Surfa® 7 Surface-Mount Channel

Shown with closed end cap

The Surfa 7 surface-mount channel features a narrow form factor that can accommodate a single row of dry location Alloy LED tape light.

- Frosted diffuser cover provides smooth light diffusion
- Hotspot-free with many popular Alloy LED tape lights
- Sold in complete kits to create a finished fixture
- Thermally-balanced design for maximum cooling
- Channel covers protect LED tape light

It is designed to deliver hotspot-free lighting when used with:

- PrimaLine 2.7 LP
- PrimaLine 3
- PrimaLine 3 Wet Location
- PrimaLine 3 XT
- PrimaLine 4.4 Gen 2
- PrimaLine 4.4 XT Gen 2
- PrimaLine 5.5 LP
- Radialux 4.7 LP
- Varien 5.5

PRODUCT INFORMATION

| Item Number	Description
AL-50-20-0011-AL-PART	4 ft. channel - aluminum finish
AL-50-20-0015-AL-PART	7 ft. channel - aluminum finish
AL-50-20-0111-KIT*	4 ft. kit: includes 1 channel, 1 diffuser cover, 2 pairs of plastic end caps, 5 mounting clips/screws
AL-50-20-0115-KIT*	7 ft. kit: includes 1 channel, 1 diffuser cover, 4 pairs of plastic end caps, 9 mounting clips/screws
AL-50-20-9902-FRT	Frosted Diffuser Cover, 4 ft.
AL-50-20-9905-FRT	Frosted Diffuser Cover, 7 ft.
AL-50-20-9951-SL	Plastic End Caps 2 Pair Pack: 2 Open, 2 Closed
AL-50-20-9956-SL	Plastic End Caps 10 Pair Pack: 10 Open, 10 Closed
AL-50-20-9981	Metal Mounting Clips/Screws - 5-Pack

*Add -15 or -30 to the end of the Item Number for discounted bundles.

This channel is compatible with selected tape light models only, see the "Channel and Tape Light Compatibility and Hotspot Guide" PDF on the Resources page on our website for information.

page 1 of 8

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v2

DIMENSIONS

0.6 in.

0.49 in.

0.7 in.

0.60 in.

0.70 in.

End Caps

0.72 in.

0.59 in.

Mounting Clip

COMPLETE SOLUTION

Snap-in Frosted Lens

End Cap

Surfa 7 Aluminum Channel

Open End Cap

Power Supply

page 2 of 8

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v4
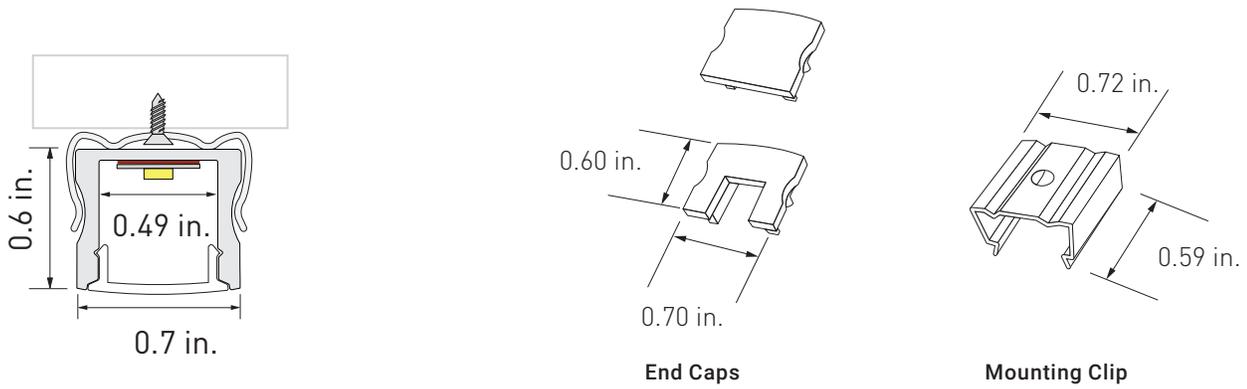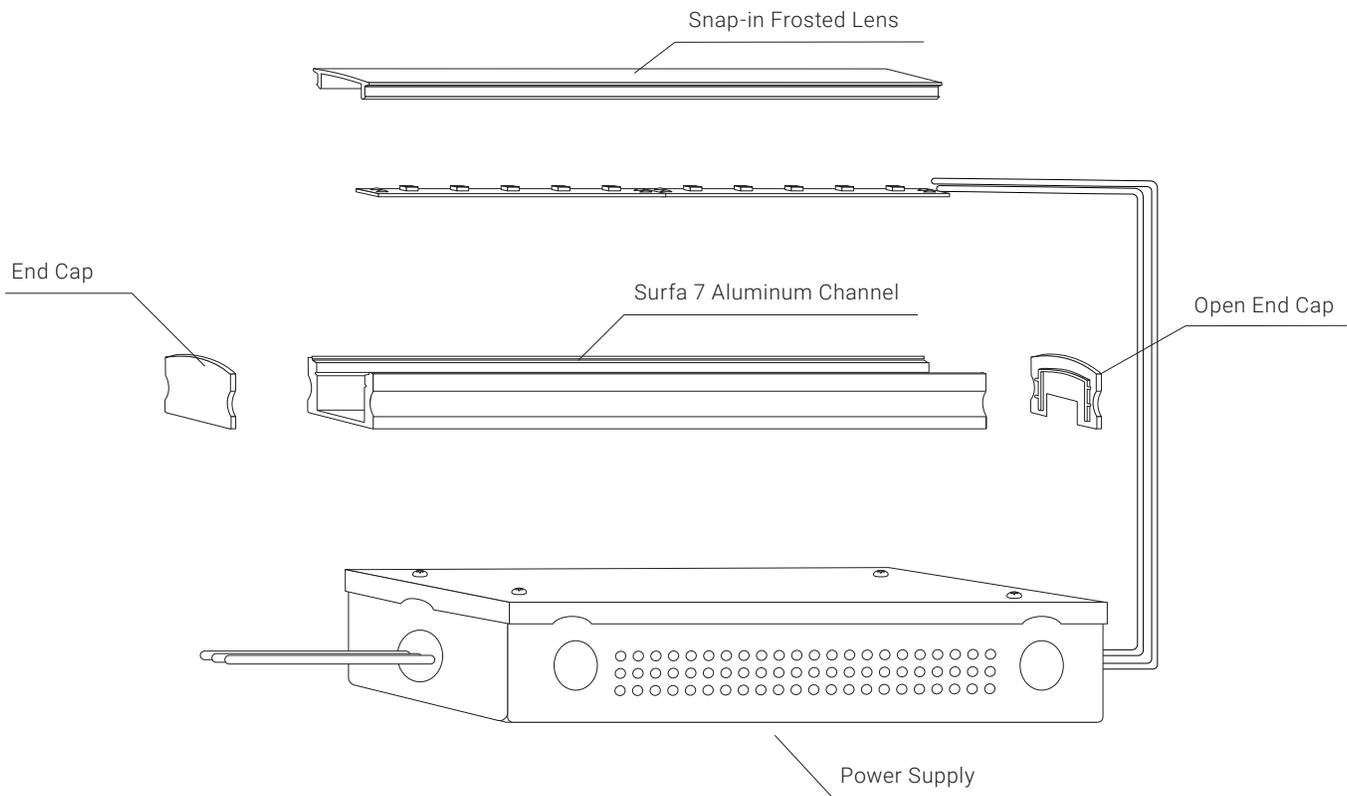
SURFA 7 AND TAPE LIGHT HOTSPOT AND COMPATIBILITY GUIDE

| Tape Light	Wire conn.	AmpChamp	Hotspot
PrimaLine® 1.5	S	Y	2
PrimaLine 1.5 XT	S		1
PrimaLine 2.5 COB		Y	0
PrimaLine 2.7 LP	S	Y	0
PrimaLine 3	S	Y	0
PrimaLine 3 XT	S		0
PrimaLine 4.4 Gen 2	S	Y	0
PrimaLine 4.4 XT Gen 2	S	Y	0
PrimaLine 5.5 LP	S	Y	0
PrimaLine 6.6 Gen 2			N/A
PrimaLine 7	S	Y	0
PrimaLine 8 Gen 2			N/A
Varien™ 5.5 Dim-to-Warm	S		0
Radialux® 2.2 RGB	S		1
Radialux 4.2 COB RGB			0
Radialux 4.4 RGB	S		2
Radialux 4.4 RGBW			N/A
Radialux 4.7 LP RGBW	S		0
Radialux 5.9 RGBW			N/A
Radialux 8.8 RGB			N/A
PrimaLine 1.5 Wet	Y		1
PrimaLine 1.5 XT Wet			N/A
PrimaLine 3 Wet	Y		0
PrimaLine 3 XT Wet			N/A
PrimaLine 4.4 XT Gen 2 Wet	Y*		0
Radialux 2.2 RGB Wet	Y*		3
Radialux 4.4 RGB Wet	Y*		1
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
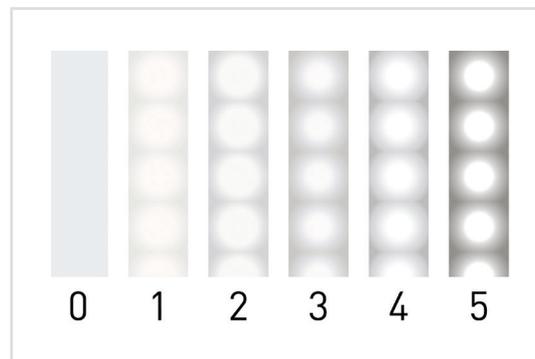
Compatibility Visual Key

Y   S   Y*

page 3 of 8

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v4

RECOMMENDED TAPE LIGHT (SOLD SEPARATELY)

Medium Output
PrimaLine 3 LED Tape Light

12V DC	Maximum Run = 16.4'				
16.4 ft. Spool	**50 ft. Spool**	**100 ft. Spool**	**Color Temperature***	**Lumens / Foot**	**CRI**
AL-01-02-1201	AL-01-02-1221	AL-01-02-1241	● 2700K	207	98
AL-01-02-1202	AL-01-02-1222	AL-01-02-1242	● 3000K	234	98
AL-01-02-1203	AL-01-02-1223	AL-01-02-1243	○ 4200K	240	97
AL-01-02-1204	AL-01-02-1224	AL-01-02-1244	● 5000K	244	96

24V DC	Maximum Run = 20'				
16.4 ft. Spool	**50 ft. Spool**	**100 ft. Spool**	**Color Temperature***	**Lumens / Foot**	**CRI**
AL-01-02-2400	AL-01-02-2420	AL-01-02-2440	● 2200K	170	95
AL-01-02-2401	AL-01-02-2421	AL-01-02-2441	● 2700K	207	98
AL-01-02-2402	AL-01-02-2422	AL-01-02-2442	● 3000K	234	98
AL-01-02-2403	AL-01-02-2423	AL-01-02-2443	○ 4200K	240	97
AL-01-02-2404	AL-01-02-2424	AL-01-02-2444	● 5000K	244	96
AL-01-02-2405	AL-01-02-2425	AL-01-02-2445	● 2400K	178	96

High Output
PrimaLine 4.4 XT Gen 2 LED Tape Light

24V DC	Maximum Run = 40'		Class 2 Maximum Run = 21'	
20 ft. Spool	**40 ft. Spool**	**Color Temperature***	**Lumens / Foot**	**CRI**
AL-01-16-2401	AL-01-16-2421	● 2700K	294	97
AL-01-16-2402	AL-01-16-2422	● 3000K	347	96
AL-01-16-2403	AL-01-16-2423	○ 4200K	361	97
AL-01-16-2404	AL-01-16-2424	● 5000K	379	95
AL-01-16-2408	AL-01-16-2428	● 3500K	333	98

page 4 of 8

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v4

ALLOYLED® Specifications

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.
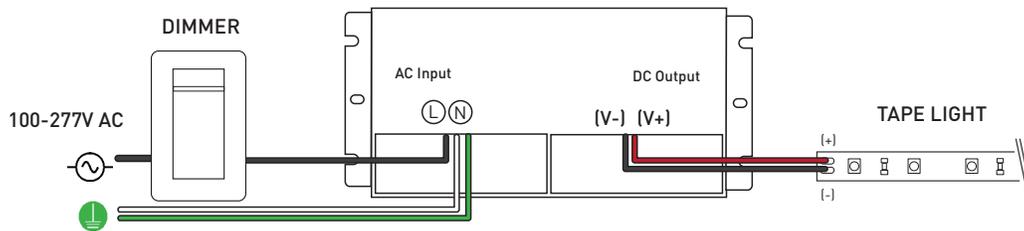
Knockout

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

Knockout

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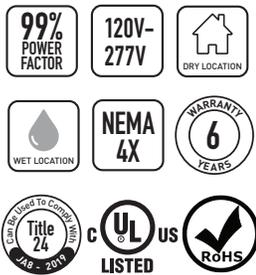
Single Tap Models

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.

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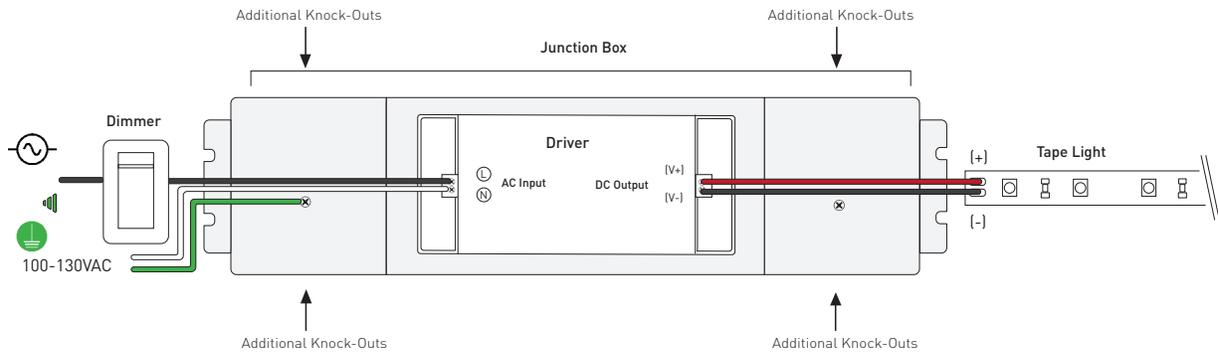
Wiring diagram is for reference ONLY. Please refer to dimmer wiring specifications sheet for accurate directions.

120V | **IP20** | DRY LOCATION
100% Maximum Load | **0%** Minimum Load | WARRANTY 5 YEARS

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.

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

ALLOYLED® Specifications

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.

SlimDim Wireless Dimmer

0.33 in. 3.0 in. 4.70 in.

SlimDim Wall Plate (Sold Seperately)
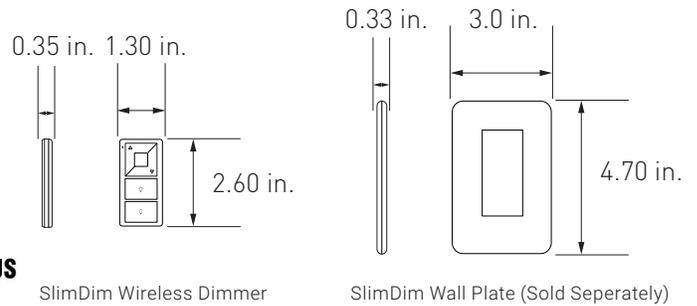
Remote Control Dimmer Switch

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

0.68 in. 2.17 in. 4.73 in.
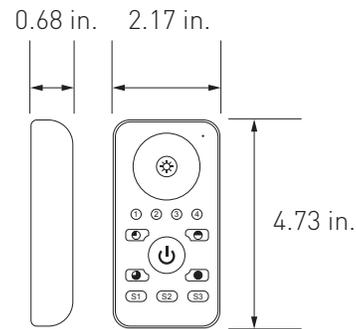
Single Channel Wireless Receiver

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

(-)

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v4