

ALPHATECH® X 130/250/400 Linear LED Lighting

Full diffusion, precision light quality, and physical durability for reliably beautiful lighting. Suitable for every application, including indoor and outdoor, submerged in water, and in extreme weather conditions. Made in the USA with foreign parts.

Date _____

Project Notes _____



FEATURES

- Objectively superior CRI, Gamut, and Fidelity
- Seamless end-to-end mounting for limitless linear runs
- Top-bending and side-bending options with multiple output levels
- Stabilized for UV for outdoor use
- IP69 for submersible applications
- UL676 listed for pools, spas, and fountains
- NSF component approved



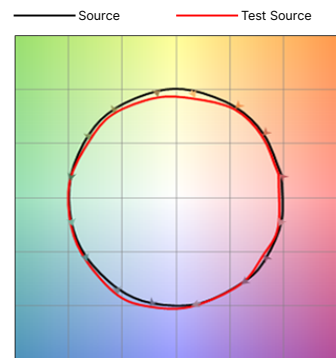
ORDERING CODES

Fixtures built to order

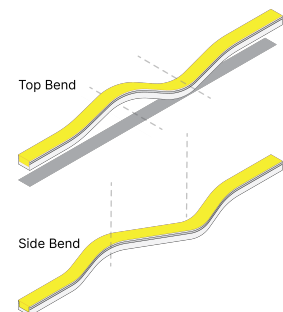
Diode LED	Voltage	Bend Style/Model	CCT		Length	Mounting	
DI	24V	TE-ATX-130 (Top Bend)	24 (2400K)	35 (3500K)	Length (in.) (2 - 192 in.)	RTCL (Rotating Clip)	WMS (Wire Management System)
		SE-ATX-250 (Side Bend)	27 (2700K)	40 (4000K)		90CL (90° Clip)	MTCH (Mounting Channel)
		TE-ATX-400 (Top Bend)	30 (3000K)			SPCH (Spine Channel)	MTCL (Mounting Clip)

	24V-TE-ATX-130	24V-SE-ATX-250	24V-TE-ATX-400
Voltage	24V	24V	24V
Wattage	1.8W/ft.	5.6W/ft.	4.6W/ft.
2400K	141/ft.	261/ft.	380/ft.
2700K	141/ft.	266/ft.	409/ft.
Lumens 3000K	123/ft.	314/ft.	393/ft.
3500K	133/ft.	320/ft.	410/ft.
4000K	127/ft.	271/ft.	422/ft.
Max Length (With Seamless Interconnection, On One Circuit)	55 feet	20 feet	30 feet
Max Length (Single Piece)	26.25 feet, Straight Wire Only	16 feet	20 feet, Straight Wire Only
Dimmable	Dim to Dark - see driver options	Dim to Dark - see driver options	Dim to Dark - see driver options
Field Cuttable	No	No	No
Bend Radius	6 in.	6 in.	6 in.
Environment	Outdoor / Wet Location (IP69), Sauna	Outdoor / Wet Location (IP69), Sauna	Outdoor / Wet Location (IP69), Sauna
Ambient Temperature	-4 - 122°F (-20 ~ 50°C)	-4 - 122°F (-20 ~ 50°C)	-4 - 122°F (-20 ~ 50°C)
Ambient Temperature (Sauna)	180°F Max, <30% Humidity	180°F Max, <30% Humidity	180°F Max, <30% Humidity
Ambient Temperature (Deep Cold)	-40°F Min, Luminaire is required to be energized when temperature falls below -4°F	-40°F Min, Luminaire is required to be energized when temperature falls below -4°F	-40°F Min, Luminaire is required to be energized when temperature falls below -4°F
Certification	UL 2108, UL 676 (with Mounting Channel), NSF	UL 2108, UL 676 (with Mounting Channel), NSF	UL 2108, UL 676 (with Mounting Channel), NSF
Warranty	5 Years, 2 Years Sauna, 2 Years Deep Cold	5 Years, 2 Years Sauna, 2 Years Deep Cold	5 Years, 2 Years Sauna, 2 Years Deep Cold

COLOR VECTOR GRAPHIC



BEND OPTIONS



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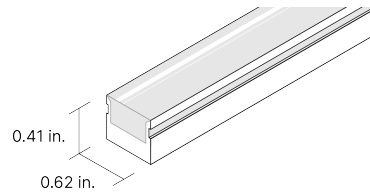
Project Notes _____



MECHANICAL DIAGRAMS

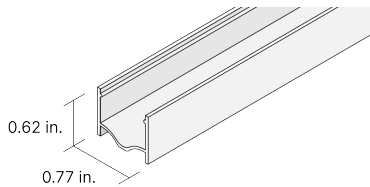
ALPHATECH® X

Without mounting accessories



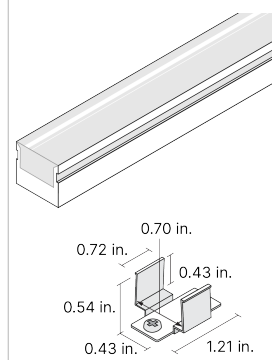
MOUNTING CHANNEL - UL676 (MTCH)

Straight and rigid lines of light



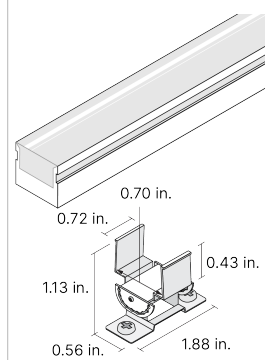
FLAT CLIP (MTCL)

Single mounting point



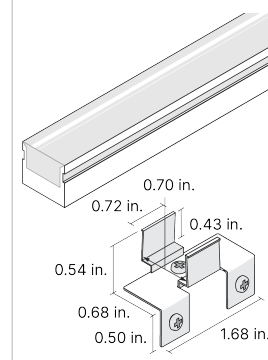
ROTATING CLIP (RTCL)

Single mounting point with adjustability



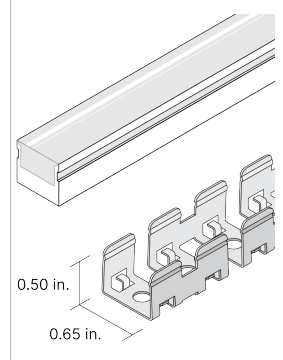
90° CLIP (90CL)

Single mounting point on ledge or support



SPINE CHANNEL (SPCH)

Mounting along a curve for architectural accents or lighting designs

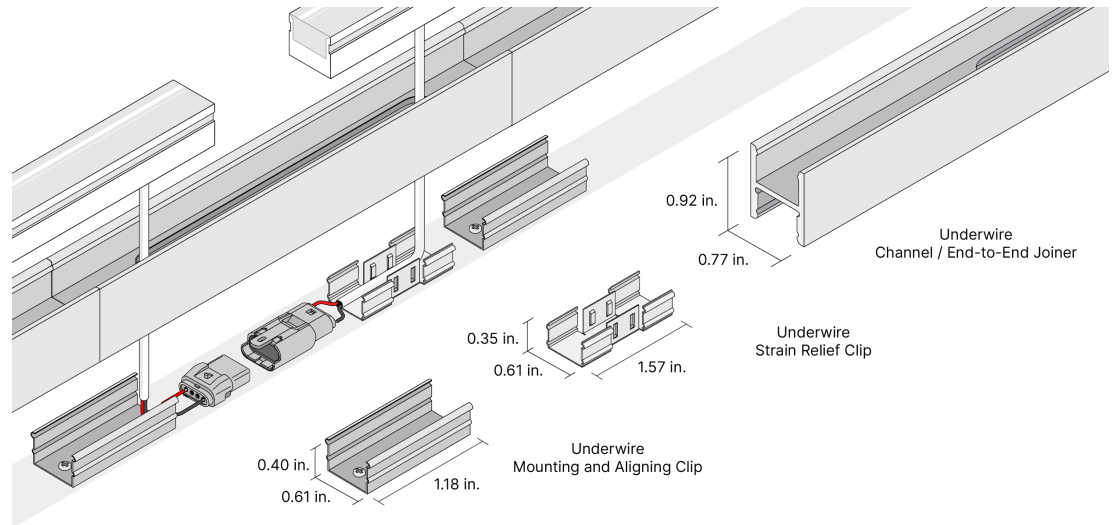


WIRE MANAGEMENT SYSTEM (WMS)

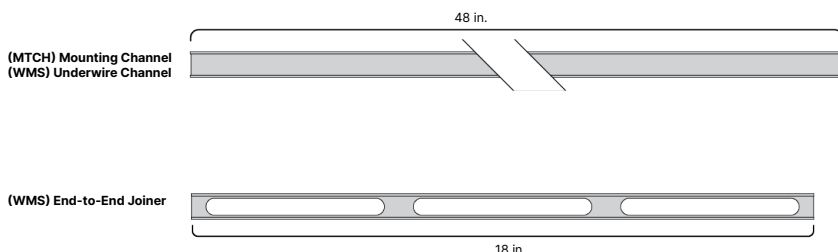
Seamless end-to-end mounting of sections of light with concealed wire management, including connections and wire chase capability.

Included with Wire Management System

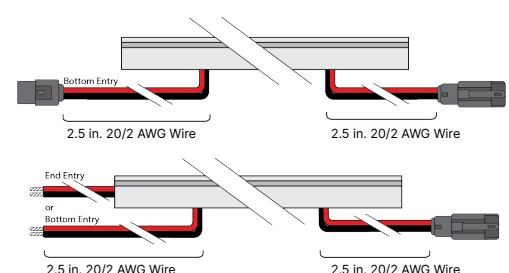
- (1) 48 inch, White Plastic, Underwire Channel
- (1) 18 inch, White Plastic, End-to-End Joiner
- (1) Underwire Channel Open End Cap
- (1) Underwire Channel Closed End Cap
- (1) Underwire Mounting and Aligning Clip
- (1) Underwire Strain Relief Clip



CHANNEL LENGTHS (MTCH) / (WMS)



CONNECTIONS



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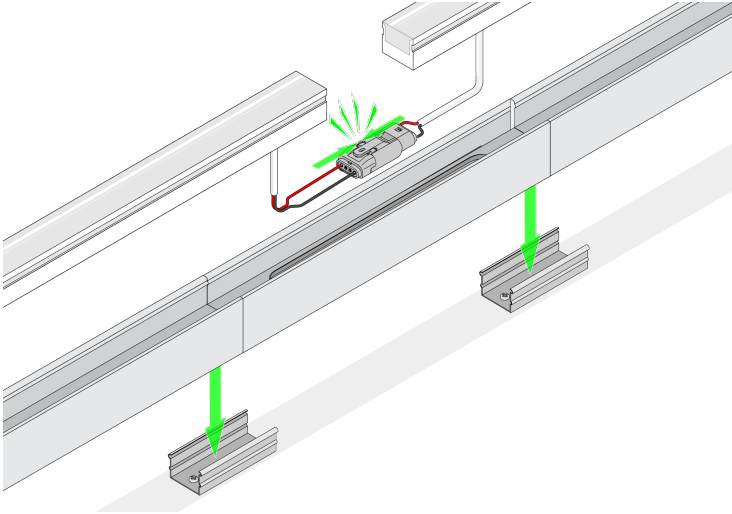
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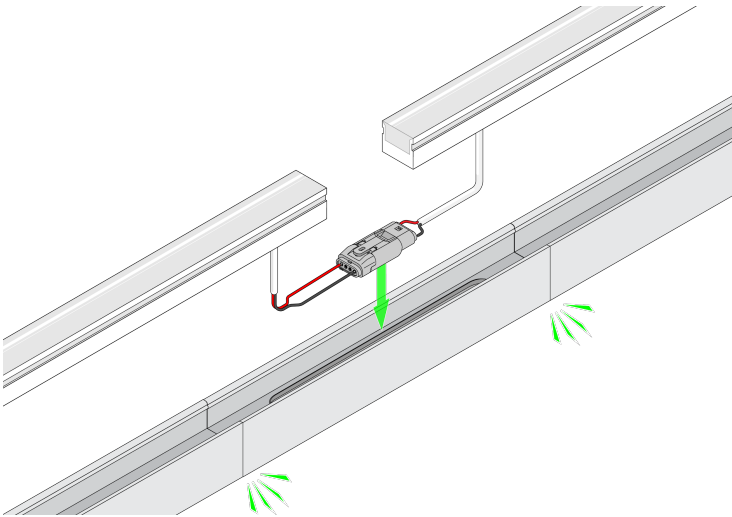


UNDERWIRE MOUNTING

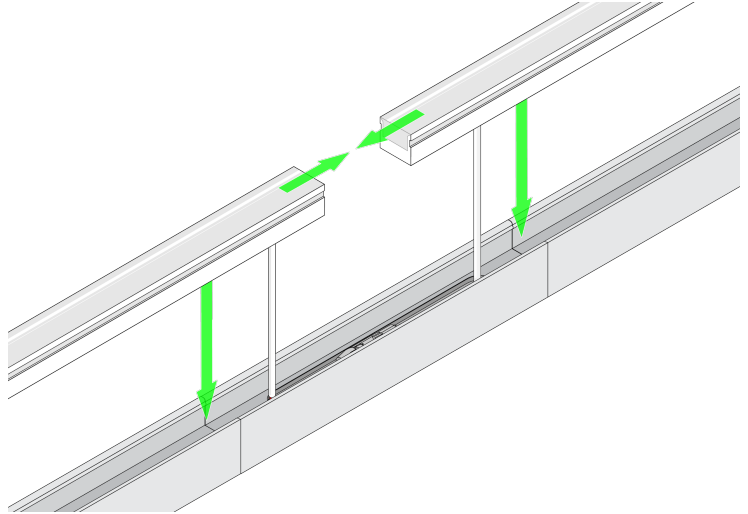
1. Fasten Connectors together and Underwire Channel to Mounting Clips



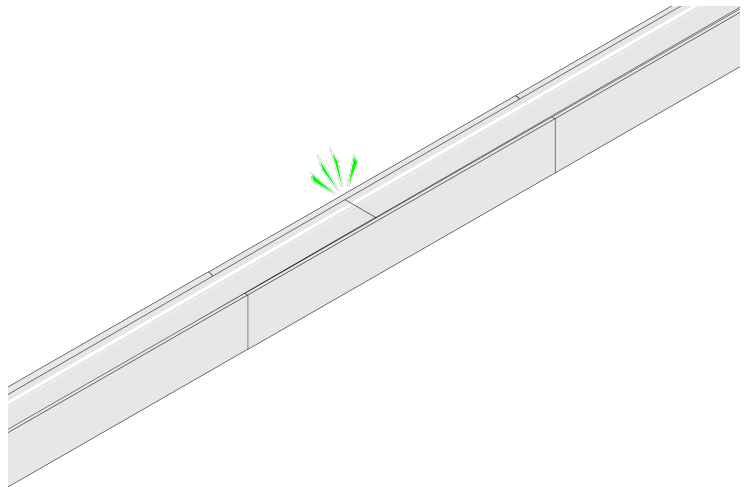
2. Tuck Connectors into End-to-End Joiner



3. Place AlphaTech X within Underwire Channel



4. Complete



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RECOMMENDED DRIVERS

SKU	WATTAGE	LENGTH	WIDTH	HEIGHT
OMNIDRIVE® X Versatile driver for most high-performance dimming applications: ELV, TRIAC, 0-10V with 120-277V universal input				
DI-ODX-24V30W-J	30W	6.5 in.	3.7 in.	1.36 in.
DI-ODX-24V60W-J	60W	7.4 in.	3.7 in.	1.36 in.
DI-ODX-24V96W-J	96W	8.66 in.	3.7 in.	1.36 in.
DI-ODX-24V120W-J	120W	8.66 in.	3.7 in.	1.36 in.
DI-ODX-24V200W-J	200W	10.24 in.	4.92 in.	1.95 in.
OMNIDRIVE® BASICS Electronic Dimmable Driver				
DI-ODBELV-24V60W	60W	4.2 in.	1.75 in.	0.96 in.
SWITCHEX® Driver and Dimmer Switch LED driver and dimmer switch combined in a single gang box.				
DI-24V-SE-60W	60W	1.4 in.	2.1 in.	4.1 in.
DI-24V-SE-100W	100W	1.4 in.	2.1 in.	4.1 in.
VLM Series Constant Voltage LED Drivers Compact constant-voltage LED driver				
VLM60W-24-LPM	60W	8.19 in.	2.94 in.	1.31 in.
VLM100W-24-LPM	100W	8.19 in.	2.94 in.	1.31 in.
Lutron® Hi-lume™ 1% Dimmable LED Drivers				
DI-DM-24V40W-L3D	40W	4.89 in.	4 in.	2.62 in.
DI-DM-24V40W-LTE	40W	4.89 in.	4 in.	2.62 in.
Lutron® Hi-lume Premier 0.1% LED driver				
DI-DM-24V96W-L3D	96W	5.5 in.	2.2 in.	10.5 in.
PoE 24V constant voltage platform, ready for Power over Ethernet (Inquire)				

Power Supply Note: Not for use with OMNIDRIVE Basics, MikroDIM, or MLV power supplies.

DELIVERY OPTIONS

- Factory Assembly

Fastest installation: fixtures fully assembled in the factory.

ADDITIONAL INFORMATION

- Sustained Compressive Load Limit: 1,000 PSI

• Lumen value measured in accordance to IES LM-80-08. LED chips have a luminous flux range with a tolerance of +/- 5%.

• Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length. Max run may exceed Class 2 limit. Actual wattage may differ from calculated wattage due to voltage drop across run.

• Do not install product in an environment outside the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, lumen output, and/or adversely impact color consistency.

• Actual efficacy value is dependent to specified LED driver (power supply). An estimated efficacy value can be calculated as follows: Lumen value divided by average power consumption per foot.

• Operating temperature is measured according to the minimum and maximum ambient temperature environment.

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CERTIFICATIONS

Safety

- UL Listed 2108 Low Voltage Lighting System / Low Voltage Luminaire, UL 1598 / CSA 250.008, UL 8750. UL 879 / CAN/CSAC22.2 no. 207M89. Certified for United States and Canada. File # E469769
- UL 676 Underwater Luminaires / CAN/CSA C22.2 No. 891976 / UL 8750. This certification conforms to Article 680 and 682 of the National Electrical Code® for installation in swimming pools, fountains, spas, natural and artificially made bodies of water. File# E479607
- NSF Sanitation Certified: NSF/ANSI Standard 2 2018 Food Equipment
- Approved for storage areas of clothes closets per NEC 410.16.A.3 and 410.16.C.5

Environment

- IK11 Rated impact protection in accordance with IEC standards

Performance

- Can be used to comply with TITLE 24 Part 6 High efficacy LED requirements - JA8-2016-E
- LED chip data measured in accordance to IES LM-80-08.
- Photometric & Colorimetry data measured in accordance to IES LM-79-08, in Elemental LED's Innovation Lab.

Safety / Warnings / Disclosures

1. Install in accordance with national and local electrical code regulations.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. Only use copper wiring. Use wires rated for at least 176°F (80°C) and certified for use with external connection of electrical equipment.
4. Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
5. Tape light, attached wire leads, and additional extension cables, connectors, etc., are not rated for in-wall installation unless otherwise noted. Tape light and attached wire leads are field-cuttable.
6. Ensure applicable wire is installed between driver, fixture, and any controls in-between. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.). Inadequate wire installation could overheat wires, and cause fire.
7. Do not install in environment where LED chips are exposed to direct sunlight as damage to the phosphor will occur.
8. Do not install in environment where excessive heat may exist (ex. close proximity to fireplace, etc.) See Ambient Temperature ratings
9. Do not install indoor LED tape light products in outdoor / wet location environments. Only wet location tape light models are rated for outdoor / wet locations.
10. Do not modify product beyond instructions or warranty will be void.
11. Tape light must be handled with care. Excessive handling, bending, and pressure may damage the product, voiding the warranty.
12. Actual color may vary from what is pictured on this sheet and other print materials due to the limitations of photographic processes.
13. We reserve the right to modify and improve the design of our fixtures without prior notice. We cannot guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.

WARRANTY

Limited Warranty

- 5 Years: General Lighting
- 2 Years: Sauna
- 2 Years: Deep Cold

This warranty does not include the additional accessories referenced in this specification sheet. Complete warranty details for fixtures and additional accessories are available at www.diodeled.com/limited-warranty/ within the Policies section. For warranty related questions please contact product support.

Consumer's Acknowledgment

Elemental LED, Inc. stands behind its products when they are used properly and according to our specifications. By purchasing our products, the purchaser agrees and acknowledges that lighting design, configuration and installation is a complex process, wherein seemingly minor factors or changes in layout and infield adjustments can have a significant impact on an entire system. Choosing the correct components is essential. Elemental LED is able to work with the original purchaser to make an appropriate product selection to the extent of the limited information that the customer can provide, but it is virtually impossible for Elemental LED to design a system that foresees every unknown factor. For this reason, this Warranty does not cover problems caused by improper design, configuration or installation issues. Any statement from a Elemental LED employee or agent regarding a customer's bill of goods and/or purchase order is NOT an acknowledgment that the products purchased are designed and configured correctly. The purchase agrees and acknowledges that it is the customer's responsibility to adhere strictly to all information contained in the Product Specification Sheets.

There is often more than one way to design, configure and layout an LED lighting application properly to achieve the same lighting effect. Elemental LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Elemental LED products. The specifications include important information that a designer and installer should carefully review and strictly follow. Qualified designers and certified and/or licensed installers, with access to the final installation environment, customer goals, and Elemental LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.