RGB

Features

LLRGB42 is a small profile, bright, color-changing LED strip. Increased pitch provides more continuous light, while a High Output option offers incredible brightness. Luminii attention to color quality provides balanced output across the color gamut, allowing production of millions of beautiful colors.

Mounting
LLED 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

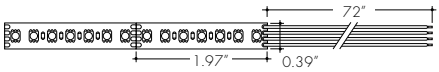
TYPE	LLRGB42	
OUTPUT OPTIONS	**SO**	**HO**
Lumens Output (all channels full on)	210 lm/ft	309 lm/ft
Average Power Consumption (for a 4' section)	4.5 W/ft	8.3 W/ft
Cutting Increment (in)	1.97"	
Pitch Length	0.28"	
Efficacy	47 lm/W	37 lm/W
Max Run Length (in series)	28 ft	13 ft
Dimensions	0.39" W x 0.07" H	
Ambient Operating Temperature Range*	-5°F – 125°F (-20°C – 50°C)	-5°F – 85°F (-20°C – 35°C)

*Ambient Operating Temperature Range to maintain L70 of 50K+ hours in normal conditions. Exceeding Ambient Operating Temperature Range may result in decreased life/output. Consult Technical Support for specific inquires.

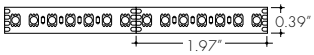
Dominant Wavelength		RGB42SO	RGB42HO
Red	620nm	49 lm/ft	97 lm/ft
Green	525nm	141 lm/ft	245 lm/ft
Blue	467nm	32 lm/ft	61 lm/ft

Section Start/End Options

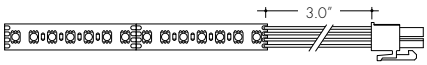
SL
Soldered lead wires (72")



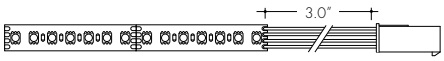
NC
No connector



LF
Lead Female 3" cable



LM
Lead Male 3" cable

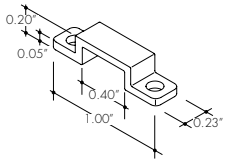


Ordering Code

MODEL	OUTPUT	SECTION START	SECTION END	LENGTH
LLRGB42 - Line LED LLRGB42	SO - Standard HO - High	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.

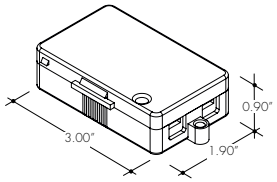
Accessories

CL1
Mounting clip

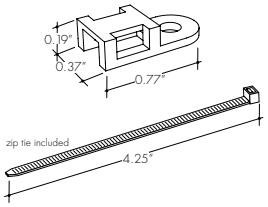


Recommended every 12" when LineLED strip is facing down

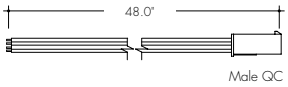
LVSP-4T-BK
Low Voltage, 4 Terminal Splice Box, Black, IP20



LL.ZIP
Cable/Wire Strain Relief Clip

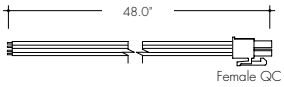


MOLEX-CON-LEAD-M-4-48
Molex Male Connector Cable, 4 pin, 48"



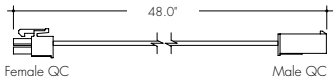
For power supply connection, not intended to be soldered to LED strip

MOLEX-CON-LEAD-F-4-48
Molex Female Connector Cable, 4 pin, 48"



For power supply connection, not intended to be soldered to LED strip

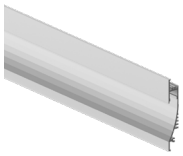
MOLEX-JC-F-M-4-48
Female/Male Jumper Cable, 4 pin, 48"

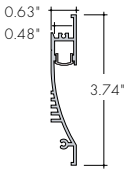


For connecting LED strips in series

Lens Options / Light Transmission

WALL+ CHANNEL -WPC
(Link to Web)

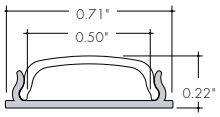




Lens	Round Frosted
Transmission %	65%
Dotting*	CD

*At 100% brightness

KLB CHANNEL -KLBC
(Link to Web)

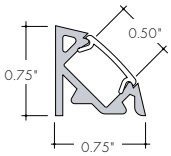


Lens	Round Frosted
Transmission %	57%
Dotting*	CD

*At 100% brightness

NOT Compatible with
- HO output

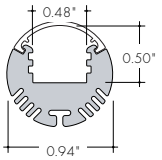
K45V CHANNEL -K45VC
(Link to Web)



Lens	Clear	Half Frosted	Frosted	Flat Frosted	13° Semi-Frosted
Transmission %	82%	65%	51%	47%	76%
Dotting*	CD	CD	ND	ND	CD

*At 100% brightness

RO CHANNEL -ROC
(Link to Web)

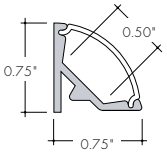


Lens	Clear	Frosted
Transmission %	86%	67%
Dotting*	CD	ND

*At 100% brightness

NOT Compatible with
- HO output

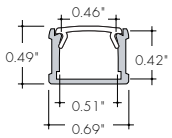
K45R CHANNEL -K45RC
(Link to Web)



Lens	Round Frosted
Transmission %	65%
Dotting*	ND

*At 100% brightness

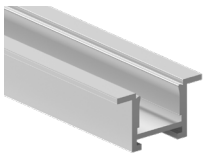
KM CHANNEL -KMC
(Link to Web)

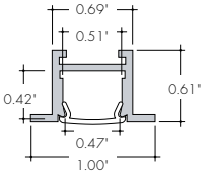


Lens	Clear	Half Frosted	Frosted	Flat Frosted	Raised	Narrow Beam Grazer
Transmission %	82%	65%	51%	47%	58%	56%
Dotting*	CD	CD	ND	ND	ND	CD

*At 100% brightness

KRM CHANNEL -KRMC
(Link to Web)

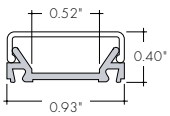




Lens	Clear	Half Frosted	Frosted	Flat Frosted	Narrow Beam Grazer
Transmission %	82%	65%	51%	47%	56%
Dotting*	CD	CD	ND	ND	CD

*At 100% brightness

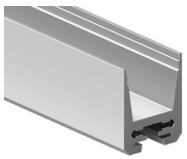
BAR CHANNEL -BARC
(Link to Web)

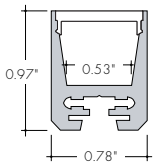


Lens	Frosted	Narrow Beam	Medium	Batwing	Asymmetric
Transmission %	65%	63%	56%	74%	56%
Dotting*	CD	CD	CD	CD	CD

*At 100% brightness

ALS20 CHANNEL -ALS20C
(Link to Web)



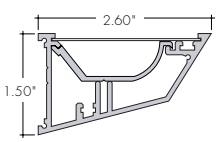


Lens	Clear	Frosted
Transmission %	54%	49%
Dotting*	CD	ND

*At 100% brightness

NOT Compatible with
- HO output

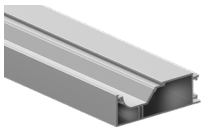
MCAL CHANNEL -MCALC
(Link to Web)

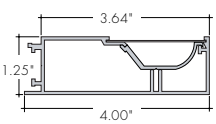


Lens	Long Throw	Tall Throw
Transmission %	91%	91%
Dotting*	CD	CD

*At 100% brightness

MREC CHANNEL -MRECC
(Link to Web)



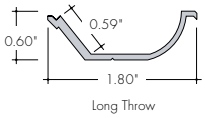


Lens	Long Throw	Tall Throw
Transmission %	91%	91%
Dotting*	CD	CD

*At 100% brightness

Lens Options / Light Transmission

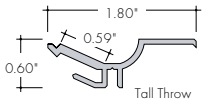
CLT CHANNEL -CLTC
(Link to Web)



Lens	No Lens
Transmission %	100%
Dotting*	CD

*At 100% brightness

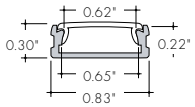
CTT CHANNEL -CTTC
(Link to Web)



Lens	No Lens
Transmission %	100%
Dotting*	CD

*At 100% brightness

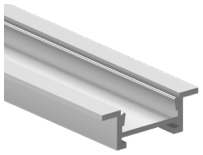
KL CHANNEL -KLC
(Link to Web)

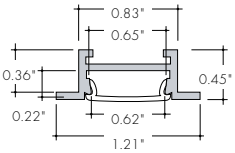


Lens	Clear	Half Frosted	Frosted
Transmission %	90%	75%	60%
Dotting*	CD	CD	CD

*At 100% brightness

KRL CHANNEL -KRLC
(Link to Web)

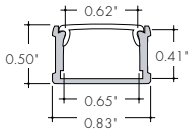




Lens	Clear	Half Frosted	Frosted
Transmission %	90%	75%	60%
Dotting*	CD	CD	CD

*At 100% brightness

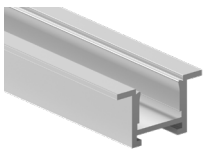
KXL CHANNEL -KXLC
(Link to Web)

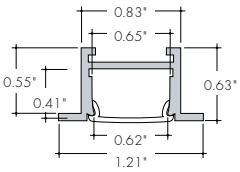


Lens	Clear	Half Frosted	Frosted
Transmission %	86%	69%	54%
Dotting*	CD	CD	ND

*At 100% brightness

KRXL CHANNEL -KRXLC
(Link to Web)

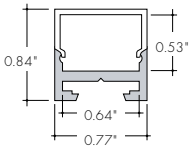




Lens	Clear	Half Frosted	Frosted
Transmission %	86%	69%	54%
Dotting*	CD	CD	ND

*At 100% brightness

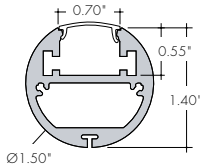
CLA CHANNEL -CLAC
(Link to Web)



Lens	Rounded Square Frosted	Square Frosted
Transmission %	62%	65%
Dotting*	ND	ND

*At 100% brightness

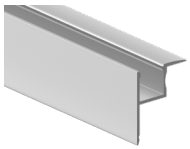
RO15 CHANNEL -RO15C
(Link to Web)

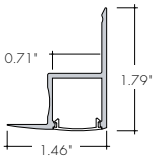


Lens	Clear	Frosted
Transmission %	76%	50%
Dotting*	CD	ND

*At 100% brightness

ALE CHANNEL -ALEC
(Link to Web)

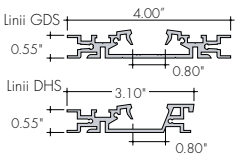




Lens	Clear	Frosted
Transmission %	58%	37%
Dotting*	CD	ND

*At 100% brightness

LIN CHANNEL -LINC
(Link to Web)

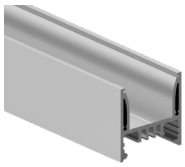


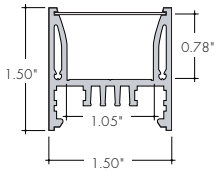
Lens	Frosted	Frosted Silicone	No Lens
Transmission %	48%	56%	82%
Dotting*	ND	ND	CD

*At 100% brightness

Lens Options / Light Transmission

KILO CHANNEL -KILOC
(Link to Web)

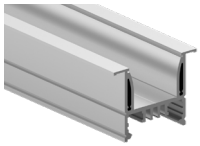


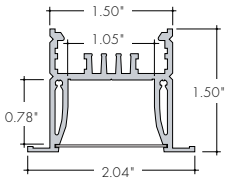


Lens	Clear	Frosted	No Lens
Transmission %	85%	75%	90%
Dotting*	CD	ND	CD

*At 100% brightness

KILOR CHANNEL -KILORC
(Link to Web)

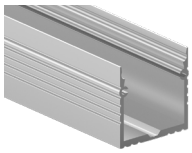


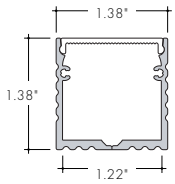


Lens	Clear	Frosted	No Lens
Transmission %	85%	75%	90%
Dotting*	CD	ND	CD

*At 100% brightness

PLA CHANNEL -PLAC
(Link to Web)

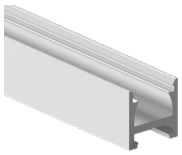


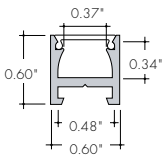


Lens	Clear	Frosted
Transmission %	56%	34%
Dotting*	CD	ND

*At 100% brightness

BOS CHANNEL -BOSC
(Link to Web)

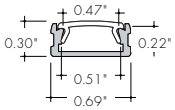




Lens	Frosted	Raised	Graze	Satin Ice
Transmission %	52%	57%	76%	71%
Dotting*	ND	ND	CD	CD

*At 100% brightness

KS CHANNEL -KSC
(Link to Web)

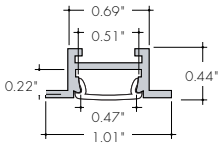


Lens	Clear	Half Frosted	Frosted	Flat Frosted	Raised	Medium
Transmission %	90%	71%	56%	56%	64%	85%
Dotting*	CD	CD	CD	CD	ND	CD

*At 100% brightness

NOT Compatible with
- HO output

KRS CHANNEL -KRSC
(Link to Web)



Lens	Clear	Half Frosted	Frosted	Flat Frosted
Transmission %	90%	71%	56%	56%
Dotting*	CD	CD	CD	CD

*At 100% brightness

NOT Compatible with
- HO output

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 Reference

Use complete Dotting Chart Tool online for more dotting information

Dotting Chart Tool

I'm also click-able

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

Power Consumption

Tested at full power with PDC Series power supplies.

	LLRGB42			
	SO		HO	
Nominal Length	W/ft	Total wattage	W/ft	Total wattage
1	4.4	4.4	8.6	8.6
2	4.5	8.9	8.3	16.6
3	4.4	13.0	8.3	24.2
4	4.5	17.5	8.3	32.7
5	4.4	21.7	8.1	39.8
6	4.4	26.9	8.1	49.0
7	4.3	30.7	7.9	56.2
8	4.3	34.7	7.8	62.2
9	4.3	38.6	7.7	69.7
10	4.3	42.6	7.5	74.9
11	4.2	46.3	7.0	77.4
12	4.1	49.3	6.8	81.7
13	4.1	53.6	6.5	84.2
14	4.1	56.6		
15	4.0	59.7		
16	4.0	63.6		
17	3.9	66.9		
18	3.8	69.5		
19	3.8	71.4		
20	3.7	73.6		
21	3.5	73.5		
22	3.4	75.9		
23	3.3	76.8		
24	3.3	77.8		
25	3.2	78.8		
26	3.1	80.6		
27	3.0	81.4		
28	3.0	84.3		

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.

For use with RGB/RGBW

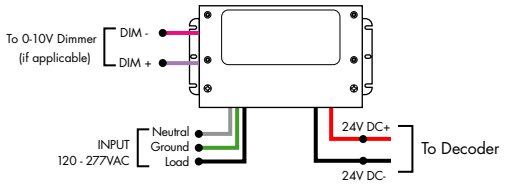
Ordering Code - Universal Dimming Power Supplies 0.1% 120VAC - 277VAC

MODEL		INPUT CONTROL		WATTAGE		OUTPUT
	–		–		–	
PS - Power Supply, 120-277VAC		UNI - 0-10V Dimming (0.1%), Phase Dimming (0.1%)		30 - 30 Watts 60 - 60 Watts 96 - 96 Watts 3x96 - 3x96 Watts		24 - 24 VDC

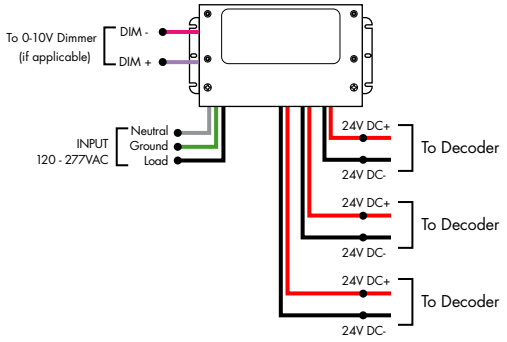
MODELS	PS-UNI-30W	PS-UNI-60W	PS-UNI-96W	PS-UNI-3X96W
Length	6.50"	7.40"	8.66"	11.85"
Width	3.73"	3.73"	3.73"	4.32"
Depth	1.61"	1.61"	1.61"	1.81"

REQUIRES A CONTROLLER AND A DECODER TO WORK PROPERLY

PS-UNI-30/60/96



PS-UNI-3X96



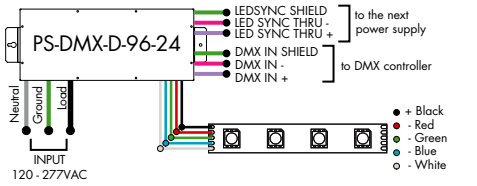
For use with RGB/RGBW

Ordering Code - DMX Dimming Power Supplies 0.1% 120VAC - 277VAC

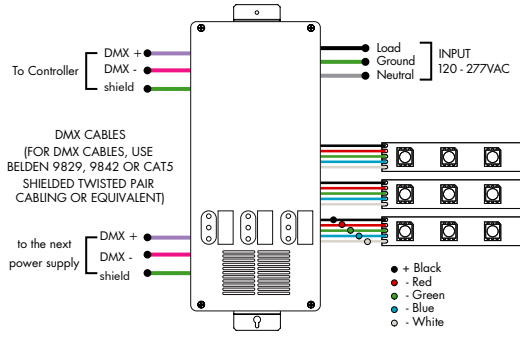
MODEL		INPUT CONTROL		ENVIRONMENT		WATTAGE		OUTPUT
	-		-		-		-	
PS - Power Supply, 120-277VAC		DMX - DMX (0.1%)		D - Dry		96 - 96 Watts 3X96 - 3X96 Watts		24 - 24 VDC

MODELS	96W	3X96
Length	14.40"	15.00"
Width	5.20"	6.62"
Depth	2.60"	4.56"

DMX CABLES
(FOR DMX CABLES, USE BELDEN 9829, 9842 OR CAT5 SHIELDED TWISTED PAIR CABLING OR EQUIVALENT)



PS-DMX-D-3X96-24

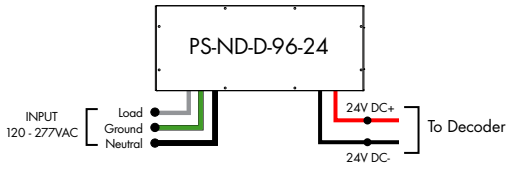


For use with RGB/RGBW/Pixel

Ordering Code - Non-Dimming Power Supply 120VAC - 277VAC

MODEL		INPUT CONTROL		ENVIRONMENT		WATTAGE		OUTPUT
	-		-		-		-	
PS - PSV Series		ND - Non Dimming		D - Dry		96 - 96 Watts		24 - 24 VDC

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



REQUIRES A CONTROLLER AND A DECODER TO WORK PROPERLY

Controllers and Decoders

For use with Tunable White, RGB/RGBW Power Supplies

Translates controller DMX512 programs for RGB and white LED strips.

Unique DMX address for the decoder can be set easily and displayed by the numeric display on the case. Changing and resetting the DMX address requires manual input.

Use power repeater to expand output.

Operating Voltage

12-36 VDC

Power Capacity

up to 96W at 24V

Operating Temperature Range

from -4°F to +122°F in case

ORDERING CODE

MODEL

DDMX-RGBW

DDMX-RGBW - DMX decoder

The RGBW receiver is easily paired with controller by the click of a button. Receiver can be reset to factory settings at any time.

Each receiver can store one static RGB color, one color sequence, and one brightness setting for the white LED strip. Receivers assigned to the same scene within the same zone will have the same LED static color and color sequence.

Operating Voltage

12-36 VDC

Power Capacity

up to 96W at 24V

Operating Temperature Range

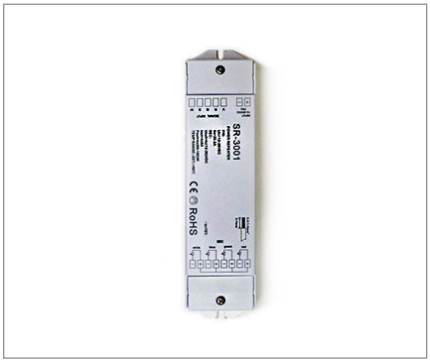
from -4°F to +122°F in case

ORDERING CODE

MODEL

RGBW-RC-R

RGBW-RC-R - RGBW receiver



Extends identical signal when connected in series to an RGBW LED control system. The RGBW signal repeater works with Luminii RGB and RGBW controllers, receivers, and decoders.

RGBW signal can be extended indefinitely when adequate power supply (not included) is connected to the system.

Operating Voltage

12-36 VDC

Power Capacity

up to 96W at 24V

Operating Temperature Range

from -4°F to +122°F in case

ORDERING CODE

MODEL

RGBW-SR

RGBW-SR - RGBW signal repeater

Controllers and Decoders

For use with RGB/RGBW Power Supplies

ORDERING CODE

MODEL

RGBW-MC3

RGBW-MC3 - 4-zone RGBW controller

Easy to operate wireless interface suitable for static or color changing scenes. Control 4 different color zones separately or at the same time. RGBW receiver (RGBW-RC-R) required for operation. Assign multiple receivers per zone to cover a large area.

Color wheel enables highly stable and sensitive color control functionality. Create your own color changing sequences with ease and flexibility.

Power

qty 3 AAA batteries

Scenes

up to 4 unique zones

Signal

Wireless (RF)

Energy Saving

Deactivates after 10 seconds of inactivity

Color Parameters

- Brightness
- Saturation
- Primary colors
- Speed of color changing sequence
- Fading

ORDERING CODE

MODEL		ZONES		COLOR
	-		-	

DMX - DMX Controller

3Z - Three Zone
1Z - One Zone

RGBW - Red,Green, Blue,& White

DMX /Wireless RGB-W wall-mount controller controls DMX lighting fixtures, wireless control of RGB-W lighting fixture or use both simultaneously. Fits in any standard US switch box. Includes all the outputs in the back of the controller.

Control brightness levels with a single touch, personalize and memorize 3 different scenes, and even create 3 variations of white.

Features

- 2 in 1 in-Wall Controller: DMX Control or Wireless RGB-W
- 65,000 Color Options, Dimming and Speed Control
- Memory Function
- 50 Foot Wireless Range
- Easily Fits Standard US Switch Boxes
- Touch Sensitive Glass Surface
- Includes 10 Built in Programs, or Create and Play Your Own

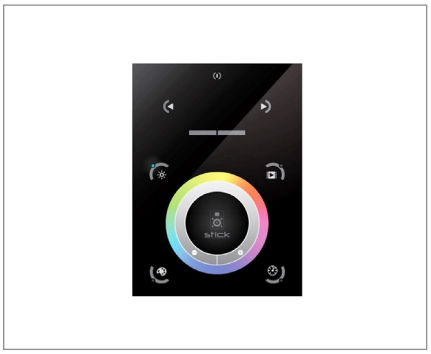
Operating Voltage

12 - 24V DC

Color Parameters

- Brightness
- Saturation
- Primary colors
- Fading
- Color changing speed

For use with Tunable White, RGB/RGBW, Pixel Power Supplies



ORDERING CODE

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

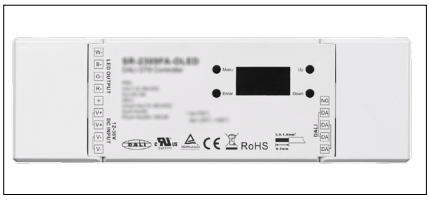
DMX512 (1024 channels)

Color Parameters

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

Controllers and Decoders

For use with Tunable White, RGB/RGBW Power Supplies



ORDERING CODE

MODEL

DALI2-DT8-RGBW

DALI2-DT8-RGBW - DALI-2 RGBW Decoder

A 4-channel DALI2 DT8 decoder designed to control RGB, RGBW, and TW LED fixtures, featuring adjustable color temperature and customizable lumen output.

Voltage/Frequency
12-36VDC

Max Output Power
4 output channels, 60-180W each

Max Output Current
4 output channels, max of 5A each

Ambient Operating Temperature Range
-20 to 50°C

Environment
Dry (IP20)

ORDERING CODE

MODEL

DDMX-5CH-RDM-PRO

DDMX-5CH-RDM-PRO - DMX512 Decoder

DMX512 decoder with RDM functionality features 5 PWM output channels with common anode. High PWM output frequency range allows the product to be used in HD video conferencing spaces.
All DMX products to be installed per DMX512 Standard.

Power
96 Watt

Inputs
RJ45, XLR-5Pin, Terminal Block

DMX Channels
1 to 5 settable

PWM Output Resolution Ratio
8 or 16 bit

PWM Output Frequency
500Hz - 30KHz

Output Dimming Curve Gamma Value
0.1 ~ 9.9

ORDERING CODE

MODEL

RGBW-WI-R

RGBW-WI-R - WIFI generator

RGBW-WI-R creates a local network that enables any electronic device (phone, tablet, etc.) to control the RGB/W strip connected to a RGBW-RC-R receiver.

The control functions are achieved through a free application download for Android and iOS devices called REALCOLOR.

Operating Voltage
12-36 VDC

Power Supply
PI-130-24 (included)

Operating Temperature Range
from -4°F to +122°F in case