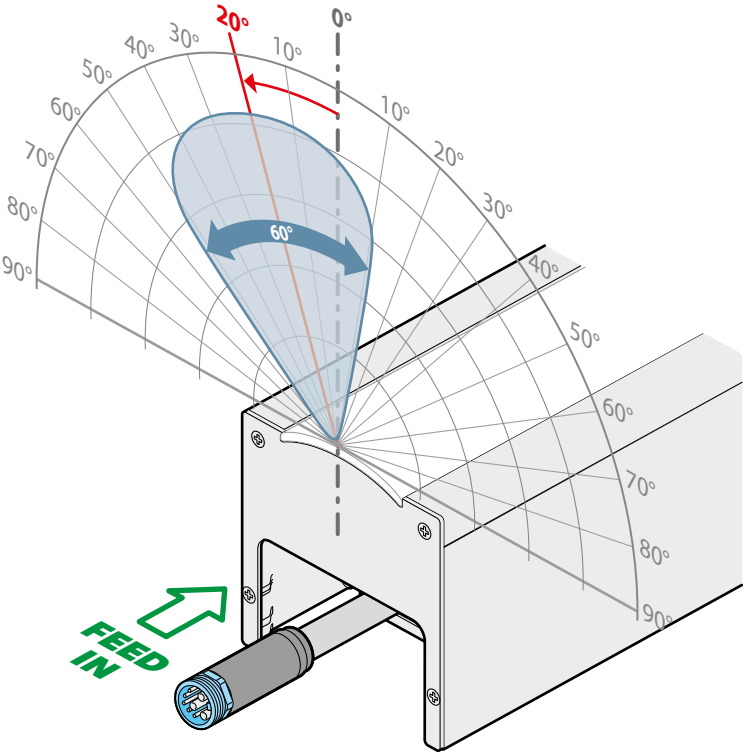
Asymmetric Wall Wash Right (60° x 60° with 20° tilt)





Asymmetric Wall Wash Left (60° x 60° with 20° tilt)





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CCT Select color mixing

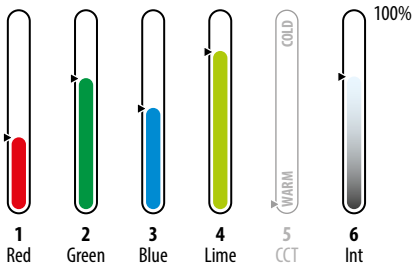
Nova Linear fixtures fitted with RGBL (QL) emitters allow you to mix saturated and pastel colors in addition to calling up any color temperature of white (using a dedicated DMX control channel). The special mode uses six channels to provide full control over the RGBL emitters.

Mixing saturated and pastel colors individually

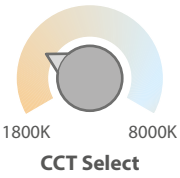
Use DMX channels 1 to 4 to mix the required shade.

Use channel 6 to determine the overall output intensity.

*Note: **Channel 5** must be at **zero**.*



Choosing a temperature of white

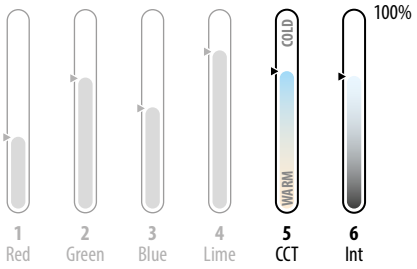


Use DMX channel 5 to select the required correlated color temperature (CCT) ranging from 1800K (at 1%) to 8000K (at 100%).

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.

Note: A full list of DMX values for each color temperature are provided in the Nova Linear user guide.

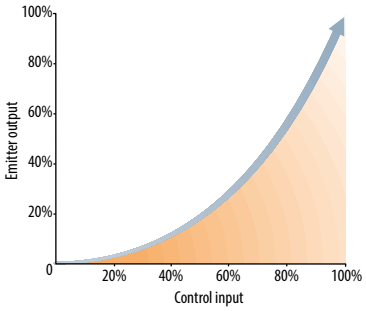


DMX value	Color temp
0	Off
001-004	1800K
005-008	1900K
009-012	2000K
013-016	2100K
017-020	2200K
-	-
-	-
233-236	7600K
237-240	7700K
241-245	7800K
246-250	7900K
251-255	8000K

Single channel tungsten emulation

(Ai Dim to Warm)

In addition to the multi-channel control modes mentioned above, Nova Linear fixtures fitted with RGBL (QL) emitters also offer a simple one channel option. As the single channel is raised from zero to 100% and back to zero, the fixture responds with combined graduations of both intensity and color temperature to skilfully emulate the dimming response of a typical high-output tungsten source.



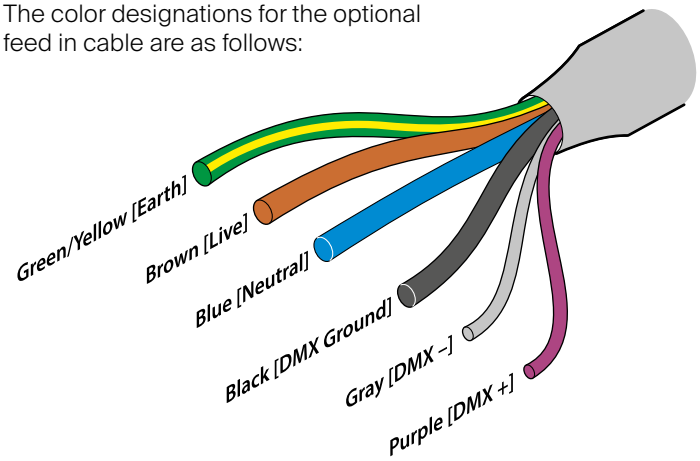
Ai Dim technology

PROJECT | FIRM | ORDER # | TYPE | QTY

Power and control wiring

Power and control are combined within IP66-rated cables. Input and output connectors are proprietary multi-pin designs; with a male input connector located at one end of the fixture and a female output connector at the other. Connector placements are such that abutted units can be directly connected without need for additional cables.

The color designations for the optional feed in cable are as follows:



Power cores: AWG 18 / 1.02mm²

Signal cores: AWG 26 / 0.13mm²

Power

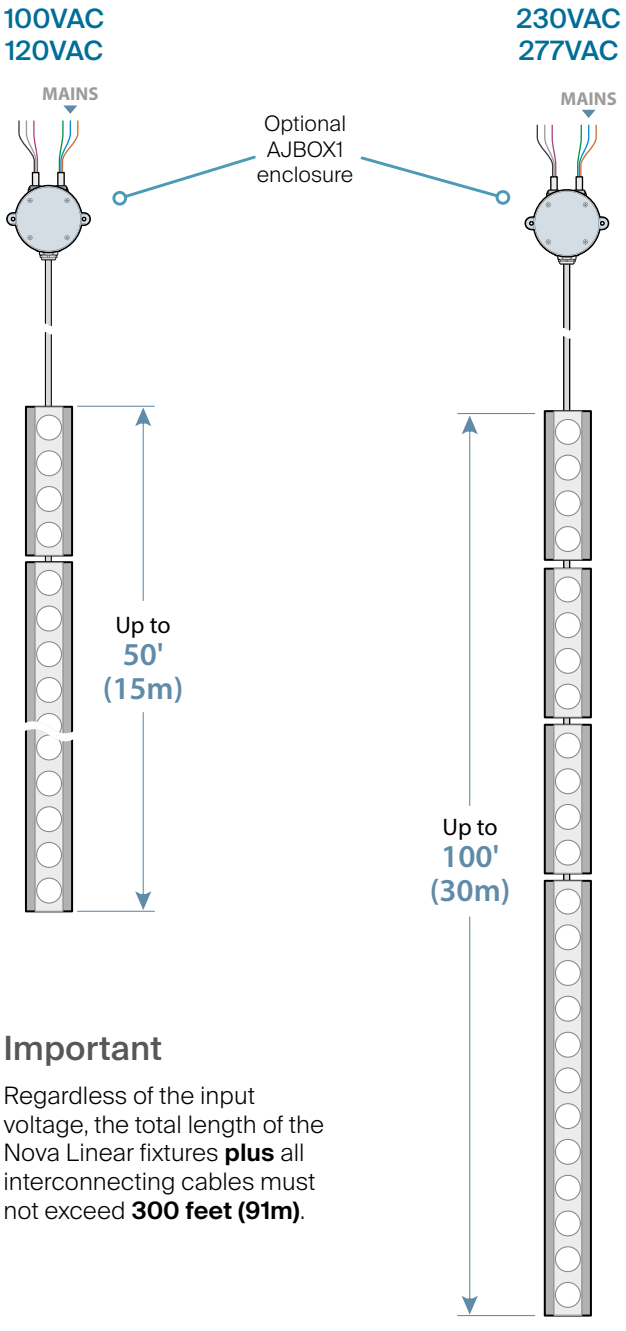
The fixture power requirements are as follows:

- Voltage: 100-277VAC 50/60Hz
- Power: 1' models: 50W
  2' models: 100W
  3' models: 150W
  4' models: 200W

Note: Acclaim recommends taking proper precautions for external surge protection, as control and power electronics can be damaged by major events. Ensure that the mains power is supplied from a suitably protected source and initial connections are made within IP rated enclosures. Acclaim recommends Belden 9842 or approved equivalent for all DMX wiring applications.

Run lengths

All Nova Linear fixtures are rated at 50W per linear foot. Maximum run lengths are determined by the supply voltage:



Important

Regardless of the input voltage, the total length of the Nova Linear fixtures **plus** all interconnecting cables must not exceed **300 feet (91m)**.

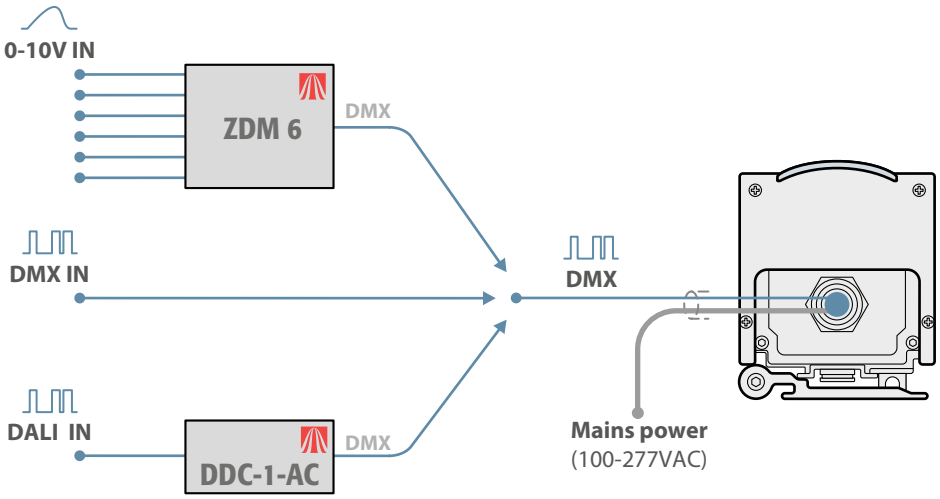
SCAN FOR PRODUCT PAGE

Alternative control inputs

Nova Linear fixtures use DMX as their native control method, however, it is possible to use other common control protocols when required, such as 0-10V (source or sink) or DALI.

Control inputs via converters

- DMX - connect a DMX input directly to the feed cable.
- 0-10V - use an Acclaim Lighting ZDM 6 to convert one or more analog control feeds into a combined DMX feed.
- DALI - use an Acclaim Lighting DDC-1-AC to convert one or more DALI channels into a combined DMX feed.



When using Acclaim Lighting ZDM 6 or DDC-1-AC modules it is possible to convert multiple inputs into separate DMX channels within a consolidated feed - thus allowing multiple Nova Linear fixtures to be uniquely addressed. The ZDM 6 can convert up to six 0-10V inputs into DMX channels, whereas the DDC-1-AC can convert a maximum of 64 DALI channels (although large numbers of channels are not recommended due to the timing limitations of the DALI standard).

Important cabling considerations

- Wherever possible, cable runs should be positioned to make them beyond normal reach within any installation.
- Additional power cabling: Where power feeds require extra cabling, the power cores should be 14 AWG minimum.
- Additional DMX control cabling: For initial control runs, these are recommended:
  - Indoor exposed or inside conduit above grade: ..... Belden 9842
  - Indoor plenum: ..... Belden 82842
  - Outdoor exposed, direct burial, or inside conduit below grade:..... Belden 3107DB
  - Alternatives must meet **all** of the following requirements:
    - **Construction** Shielded, twisted pair (or multi-pair).
    - **Impedance** Between 90 and 120Ω.
    - **Capacitance** 15pF or less.
- Please consult and adhere to all relevant local codes.
- The next page provides details about maximum run lengths for Nova Linear installations. It should be noted that those limits are imposed only by the power characteristics. The length of the DMX control feed to the first fixture must not exceed 1,500' (457m) without buffering.

For full installation details, please refer to the **user guide**, available for free download here: