



LLRGBX18



LLRGBWX18



Features

LLRGBX18 Pixel SPI is a small profile and energy efficient pixel color-changing light strip. It is easily installed directly on to the mounting surface with double sided tape or within discrete mounting extrusions.

LLRGBX18 is a smart pixel controlled LED with a microcontroller every six LEDs resulting in a uniquely controlled pixel every 4". This advanced design allows for mind blowing animations such as cascading and chasing effects at the granular level.

Infinite RGB lighting possibilities are now achievable with ease when using the LineLED RGB X18 with SPI protocol pixel control.

Mounting

LED strip is equipped with 3M™ adhesive transfer tape (9472LE).

Applications

Indoor only - millwork, cove, architectural reveals, undercabinet, display case, handrail, accent lighting.

Approvals

Class 2 damp listed

Operating voltage

24 VDC

Average Life (L70)

50,000 hours

Warranty

7 years



Technical information

TYPE	LLRGBX18	LLRGBWX18
OUTPUT OPTIONS	SO	SO
Lumens Output (all channels full on)	169 lm/ft	256 lm/ft
Average Power Consumption (for a 4" section)	4.5 W/ft	5.7 W/ft
Efficacy	38 lm/W	45 lm/W
Cutting Increment	3.94"	
Pitch Length	0.66"	
Max Run Length (in series)	30 ft	20 ft
Dimensions	0.39" W x 0.09" H	
Control/Dimming Protocol	SPI Protocol UCS 2903	SPI Protocol UCS 2904

RGBW (3000K)

Tape	TM-30			
	CRI	R _f	R _g	R ₉
LLRGBWX18-SO	93	91	99	64

Dominant Wavelength

Color	RGB/RGBW
Red	621nm
Green	519nm
Blue	465nm

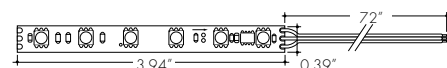
Ordering code

MODEL	OUTPUT	COLOR TEMPERATURE	SECTION START	SECTION END	LENGTH
LLRGBWX18-LineLED LLRGBWX18 LLRGBX18-LineLED LLRGBX18	SO-Standard	PXSPI-Smart Pixel Control (SPI)	SL-Soldered lead wires (72") LF-Female Quick Connect LM-Male Quick Connect NC-No Connector	SL-Soldered lead wires (72") LF-Female Quick Connect LM-Male Quick Connect NC-No Connector	Ordered in one foot increments. See chart above for max run length.

Section Start/End Options

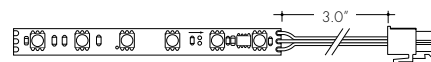
SL

Soldered lead wires (72")



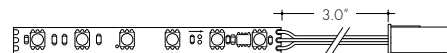
LF

Lead Female 3" cable



LM

Lead Male 3" cable



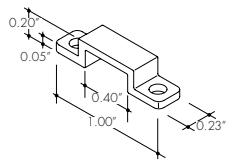
NC

No connector



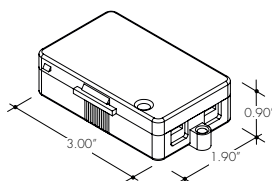
Accessories

CL1
Mounting clip

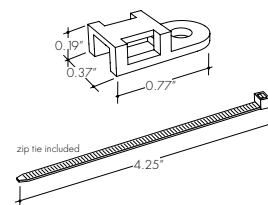


Recommended every 12" when LineLED strip is facing down

LVSP-4T-BK
Low Voltage, 4 Terminal Splice Box, Black



LL.ZIP
Strain relief clip



Lens Options / Light Transmission

C Clear	HF Half (50%) Frosted	GR Graze	F Frosted	FF Flat Frosted	R Raised	S Square Frosted	Q Round Square Frosted	13° 13° Semi-Frosted
BOS Channel (BOSC-XX) 	CLA Channel (CLAC-XX) 	MCAL Channel (MCALC-XX) 	K45V Channel (K45V-XX) 					
F 52% SI 66% R 60% G 76%	S 62% Q 65%	C 86%	C 82% HF 68% F 45% 13° 76%					
K45R Channel (K45R-XX) 	KiloR Channel (KILORC-XX) 	Kilo Channel (KILOC-XX) 	KL Channel (KLC-XX) 					
RF 61%	C 85% F 75%	C 85% F 75%	C 81% HF 67% F 51%					

Installation

All mounting channels are field cuttable using miter saw with circular blade suitable for cutting aluminum.

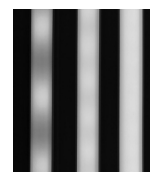
Ordering

Extrusions are sold separately. View respective specsheets for details on ordering extrusions and their accessories (endcaps, mounting brackets, etc).

Led Dotting per Extrusion

using the frosted lens option

Extrusion	LED Model LLRGBX18
KSC, KRSC	CD
KMC, KRMC, K45V	CD
KXLC, KRXLC	SD
KLC, KRLC	CD
KILOC, KILORC	SD
RO15	SD
BOSC	CD
CLAC	SD
MCAL	ND



CD SD ND
CD - Clear Dotting
SD - Slight Dotting
ND - No Dotting

Lens Options / Light Transmission



Clear



Half (50%)
Frosted



Graze



Frosted



Flat
Frosted



Raised



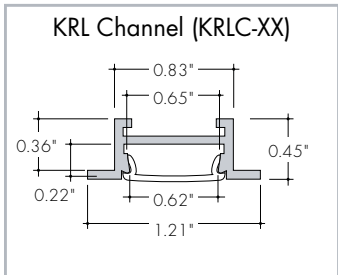
Square
Frosted



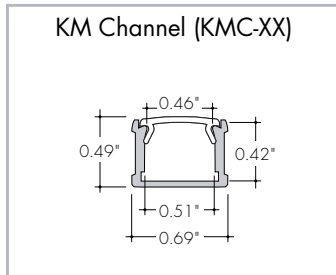
Round Square
Frosted



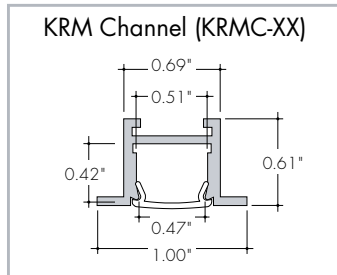
13°
Semi-Frosted



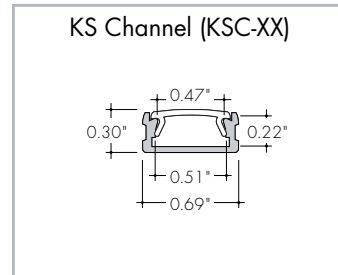
C **HF** **F**
81% 67% 51%



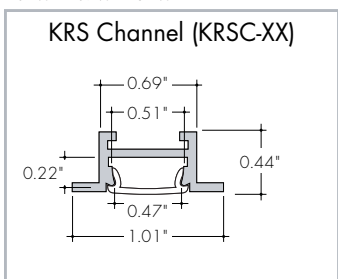
C **HF** **F** **FF** **R** **GR**
82% 68% 45% 52% 58% 56%



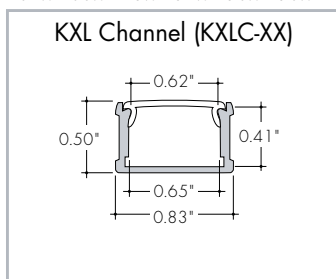
C **HF** **F** **FF** **GR**
82% 68% 45% 52% 56%



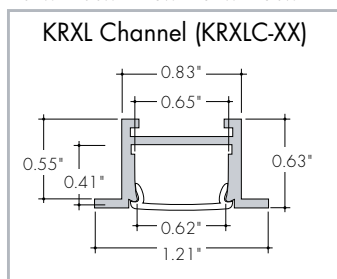
C **HF** **F** **FF** **R** **M**
86% 71% 56% 60% 64% 85%



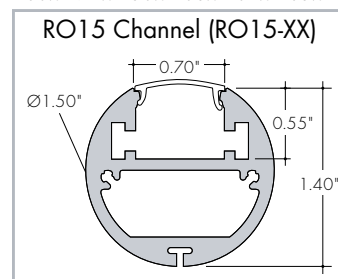
C **HF** **F** **FF** **M**
86% 71% 56% 60% 85%



C **HF** **F**
79% 66% 49%



C **HF** **F**
79% 66% 49%



C **F**
65% 41%

Installation

All mounting channels are field cuttable using miter saw with circular blade suitable for cutting aluminum.

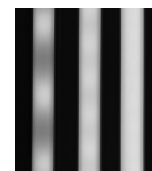
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RO15	SD
BOSC	CD
CLAC	SD
MCAL	ND



CD **SD** **ND**
CD - Clear Dotting
SD - Slight Dotting
ND - No Dotting

Power Consumption

Tested at full power with PDC Series power supplies.

Nominal Length	LLRGBX18		LLRGBWX18	
	W/ft	Total Wattage	W/ft	Total Wattage
1	4.6	4.6	5.7	5.7
2	4.6	9.1	5.7	11.3
3	4.5	13.1	5.7	16.5
4	4.5	17.4	5.6	21.9
5	4.4	21.7	5.5	27.1
6	4.4	25.8	5.5	32.3
7	4.3	29.8	5.4	37.1
8	4.3	33.4	5.3	41.6
9	4.2	37.2	5.3	46.4
10	4.2	40.9	5.2	51.2
11	4.1	45.7	5.1	57.4
12	4.0	49.2	5.1	61.9
13	4.0	52.3	5.0	66.0
14	3.9	55.6	4.9	69.6
15	3.9	58.8	4.8	73.0
16	3.8	61.8	4.7	76.2
17	3.7	64.0	4.6	78.4
18	3.7	66.8	4.5	81.2
19	3.7	69.4	4.4	83.6
20	3.6	72.0	4.3	86.0
21	3.6	74.6		
22	3.5	75.9		
23	3.4	78.2		
24	3.4	80.2		
25	3.3	82.3		
26	3.3	84.3		
27	3.2	85.0		
28	3.1	86.7		
29	3.1	88.2		
30	3.0	89.7		

Voltage Drop Calculator

The below chart assumes nominal voltage of 24 Volts and a Voltage Drop Allowance of 3% through the wire

Wattage [W]	Maximum Wire Length From Power Supply to Start of Run [ft]						
	12 AWG	14 AWG	16 AWG	18 AWG	20 AWG	22 AWG	24 AWG
5	1088.2	684.4	430.3	270.6	170.2	107.1	67.3
10	544.1	342.2	215.1	135.3	85.1	53.5	33.7
15	362.7	228.1	143.4	90.2	56.7	35.7	22.4
20	272.0	171.1	107.6	67.7	42.6	26.8	16.8
25	217.6	136.9	86.1	54.1	34.0	21.4	13.5
30	181.4	114.1	71.7	45.1	28.4	17.8	11.2
35	155.5	97.8	61.5	38.7	24.3	15.3	9.6
40	136.0	85.5	53.8	33.8	21.3	13.4	8.4
45	120.9	76.0	47.8	30.1	18.9	11.9	7.5
50	108.8	68.4	43.0	27.1	17.0	10.7	6.7
55	98.9	62.2	39.1	24.6	15.5	9.7	6.1
60	90.7	57.0	35.9	22.6	14.2	8.9	5.6
65	83.7	52.6	33.1	20.8	13.1	8.2	5.2
70	77.7	48.9	30.7	19.3	12.2	7.6	4.8
75	72.5	45.6	28.7	18.0	11.3	7.1	4.5
80	68.0	42.8	26.9	16.9	10.6	6.7	4.2
85	64.0	40.3	25.3	15.9	10.0	6.3	4.0
90	60.5	38.0	23.9	15.0	9.5	5.9	3.7
96	56.7	35.6	22.4	14.1	8.9	5.6	3.5

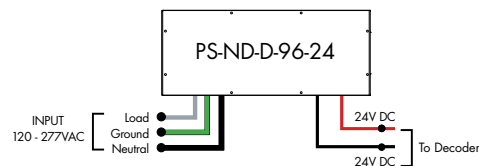
Power Supplies

See fixture and power supply instructions & spec sheet for wiring information. Dimming possible in select models - view Luminii website for list of compatible dimmers.

Ordering Code Non-Dimming Power Supply 120VAC - 277VAC Requires Controller and Decoder

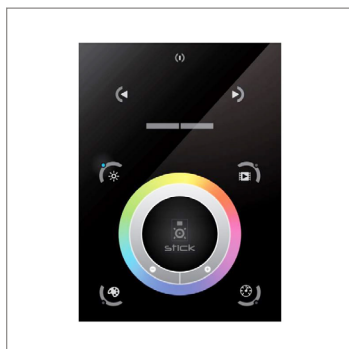
MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT
PS-Power Supply, 120-277VAC	ND-Non Dimming	D-Dry	96-96 Watts	24 - 24 VDC

MODELS	96W
Length	14.40"
Width	5.20"
Depth	2.60"



Touch DMX Controller

Touchscreen digital LED controller



MODEL

TSDMX-E

TSDMX-E - Touchscreen DMX controller

Programmable advanced DMX512 lighting controller featuring a touch-screen interface. Operates as stand alone controller or integrated with most architectural lighting control systems. Can controller endless DMX512 enabled devices.

Mounts to standard single or dual gang wall box with the included power supply inside the junction box. Terminal block design for power and data connections.

Features

- Sleek glass design which sits 0.43" from the wall
- Graphical color display to show selected environment
- Color/dimmer/speed palette
- Color temperature mixing
- Touch sensitive buttons. No mechanical parts
- Touch sensitive wheel allows for accurate color selection
- Multi-zone microSD memory
- Multi-room control with 500 scenes, 10 zones
- 1024 DMX channels. Control 340 RGB fixtures
- USB & Ethernet connectivity for programming and control

Power Supply

7 VDC (included)

Programmability

PC, Mac, Tablet, Smartphone

Output Signal

DMX512 (1024 channels)

Color Parameters

- Brightness
- Saturation
- Speed of color changing sequence
- Fading / dimming / brightness

Smart Pixel Decoder

SPI signal to DMX signal decoder



ORDERING CODE

MODEL

SR-DMX-SPI

SR-DMX-SPI - Smart Pixel Decoder

The SR-DMX-SPI is a smart LED pixel decoder that controls RGB/RGBW pixel LED strips with SPI signal. Designed with an OLED backlit panel, the pixel controller allows for easy configuration of most settings. Four push buttons are available for control of the LED functions.

*For pixel only.

Features

- 2 in 1 in-Wall Controller: DMX Control or Wireless RGB-W
- SPI signal output for RGB/RGBW pixel light control
- DMX512 controllable and RF/WIFI remote controllable
- Capable of addressing up to 1020 RGB pixels & 765 RGBW pixels
- OLED panel allows for easy configuration

Operating Voltage

12 - 36V DC

Power capacity

up to 96W at 24V

Operating temperature range

from -4°F to +122°F in case