SurfaFlex 1 Bendable Aluminum Channel

Shown with closed end cap

SurfaFlex 1 is a flexible channel that effortlessly bends to fit curves, making it perfect for any application. Designed to deliver hotspot-free lighting when used with Alloy LED's popular tape lights, such as PrimaLine 2.5 COB and Radialux 4.2 COB RGB, and ideal for under-cabinet lighting, coves, and soffits, this sleek solution transforms your lighting projects with ease and elegance.

- Enables mounting our LED tape lights on curved surfaces
- Diffuser covers provide smooth light diffusion with no hotspots
- Sold in complete kits (4 ft. and 7 ft.) to create a finished fixture in the field
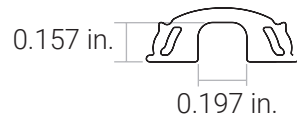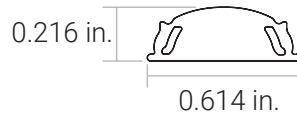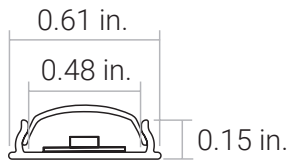

PRODUCT INFORMATION

Item Number	Description
AL-50-33-0111-KIT*	4 ft. kit: includes 1 channel, 1 diffuser cover, 2 pair pack of plastic end caps, 5 metal mounting clips with screws
AL-50-33-0115-KIT*	7 ft. kit: includes 1 channel, 1 diffuser cover, 4 pair pack of plastic end caps, 10 metal mounting clips with screws
AL-50-33-0011-AL-PART	Channel - 4 ft. - aluminum finish
AL-50-33-0015-AL-PART	Channel - 7 ft. - aluminum finish
AL-50-33-9902-FRT	Diffuser cover - 4 ft.
AL-50-33-9905-FRT	Diffuser cover - 7 ft.
AL-50-33-9951-SL	Plastic end caps 2 pair pack: 2 open, 2 closed
AL-50-33-9986-AL	Metal mounting clips with screws - 5-pack

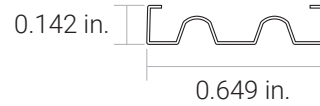*Add -20 or -40 to the end of the item number for discounted bundles.

This channel is compatible with select tape lights, see page 3 for our channel and tape light compatibility and hotspot guide.

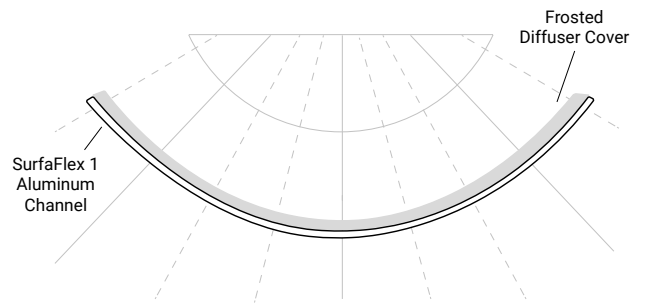www.AlloyLED.com | Call: 800.910.LEDS [5337] | solutions@AlloyLED.com
Specifications subject to change without notice.

v1

DIMENSIONS

0.61 in.
0.48 in.
0.15 in.

0.216 in.
0.614 in.

0.157 in.
0.197 in.

End Caps

0.142 in.
0.649 in.

Mounting Clip

BEND RADIUS

Minimum Radius 5.5 in.

Frosted Diffuser Cover

SurfaFlex 1 Aluminum Channel

Frosted Diffuser Cover

SurfaFlex 1 Aluminum Channel

COMPLETE SOLUTION

Frosted Diffuser Cover

End Cap

SurfaFlex 1 Aluminum Channel

Mounting Clip

Mounting Clip

Power Supply

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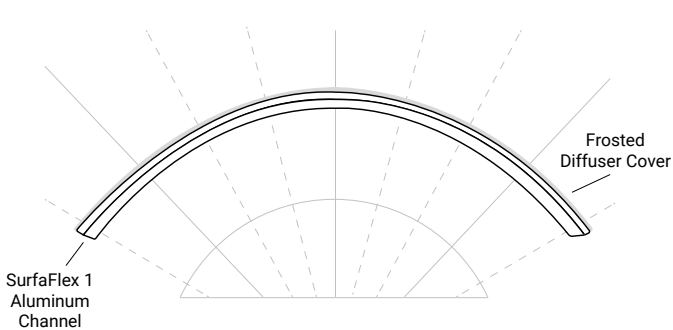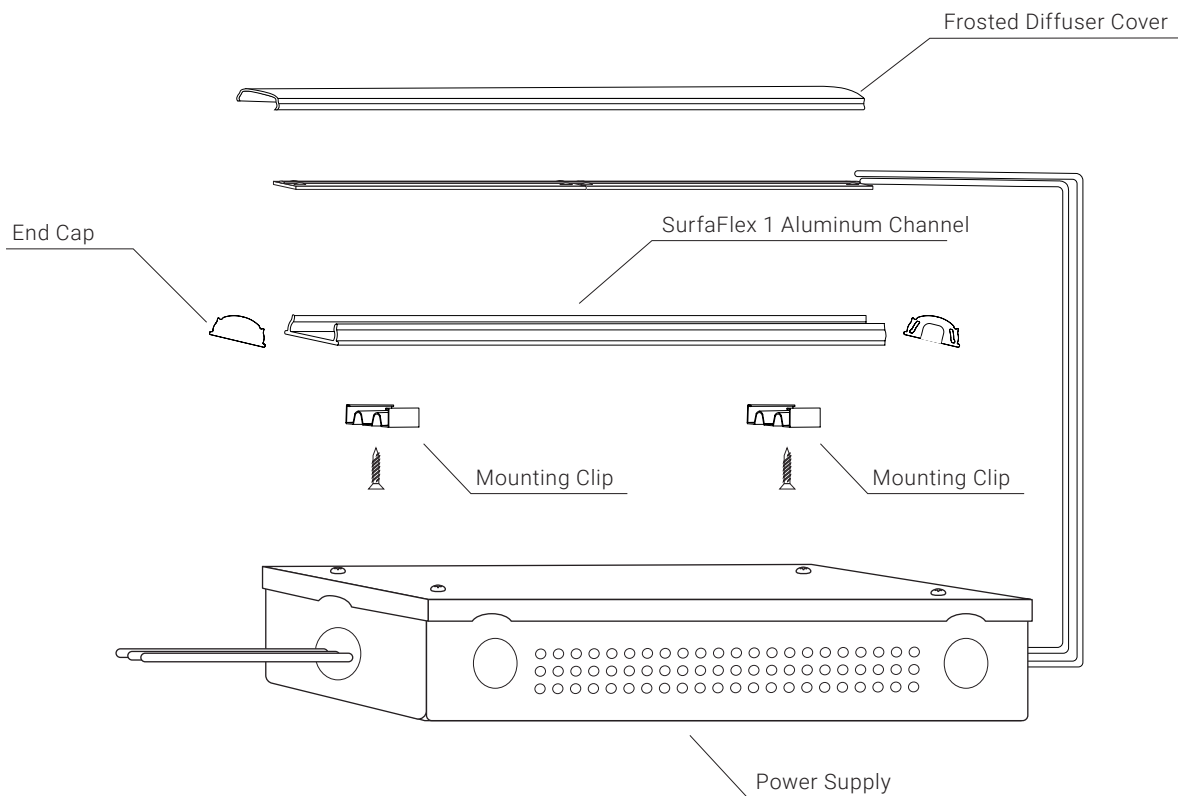
SURFAFLEX 1 AND TAPE LIGHT HOTSPOT AND COMPATIBILITY GUIDE

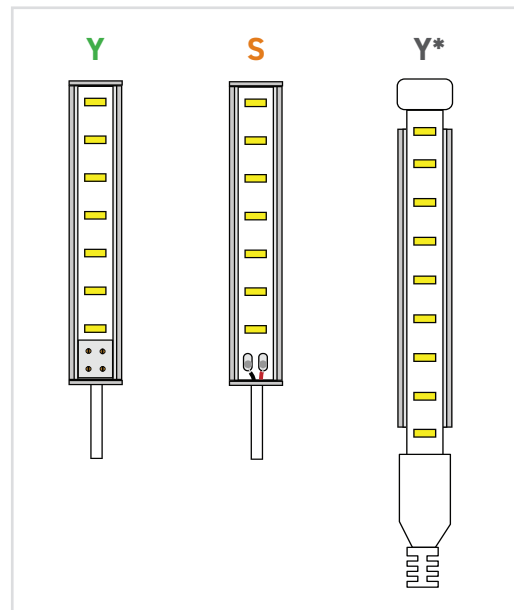| Tape Light	Wire Connector	AmpChamp	Hotspot
PrimaLine® 1.5	S		4
PrimaLine 1.5 XT			N/A
PrimaLine 2.5 COB	S		0
PrimaLine 2.7 LP	S		2
PrimaLine 3	S		3
PrimaLine 3 XT			N/A
PrimaLine 4.4 Gen 2	S		3
PrimaLine 4.4 XT Gen 2	S		3
PrimaLine 5.5 LP	S		2
PrimaLine 6.6 Gen 2			N/A
PrimaLine 7	S		3
PrimaLine 8 Gen 2			N/A
Varien™ 5.5 Dim-to-Warm			N/A
Radialux® 2.2 RGB	S		5
Radialux 4.2 COB RGB	S		0
Radialux 4.4 RGB	S		4
Radialux 4.4 RGBW			N/A
Radialux 4.7 LP RGBW	S		3-5
Radialux 5.9 RGBW			N/A
Radialux 8.8 RGB			N/A
RazorLine 3.7	S		0.5-1
RazorLine Neon 300	S		0
PrimaLine 1.5 Wet			N/A
PrimaLine 1.5 XT Wet			N/A
PrimaLine 3 Wet			N/A
PrimaLine 3 XT Wet			N/A
PrimaLine 4.4 XT Gen 2 Wet			N/A
Radialux 2.2 RGB Wet			N/A
Radialux 4.4 RGB Wet			N/A
Radialux 4.4 RGBW Wet			N/A
Radialux 5.9 RGBW Wet			N/A

Chart Key

Y	Tape, channel, and connector fit
Y*	(Wet Tape Only) Tape light end caps do not fit
S	(Dry Tape Only) Connector does not fit in channel / leads should be soldered
	Does not fit width and /or height

Hotspot Values

0   1   2   3   4   5
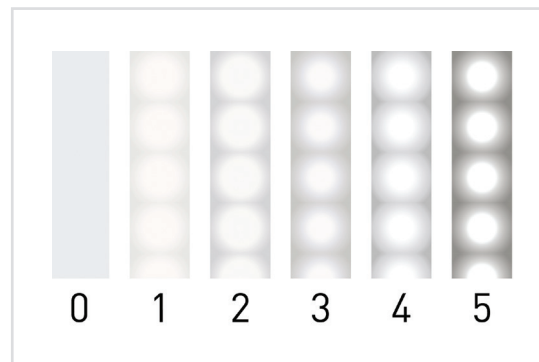
Compatibility Visual Key

Y   S   Y*

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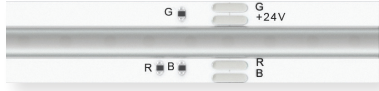page 3 of 8   v1

RECOMMENDED TAPE LIGHT (SOLD SEPARATELY)

Medium Output
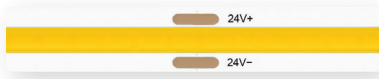Radialux 4.2 COB RGB LED Tape Light

24V DC / Maximum Run = 16.4 ft.		
16.4 ft. Spool	**100 ft. Spool**	**Lumens per Foot**
AL-02-60-2401	AL-02-60-2441	211

High Output
PrimaLine 2.5 COB LED Tape Light

24V DC / Maximum Run = 27 ft.				
27 ft. Spool	**100 ft. Spool**	**Color Temperature**	**Lumens per Foot**	**CRI**
AL-01-60-2401	AL-01-60-2441	● 2700K	286	92
AL-01-60-2402	AL-01-60-2442	● 3000K	291	93
AL-01-60-2408	AL-01-60-2448	● 3500K	304	93
AL-01-60-2403	AL-01-60-2443	○ 4200K	333	93
AL-01-60-2404	AL-01-60-2444	● 5000K	355	93

High Output
RazorLine Neon 300 LED Tape Light

24V DC / Maximum Run = 10 ft.			
10 ft. Spool	**Color Temperature**	**Lumens per Foot**	**CRI**
AL-01-40-2401	● 2700K	291	95.7
AL-01-40-2402	● 3000K	328	96.6
AL-01-40-2408	● 3500K	309	96.5
AL-01-40-2403	○ 4200K	319	98.2
AL-01-40-2404	● 5000K	316	97.8

High Output
RazorLine 3.7 LED Tape Light

24V DC / Maximum Run = 16.4 ft.				
7 ft. Spool	**16.4 ft. Spool**	**Color Temperature**	**Lumens per Foot**	**CRI**
AL-01-33-2401	AL-01-33-2441	● 2700K	271	96.1
AL-01-33-2402	AL-01-33-2442	● 3000K	300	96.7
AL-01-33-2408	AL-01-33-2448	● 3500K	307	96.9
AL-01-33-2403	AL-01-33-2443	○ 4200K	316	97.4
AL-01-33-2404	AL-01-33-2444	● 5000K	350	94.9

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RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)

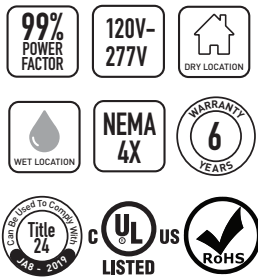**ALLOY'S** **A** **TOP CHOICE**

Alloy LED PowerFactor™ Dimmable Power Supplies with Integrated UL Listed Junction Box

Compact, highly efficient, and code-compliant power supply with versatile and smooth dimming capabilities.
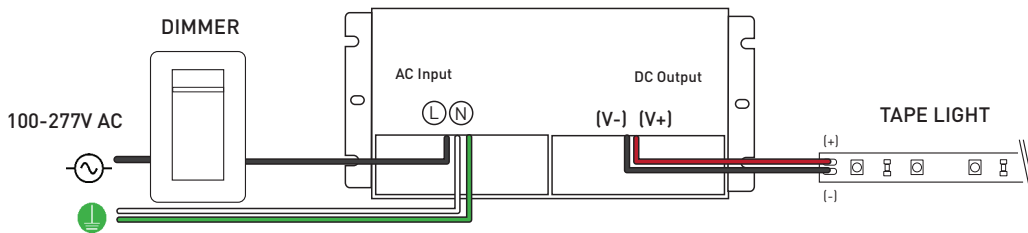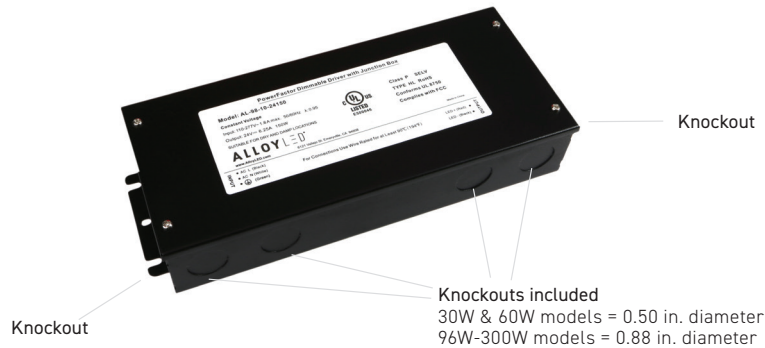
Knockout

Knockout

Knockouts included
30W & 60W models = 0.50 in. diameter
96W-300W models = 0.88 in. diameter

DIMMER

AC Input

DC Output

100-277V AC

(V-) (V+)

TAPE LIGHT

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

99% POWER FACTOR | 120V-277V | DRY LOCATION
WET LOCATION | NEMA 4X | WARRANTY 6 YEARS
Title 24 JA8 - 2019 | cULus LISTED | RoHS

Single Tap Models

Item Number	Output Voltage	Wattage	Wet Location	Minimum Load	Dimensions (L x W x H)	Class 2
AL-98-10-12030	12V DC	30W	Yes (NEMA 4X)	10%	6.50 x 3.72 x 1.02 in.	Yes
AL-98-10-12060	12V DC	60W	Yes (NEMA 4X)	10%	7.40 x 3.72 x 1.02 in.	Yes
AL-98-10-12120	12V DC	120W	Yes (NEMA 4X)	10%	8.66 x 3.72 x 1.57 in.	No
AL-98-10-24030	24V DC	30W	Yes (NEMA 4X)	10%	6.50 x 3.72 x 1.02 in.	Yes
AL-98-10-24060	24V DC	60W	Yes (NEMA 4X)	10%	7.40 x 3.72 x 1.02 in.	Yes
AL-98-10-24096	24V DC	96W	Yes (NEMA 4X)	10%	8.66 x 3.72 x 1.57 in.	Yes
AL-98-10-24150	24V DC	150W	Yes (NEMA 4X)	10%	10.24 x 4.13 x 1.77 in.	No
AL-98-10-24200	24V DC	200W	Yes (NEMA 4X)	10%	10.24 x 4.13 x 1.77 in.	No
AL-98-10-24300	24V DC	300W	Yes (NEMA 4X)	10%	10.94 x 4.33 x 1.77 in.	No

Class 2 Compliant Multi-Tap Models

Item Number	Output Voltage	Wattage	Wet Location	Minimum Load	Dimensions (L x W x H)	Class 2
AL-98-10-12300-MT	12V DC	300W	Yes (NEMA 4X)	10%	11.85 x 4.33 x 1.77 in.	Yes
AL-98-10-24192-MT	24V DC	192W	Yes (NEMA 4X)	10%	10.94 x 4.33 x 1.77 in.	Yes
AL-98-10-24288-MT	24V DC	288W	Yes (NEMA 4X)	10%	10.85 x 4.33 x 1.77 in.	Yes

Note: PowerFactor assumes 80% load.
Inspectors prefer power supply to be used with junction box.
For dimmer compatibility, refer to drivers specification sheet.

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RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)
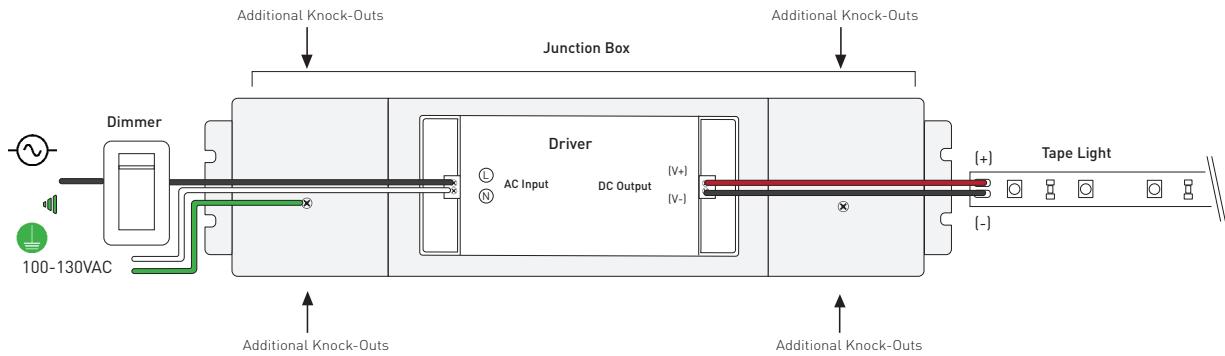
Alloy LED's Silver Recommendation

Alloy LED Primavolt® No Minimum Load Dimmable Power Supplies with ETL Listed Junction Box

Code-compliant power supply with versatile and smooth dimming capabilities. Compatible with ELV, MLV, and TRIAC dimmers.
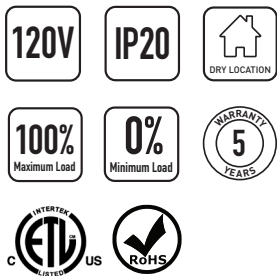

Dry Location Model
White model for 60W and lower

Wet Location Model
Black model for 80W and higher

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

Item Number	Output Voltage	Wattage	Minimum Load	Dimensions (Junction box) (L x W x H)	Class 2
AL-98-03-12024-NM	12V DC	24W	0%	13.75 x 3.0 x 1.50 in.	Yes
AL-98-03-12048-NM	12V DC	48W	0%	13.75 x 3.0 x 1.50 in.	Yes
AL-98-03-12060-NM	12V DC	60W	0%	13.75 x 3.0 x 2.25 in.	Yes
AL-98-03-12080-NM	12V DC	80W	0%	15.0 x 3.0 x 2.25 in.	No
AL-98-03-12120-NM	12V DC	120W	0%	15.0 x 3.0 x 2.25 in.	No
AL-98-03-24024-NM	24V DC	24W	0%	13.75 x 3.0 x 1.50 in.	Yes
AL-98-03-24048-NM	24V DC	48W	0%	13.75 x 3.0 x 1.50 in.	Yes
AL-98-03-24060-NM	24V DC	60W	0%	13.75 x 3.0 x 2.25 in.	Yes
AL-98-03-24080-NM	24V DC	80W	0%	15.0 x 3.0 x 2.25 in.	Yes
AL-98-03-24096-NM	24V DC	96W	0%	15.0 x 3.0 x 2.25 in	Yes
AL-98-03-24150-NM	24V DC	150W	0%	16.25 x 3.50 x 2.25 in.	No
AL-98-03-24200-NM	24V DC	200W	0%	16.25 x 3.50 x 2.25 in.	No

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.

ALLOYLED® Specifications

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 Number	Output	Wattage	Minimum Load	Class 2
AL-98-07-12040	12V DC	40W	N/A	Yes
AL-98-07-12040-3WIRE	12V DC	40W	N/A	Yes
AL-98-07-24040	24V DC	40W	N/A	Yes
AL-98-07-24040-3WIRE	24V DC	40W	N/A	Yes
AL-98-07-24096-3WIRE	24V DC	96W	N/A	Yes

Lutron® Controls

Item Number	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

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DIMMING ACCESSORIES (SOLD SEPARATELY)

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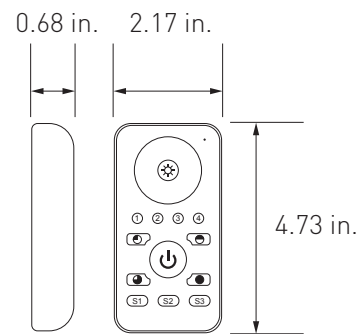
AL-70-01-0001	SlimDim Wireless Dimmer
AL-70-01-0002	Single Color Receiver (96W maximum) (Sold separately)
AL-98-07-9950-FPLATE	SlimDim Wall Plate (Sold separately)

0.35 in.   1.30 in.   2.60 in.

0.33 in.   3.0 in.   4.70 in.

SlimDim Wireless Dimmer

SlimDim Wall Plate (Sold Seperately)
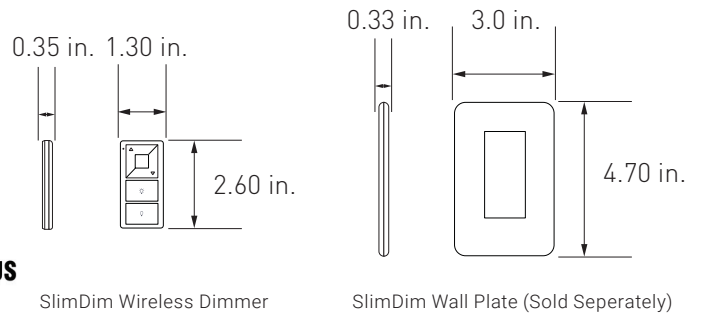
Remote Control Dimmer Switch

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)
AL-60-03-0004-V2	Wireless Receiver (RGB and RGBW) (Sold separately)

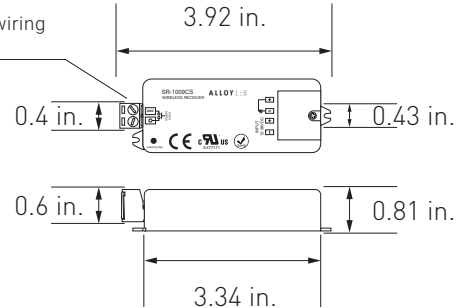0.68 in.   2.17 in.   4.73 in.

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

Terminal for hardwiring on/off switch

3.92 in.   0.4 in.   0.43 in.   0.6 in.   0.81 in.   3.34 in.

WIRING DIAGRAM

DRIVER & JUNCTION BOX

DIMMER

100-130V AC

AC Input   DC Output

(+)   TAPE LIGHT

(-)

v1