ALLOY LED® Specifications

PrimaLine® 2.7 LP (Low-Profile) LED Tape Light











PrimaLine 2.7 LP is a low-profile, medium output, dimmable LED light that is designed with specialized diodes to emit a smooth, even line of continuous light. PrimaLine 2.7 LP features the new 2110 diode, a low profile LED chip arranged in a tight array to ensure hotspot-free lighting in most Alloy LED channels.

- Smooth, hotspot-free line of light
- Ultra low profile
- New 2110 diodes
- 97 CRI (Color Rendering Index)
- Very high R9 and R13 values for superb rendering of warm tones

TECHNICAL INFORMATION

Stocked CCTs (Kelvin Temp.)*	2200K, 2400K, 2700K, 3000K, 4200K
Power Consumption per ft.	2.7 Watts / 113mA
Input Voltage	24V DC
Diodes per foot	81
Diode Spacing	0.14 inches
Tape Height	0.02 inches
Beam Angle	120°
Field Cuttable (UL 2108)	Every 1 inch
Max Run Length	18 ft.
Dimmable	Yes

Diode Type	2110 SMD
Mounting	3M™ Self-Adhesive Tape (Non-porous)
Operating Temp.	-13° F to 140° F
Ambient Temp.	-40° F to 186° F
Spool Length**	13 ft., 26 ft.
Environment	Indoor, Dry
Certifications	UL Listed, UL 2108, CE, RoHS, UL Closet Rated
Warranty	6 Year Limited

^{*} In addition to stocked colors, a wide variety of kelvin temperatures is also available by special order. Please call or email to order.

PRODUCT INFORMATION

13 ft. spool	26 ft. spool	Kelvin Temp. (CCT)	Watts / foot	CRI	R9 Value	R13 Value	TM30	cqs	Lumens / foot
AL-01-08-2400	AL-01-08-2420	2200K	2.7W	96.7	91	97	n/a	n/a	160
AL-01-08-2401	AL-01-08-2421	2700K	2.7W	96.7	97	97	n/a	n/a	188
AL-01-08-2402	AL-01-08-2422	3000K	2.7W	96.7	95	96	n/a	n/a	202
AL-01-08-2403	AL-01-08-2423	4200K	2.7W	96.7	98	99	n/a	n/a	224
AL-01-08-2405	AL-01-08-2425	2400K	2.7W	96.7	98	99	n/a	n/a	170

^{**}Each spool comes with 36 in. CL2 rated 20 AWG tinned lead wires at each end.

VOLTAGE DROP GUIDANCE CHART

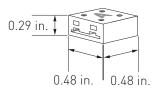
Standard Non-XT 24V Voltage Drop & Wire Length Distance Chart (3% Drop or 24V)*

Wire Gauge	Copper Wire Resistance (O/kFT)	10W (0.42A)	20W (0.83A)	30W (1.25A)	40W (1.67A)	50W (2.08A)	60W (2.50A)	70W (2.92A)	80W (3.33A)	90W (3.75A)	96W (4A)
22 AWG	16.14	54 ft.	27 ft.	18 ft.	14 ft.	11 ft.	9 ft.	8 ft.	7 ft.	6 ft.	6 ft.
20 AWG	10.15	86 ft.	43 ft.	29 ft.	22 ft.	18 ft.	15 ft.	13 ft.	11 ft.	10 ft.	9 ft.
18 AWG	6.39	136 ft.	68 ft.	46 ft.	34 ft.	28 ft.	23 ft.	20 ft.	17 ft.	16 ft.	15 ft.
16 AWG	4.02	216 ft.	108 ft.	72 ft.	54 ft.	44 ft.	36 ft.	31 ft.	27 ft.	24 ft.	23 ft.
14 AWG	2.53	343 ft.	172 ft.	115 ft.	86 ft.	69 ft.	58 ft.	49 ft.	43 ft.	39 ft.	36 ft.
12 AWG	1.59	545 ft.	273 ft.	182 ft.	137 ft.	109 ft.	91 ft.	78 ft.	69 ft.	61 ft.	57 ft.
10 AWG	0.99	865 ft.	433 ft.	289 ft.	217 ft.	173 ft.	145 ft.	124 ft.	109 ft.	97 ft.	91 ft.

Note: These tables provide general guidelines for determining Wire Gauge based on total load and distance from LED driver to beginning of luminaire.

ACCESSORIES (SOLD SEPARATELY)

Amp Champ: For a more secure connection



0.63 in

0.46 in.

connectors for stranded wire, 3M® adhesive backing, and preattached 6 inch in-wall-rated 18 AWG lead wire. Note: Amp Champ Corner

Accepts many combinations of

tape and wire. Includes spade

Note: Amp Champ Corner does not include the preattached 6 inch in-wall-rated 18 AWG lead wire.

Standard Amp Champ

AL-01-08-9900 AL-01-08-9900-10 (10 pack)

Amp Champ Corner AL-01-08-9900-L

Amp Champ Jumper and Power Feed Kits

Amp Champ Jumper Kit includes 2 Amp Champs and 1 pre-tinned 18AWG jumper wire.



AL-01-08-9900-3IN-JK (3" jumper wire) AL-01-08-9900-6IN-JK (6" jumper wire) AL-01-08-9900-36IN-JK (36" jumper wire)

Amp Champ Power Feed Kit includes 1 Amp Champ and 1 pre-tinned 18AWG power feed wire.

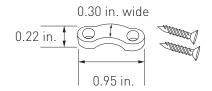


AL-01-08-9900-36IN-PK (36" power feed wire) AL-01-08-9900-8FT-PK (8' power feed wire)

Wire and Tape Light Management

We recommend the use of the wire and tape harness.

- At least 1 wire harness at the beginning to secure the lead wire; for longer lead wires, place a harness every 2 feet
- 1 tape harness every 2 feet and 1 harness at the end of the tape light to secure it



Wire Harness

0.29 in.

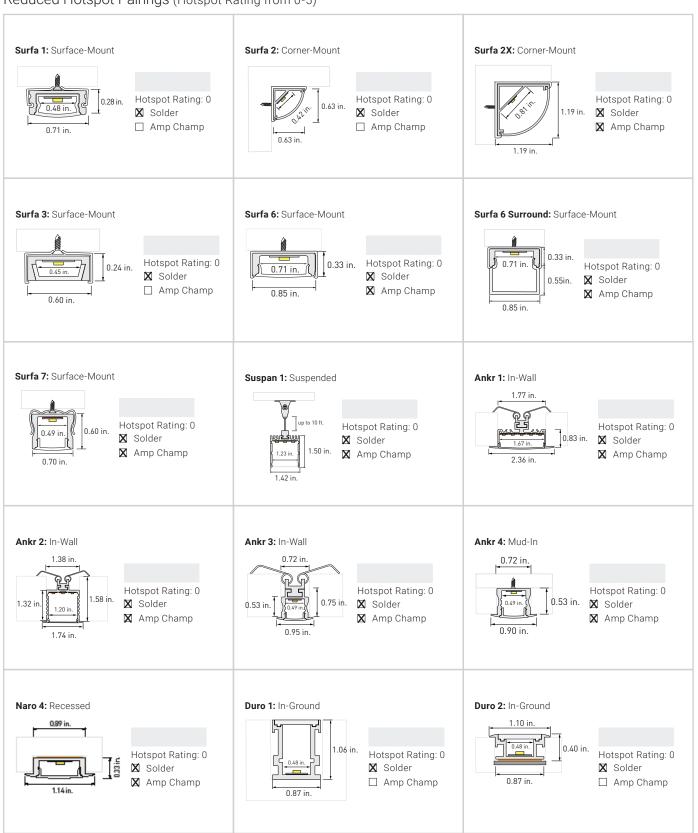
Holds wire in place securely AL-01-99-9901-10 (10 pack)

Tape Harness

Provides extra security for tape light, especially at the ends of a run AL-01-99-9900-10 (10 pack)

COMPATIBLE CHANNELS (Diagrams below not to scale)

Reduced Hotspot Pairings (Hotspot Rating from 0-5)

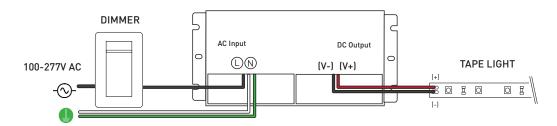


RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)



Alloy LED PowerFactor™ Dimmable Power Supplies w/ Integrated UL Listed Junction Box Compact, highly efficient, and code-compliant power supply with versatile and smooth dimming capabilities.





Wiring diagram is for reference ONLY. Please refer to dimmer wiring specifications sheet for accurate directions.













Single Tap Models

Item #	Output Voltage	Wattage	Wet Location	Minimum Load	Dimensions (L x W x H)	Class 2
AL-98-10-12030	12V DC	30W	Ν	10%	6.50 x 3.72 x 1.02 in.	Υ
AL-98-10-12060	12V DC	60W	Ν	10%	7.40 x 3.72 x 1.02 in.	Υ
AL-98-10-12120	12V DC	120W	Y (IP66)	10%	8.66 x 3.72 x 1.57 in.	Ν
AL-98-10-24030	24V DC	30W	Ν	10%	6.50 x 3.72 x 1.02 in.	Υ
AL-98-10-24060	24V DC	60W	Ν	10%	7.40 x 3.72 x 1.02 in.	Υ
AL-98-10-24096	24V DC	96W	Y (IP66)	10%	8.66 x 3.72 x 1.57 in.	Υ
AL-98-10-24150	24V DC	150W	Y (IP66)	10%	10.24 x 4.13 x 1.77 in.	Ν
AL-98-10-24200	24V DC	200W	Y (IP66)	10%	10.24 x 4.13 x 1.77 in.	Ν
AL-98-10-24300	24V DC	300W	Y (IP66)	10%	10.94 x 4.33 x 1.77 in.	Ν

Class 2 Compliant Multi-Tap Models

Item #	Output Voltage	Wattage	Wet Location	Minimum Load	Dimensions (L x W x H)	Class 2
AL-98-10-12300-MT	12V DC	300W	Y (IP66)	10%	11.85 x 4.33 x 1.77 in.	Υ
AL-98-10-24192-MT	24V DC	192W	Y (IP66)	10%	10.94 x 4.33 x 1.77 in.	Υ
AL-98-10-24288-MT	24V DC	288W	Y (IP66)	10%	10.85 x 4.33 x 1.77 in.	Υ

Note: PowerFactor assumes 80% load.

Inspectors prefer power supply to be used with junction box. For dimmer compatibility, refer to drivers specification sheet.

RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)

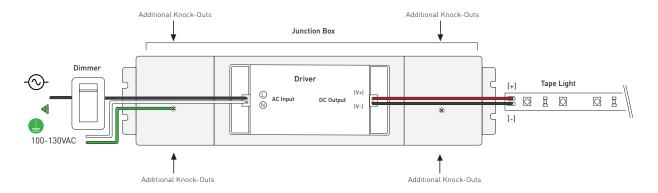
Alloy LED Primavolt® No Minimum Load Dimmable Power Supplies w/ETL Listed Junction Box Code-compliant power supply with versatile and smooth dimming capabilities. Compatible with ELV, MLV, and TRIAC dimmers.







Black model for 80W and higher



Wiring diagram is for reference ONLY. Please refer to dimmer wiring specifications sheet for accurate directions.





Item #	Output Voltage	Wattage	Dry/ Damp Location	Min. Load	Dimensions (Junction box) (L x W x H)	Class 2
AL-98-03-12024-NM	12V DC	24W	Υ	0%	13.77 x 3.03 x 1.45 in.	Υ
AL-98-03-12048-NM	12V DC	48W	Υ	0%	13.77 x 3.03 x 1.45 in.	Υ
AL-98-03-12060-NM	12V DC	60W	Υ	0%	13.77 x 3.03 x 1.45 in.	Υ
AL-98-03-12080-NM	12V DC	80W	Υ	0%	14.96 x 3.03 x 2.24 in.	N
AL-98-03-12120-NM	12V DC	120W	Υ	0%	14.96 x 3.03 x 2.24 in.	N
AL-98-03-24024-NM	24V DC	24W	Υ	0%	13.77 x 3.03 x 1.45 in.	Υ
AL-98-03-24048-NM	24V DC	48W	Υ	0%	13.77 x 3.03 x 1.45 in.	Υ
AL-98-03-24060-NM	24V DC	60W	Υ	0%	13.77 x 3.03 x 1.45 in.	Υ
AL-98-03-24080-NM	24V DC	80W	Υ	0%	14.96 x 3.03 x 2.24 in.	Υ
AL-98-03-24096-NM	24V DC	96W	Υ	0%	14.96 x 3.03 x 2.24 in.	Υ
AL-98-03-24150-NM	24V DC	150W	Υ	0%	15.98 x 3.42 x 2.36 in.	N
AL-98-03-24200-NM	24V DC	200W	Υ	0%	15.98 x 3.42 x 2.36 in.	N

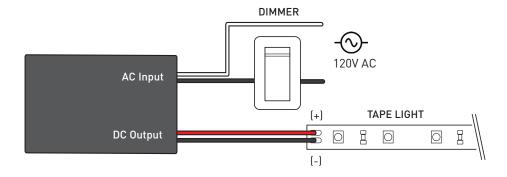
Note: Alloy LED strongly recommends using Listed Class 2 power supplies for all installations. Always install in accordance with local and national electrical code regulations. Inspectors prefer power supply to be used with junction box. For dimmer compatibility, refer to drivers specification sheet.

RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)

ELV Dimmable Power Supplies for Remote Enclosures

The drivers are derated, but when installed in a small enclosure with no heatsink or air circulation, we recommend a max. load of 40W.





Wiring diagram is for reference ONLY. Please refer to dimmer wiring specifications sheet for accurate directions.





Item #	Output	Wattage	Dimensions (L x W x H)	Class 2
AL-98-08-12060	12V DC	60W	2.66 x 1.30 x 0.83 in.	Υ
AL-98-08-24060	24V DC	60W	2.66 x 1.30 x 0.83 in.	Υ

Note: Inspectors prefer power supply to be used with junction box. For dimmer compatibility, refer to drivers specification sheet.

DIMMING ACCESSORIES (SOLD SEPARATELY)

Lutron® Dimming Accessories

By participating in Lutron's OEM Advantage program, Alloy LED is able to offer a range of the highest quality low voltage power supplies and selected controls on the market.





Hi-lume Premier 0.1% EcoSystem / 3-wire LED Driver (96W 24VDC)



- Hi-lume 1% LED Driver 40W EcoSystem / 3-wire control
- 2-wire 120V forward phase control



Lutron Vive PowPak RF Module

- RF module for EcoSystem LED driver control
- Use with the Lutron EcoSystem drivers shown to "Vive-enable" Alloy LED products

Lutron® Hi-lume LED Drivers

Item #	Output	Wattage	Min. Load	Class 2
AL-98-07-12040	12V DC	40W	n/a	Υ
AL-98-07-12040-3WIRE	12V DC	40W	n/a	Υ
AL-98-07-24040	24V DC	40W	n/a	Υ
AL-98-07-24040-3WIRE	24V DC	40W	n/a	Υ
AL-98-07-24096-3WIRE	24V DC	96W	n/a	Υ

Lutron® Controls

Item #	Description	Voltage
AL-98-07-9901	EcoSystem Control Module	n/a
AL-98-07-9901-8	EcoSystem Control Module - 8 pack	n/a
AL-98-07-9950	CL Dimmer	120V AC
AL-98-07-9950-FPLATE	CL Dimmer faceplate	n/a

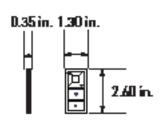
DIMMING ACCESSORIES (SOLD SEPARATELY)

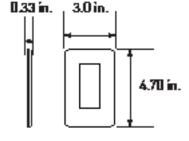
Dimmers & Switches

SlimDim Wireless Dimmers

Using long-range RF technology, these LED dimmers connect wirelessly to a receiver, offering freedom to mount anywhere. Can also be used as a fob for mobile, hand-held control.

AL-70-01-0001	SlimDim Wireless Dimmer
AL-70-01-0002	Single Color Receiver (96W max.) (sold separately)
AL-98-07-9950- FPLATE	SlimDim Wall Plate (sold separately)





SlimDim Wireless Dimmer

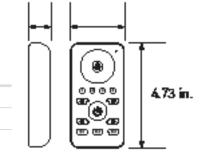
0.68 in. 2.17 in.

SlimDim Wall Plate (Sold Seperately)

Remote Control Dimmer Switch

Provides full dimming and on/off control, and includes a touch wheel that allows for direct visual selection of brightness. It can also operate up to four independent zones.

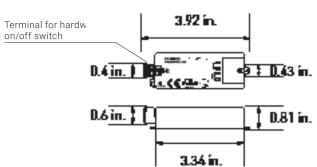
AL-60-03-0001	Remote Control Dimmer Switch
AL-70-01-0002	Single Channel Receiver (sold separately)
ΔΙ-60-03-0004-V2	Wireless Receiver (RGR & RGR-W) (sold separately)



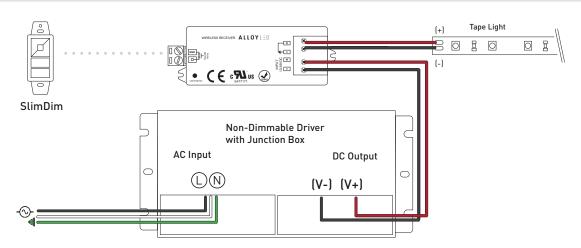
Single Channel Wireless Receiver

Pair with the Remote Control Dimmer Switch or the SlimDim Wireless Dimmer to dim PrimaLine tape lights. Use one remote to make independent lighting zones with multiple receivers with certain controllers.

AL-70-01-0002 Single Channel Wireless Receiver

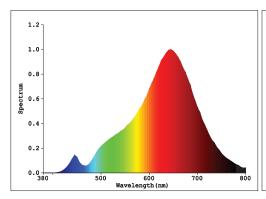


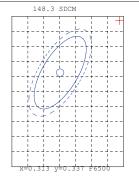
WIRING DIAGRAM



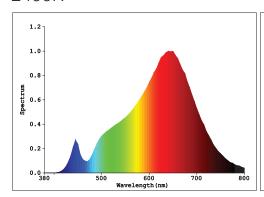
Note: specifications are representative of the diode type and not a particular tape light article.

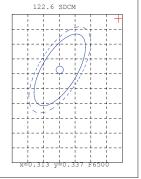
2200K



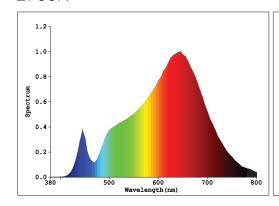


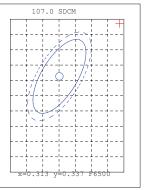
2400K





2700K





3000K



Note: specifications are representative of the diode type and not a particular tape light article.

4200K

