

# Plexineon Catenary Mount

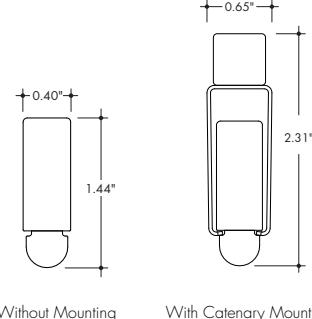
RGB, RGBW and RGBW Pixel



ilight  
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- For interior and exterior accent lighting
- Neon look providing a clear line of light visible for miles
- Includes Turnbuckles, Mounting Frame, Mounting Clips, and other hardware necessary to assemble to Catenary Cable
- Catenary Cable, Poles, Cable Eyes, and other Cable support hardware by others
- Operating Temperature: -40° F to 140° F (-40° C to 60° C)
- 24VDC Class 2
- IK10 and 3G rated
- IP67 rated
- 3 year warranty outdoor



## Technical Information

MODEL	Plexineon RGB	Plexineon RGBW	Plexineon Pixel RGBW
<b>OUTPUT OPTIONS</b>			
Lumens Output (all channels full on)	72 lm/ft	110 lm/ft	84 lm/ft
Average Power Consumption (for a 4' section)	4.1 W/ft	5.4 W/ft	5.7 W/ft
Efficacy	17.5 lm/W	20.3 lm/W	14.7 lm/W
Order Increment	1.97"	3.94"	3.94"
Max Run Length (in series)	32 ft	17 ft	16 ft
SPI Protocol	N/A	N/A	UCS 2904
DMX Addresses Occupied	N/A	N/A	4-channels per pixel

RGBW (3000K)			
Model	CRI	R <sub>f</sub>	R <sub>g</sub>
RGBW	85	84	98
RGBW-PXSPI	85	84	98

Dominant Wavelength	
Color	RGB
Red	622nm
Green	525nm
Blue	468nm

## Ordering Code

MODEL	RUN LENGTH <sup>2</sup>	BEND	CCT	OUTPUT	LENS	MOUNTING	FINISH	POWERFEED POSITION/TYPE
PX-Plexineon <sup>1</sup>	Run length in inches, 3" (RGB) and 5" (RGBW/PIXEL) min, no max run length	SR-Straight Run EB-Factory Bend, Side/Easy Bend <sup>3</sup>	RGB-RGB RGBW-RGBW (3000K) RGBW-PXSPI-RGBW Pixel Control (3000K)	SO-Standard	F-Frosted	CD-Catenary Mount, Decorative Clips <sup>4</sup>	GG-Gloss Grey BK-Matte Black GY-Matte Grey WH-Matte White	B-4-Plug Quick Connect one end, Receptacle Quick Connect other end

1. Standard lead time 8 weeks.

2. RGB is available in 2" (1.97") order increments. RGBW and Pixel RGBW are available in 4" (3.94"), +/- 1/2" tolerance. Run Lengths over 96" (8ft) will be made of equal sections no longer than 96".

3. Factory Bends require an Image or Drawing input at time of Quote to calculate total linear/arc length.

4. Catenary Mount fixtures include a fixture mounting frame and all mounting components necessary to attach to Catenary Cable (by others). Decorative mounting clips included approximately every 18" of linear/arc length and match the fixture finish.

Factory Bends require a Custom Drawing submittal at time of Order. Allow 2 weeks (typical) for Custom Drawing generation/confirmation process.

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## Finish Options

**BK**  
Matte Black Finish



**WH**  
Matte White Finish



**GY**  
Matte Grey Finish



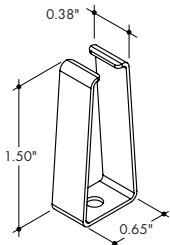
**GG**  
Gloss Grey Finish



## Mounting Components

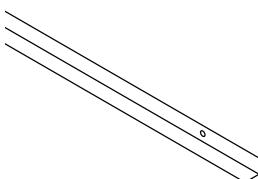
**CD**

Catenary Mount, Decorative Clip



Thinner clip with finish options to match fixtures

Mounting Frame



Mounting clips are riveted at the factory to the Mounting Frame. Finish matches Ordering Code Finish selected

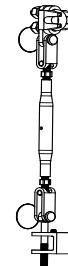
Mounting Frame Joiner



Assembles Mounting Frame together for runs over 96" (8ft)

**80-HSH01-000-XX**

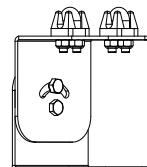
Horizontal Catenary Strut Hanger



Able to adjust up to 2.5" vertically

**35-CVC-003-XX**

Vertical Catenary Collar Assembly



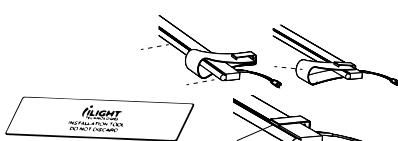
Able to adjust up to 2.5" vertically

<b>0X</b>	<b>Clip Finish</b>
<b>01</b>	Matte Black
<b>02</b>	Matte Grey
<b>03</b>	Matte White

## Additional Material

**70-TOL02-001-01**

Mounting Clip Installation Tool



Use for installation of Plexineon into Mounting Clips

# Plexineon Catenary Mount

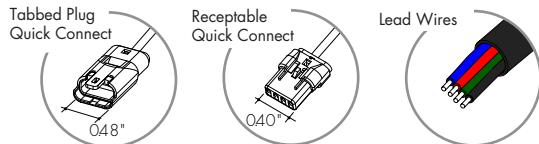
RGB, RGBW and RGBW Pixel

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## Powerfeed and Connectors

- Quick Connectors with 6" flying leads are included in the Plexineon runs per CCT option selected. Order extras as desired.
- Pixel data direction travels from Plug to Receptacle

### For use with RGB



#### 60-SJ-C4-0001-01

iLight TABBED PLUG Quick Connect with 6" flying leads, 4-conductor, Black

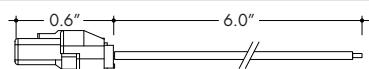


Also available with longer Flying Leads

**60-SJ-C4-0003-01** 120" flying leads

#### 60-SJ-C4-0002-01

iLight RECEPTABLE Quick Connect with 6" flying leads, 4-conductor, Black

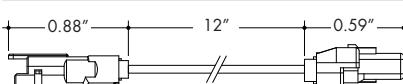


Also available with longer Flying Leads

**60-SJ-C4-0004-01** 120" flying leads

#### 60-SJ-C4-JMP-12-01

iLight Plug-Receptacle Quick Connect 12" Jumper, 4-conductor, Black silicone jacket

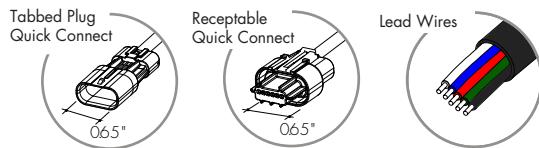


Also available with longer wires

**60-SJ-C4-JMP-48-01** 48" jumper

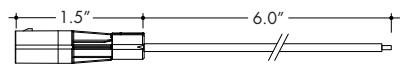
**60-SJ-C4-JMP-120-01** 120" jumper

### For use with RGBW



#### 60-SJ-C5-0001-01

iLight TABBED PLUG Quick Connect with 6" flying leads, 5-conductor, Black

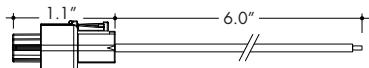


Also available with longer Flying Leads

**60-SJ-C5-0003-01** 120" flying leads

#### 60-SJ-C5-0002-01

iLight RECEPTABLE Quick Connect with 6" flying leads, 5-conductor, Black

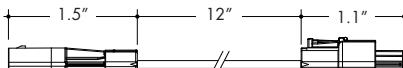


Also available with longer Flying Leads

**60-SJ-C5-0004-01** 120" flying leads

#### 60-SJ-C5-JMP-12-01

iLight Plug-Receptacle Quick Connect 12" Jumper, 5-conductor, Black silicone jacket

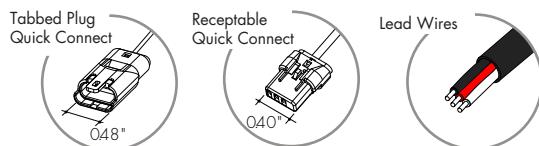


Also available with longer wires

**60-SJ-C5-JMP-48-01** 48" jumper

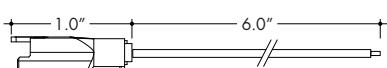
**60-SJ-C5-JMP-120-01** 120" jumper

### For use with Pixel



#### 60-SJ-C3-0001-01

iLight TABBED PLUG Quick Connect with 6" flying leads, 3-conductor, Black



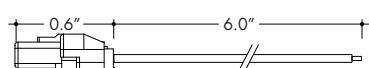
Also available with longer Flying Leads

**60-SJ-C3-0005-01** 384" flying leads

**60-SJ-C3-0007-01** 120" flying leads

#### 60-SJ-C3-0002-01

iLight RECEPTABLE Quick Connect with 6" flying leads, 3-conductor, Black



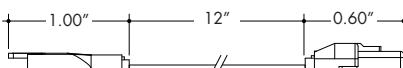
Also available with longer Flying Leads

**60-SJ-C3-0006-01** 384" flying leads

**60-SJ-C3-0008-01** 120" flying leads

#### 60-SJ-C3-JMP-12-01

iLight Plug-Receptacle Quick Connect 12" Jumper, 3-conductor, Black silicone jacket



Also available with longer wires

**60-SJ-C3-JMP-48-01** 48" jumper

**60-SJ-C3-JMP-120-01** 120" jumper

# Plexineon Catenary Mount

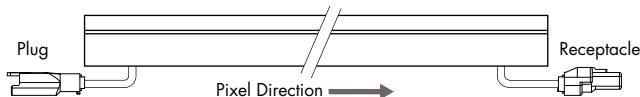
RGB, RGBW and RGBW Pixel

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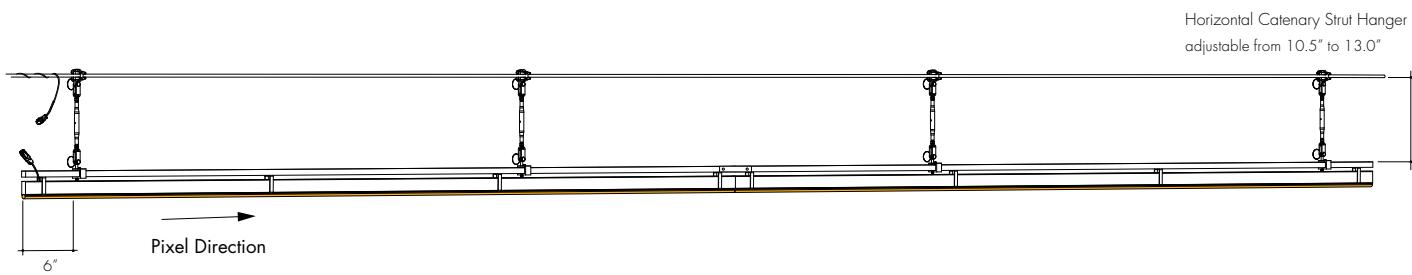
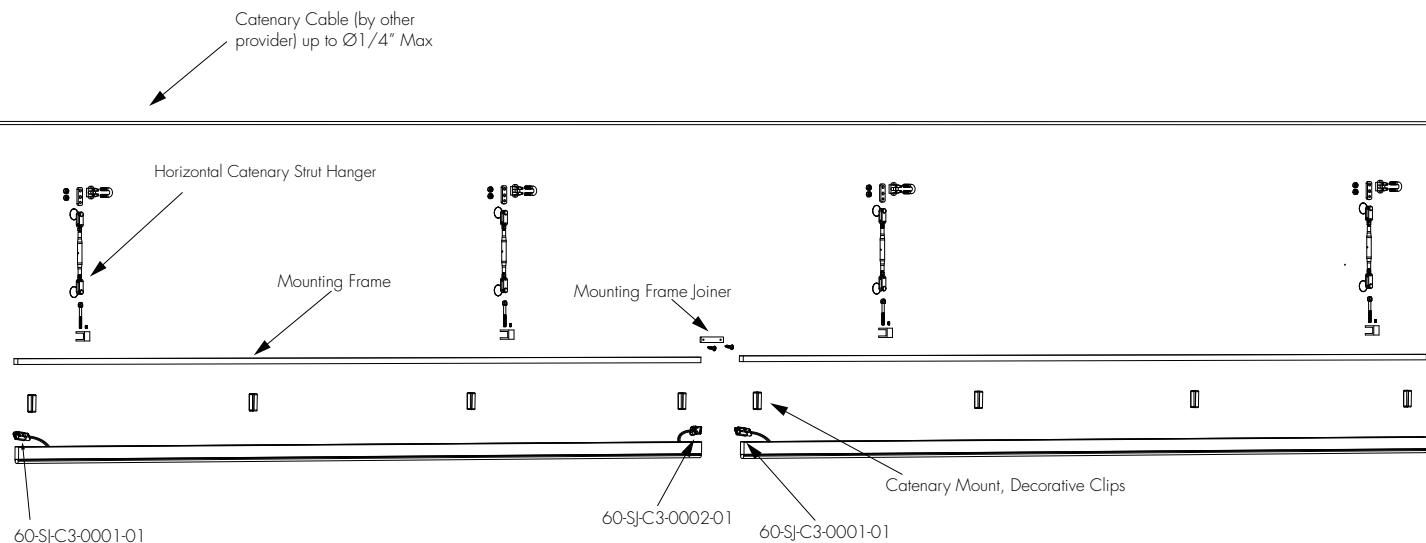
## Sample Layout

- Note (Pixel Only): Pixel direction will be shown with a label on the side of the fixture. Pixel data direction travels from Plug to Receptacle

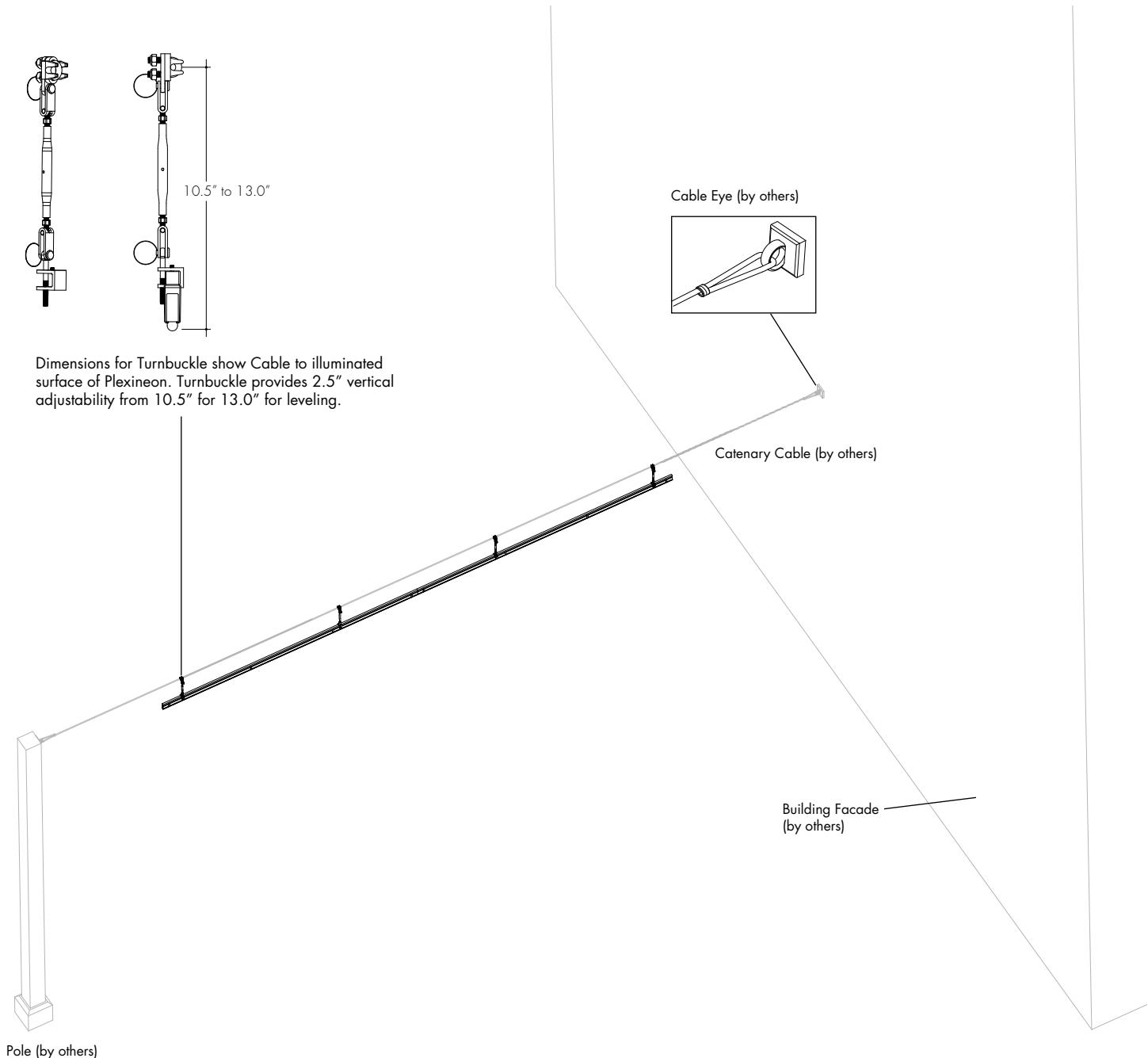


**PX-144-SR-RGBW-PXSPI-SO-F-CD-GG-B-4**

Plexineon Straight, Catenary Mount, Decorative Clips



## Sample Layout



# Plexineon Catenary Mount

RGB, RGBW and RGBW Pixel

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## Power Consumption

Tested at Full Power with PS-UNI Series power supplies.

Standard Nominal Lengths offered provide minimal shadowing. For alternate lengths, please consult Inside Sales with specific request.

### RGB

Nominal Length (in)	Actual Length	Watts	Nominal Length (in)	Actual Length	Watts
<b>3</b>	2 8/16	0.7	<b>52</b>	51 12/16	18.3
<b>5</b>	4 8/16	1.4	<b>54</b>	53 11/16	19
<b>7</b>	6 7/16	1.9	<b>56</b>	55 11/16	19.5
<b>9</b>	8 7/16	2.9	<b>58</b>	57 10/16	20.2
<b>11</b>	10 6/16	3.6	<b>60</b>	59 10/16	21.2
<b>13</b>	12 6/16	4.1	<b>62</b>	61 9/16	21.7
<b>15</b>	14 5/16	4.9	<b>64</b>	63 9/16	22.4
<b>17</b>	16 5/16	5.5	<b>66</b>	65 8/16	23.1
<b>19</b>	18 4/16	6.5	<b>68</b>	67 8/16	23.6
<b>21</b>	20 4/16	7.2	<b>70</b>	69 7/16	24.3
<b>23</b>	22 3/16	7.7	<b>72</b>	71 7/16	25.1
<b>25</b>	24 3/16	8.4	<b>74</b>	73 6/16	25.5
<b>27</b>	26 2/16	9.2	<b>76</b>	75 6/16	26.2
<b>29</b>	28 2/16	10.1	<b>78</b>	77 5/16	27
<b>31</b>	30 1/16	10.6	<b>80</b>	79 5/16	27.7
<b>33</b>	32 1/16	11.6	<b>82</b>	81 4/16	28.4
<b>35</b>	34	12.1	<b>84</b>	83 4/16	28.9
<b>36</b>	36	12.8	<b>86</b>	85 3/16	29.6
<b>38</b>	37 15/16	13.5	<b>88</b>	87 3/16	30.3
<b>40</b>	39 15/16	14.2	<b>90</b>	89 2/16	30.8
<b>42</b>	41 14/16	15.2	<b>92</b>	91 2/16	31.6
<b>44</b>	43 14/16	15.7	<b>94</b>	93 1/16	32.2
<b>46</b>	45 13/16	16.2	<b>96</b>	95 1/16	32.2
<b>48</b>	47 13/16	17.1			
<b>50</b>	49 12/16	17.8			

### RGBW

Nominal Length (in)	Actual Length	Watts
<b>5</b>	4 8/16	1.9
<b>9</b>	8 7/16	3.8
<b>13</b>	12 6/16	5.5
<b>17</b>	16 5/16	7.7
<b>21</b>	20 4/16	9.4
<b>25</b>	24 3/16	11.5
<b>29</b>	28 2/16	13.5
<b>33</b>	32 1/16	15.4
<b>36</b>	36	17.1
<b>40</b>	39 15/16	18.9
<b>44</b>	43 14/16	20.6
<b>48</b>	47 13/16	22.5
<b>52</b>	51 12/16	24.2
<b>56</b>	55 11/16	25.9
<b>60</b>	59 10/16	27.7
<b>64</b>	63 9/16	29.4
<b>68</b>	67 8/16	31.1
<b>72</b>	71 7/16	32.9
<b>76</b>	75 6/16	34.6
<b>80</b>	79 5/16	35.8
<b>84</b>	83 4/16	37.4
<b>88</b>	87 3/16	38.7
<b>92</b>	91 2/16	40.4
<b>96</b>	95 1/16	42.2

### PIXEL

Nominal Length (in)	Actual Length	Watts	Pixel Qty
<b>5</b>	4 9/16	1.8	1
<b>9</b>	8 8/16	3.6	2
<b>13</b>	12 7/16	5.6	3
<b>17</b>	16 6/16	7.7	4
<b>21</b>	20 5/16	9.6	5
<b>25</b>	24 4/16	11.5	6
<b>29</b>	28 3/16	13.7	7
<b>33</b>	32 2/16	15.6	8
<b>37</b>	36 1/16	17.5	9
<b>40</b>	40	19.1	10
<b>44</b>	43 15/16	21.3	11
<b>48</b>	47 14/16	22.9	12
<b>52</b>	51 13/16	25	13
<b>56</b>	55 12/16	26.9	14
<b>60</b>	59 11/16	28.5	15
<b>64</b>	63 10/16	30.4	16
<b>68</b>	67 9/16	32.3	17
<b>72</b>	71 8/16	34.3	18
<b>76</b>	75 7/16	36.2	19
<b>80</b>	79 6/16	38.1	20
<b>84</b>	83 5/16	40	21
<b>88</b>	87 4/16	41.7	22
<b>92</b>	91 3/16	43.6	23
<b>96</b>	95 2/16	45.2	24

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

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RGB, RGBW and RGBW Pixel

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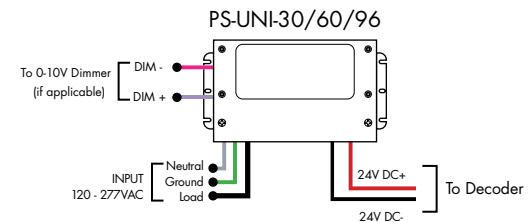
## Power Supplies

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

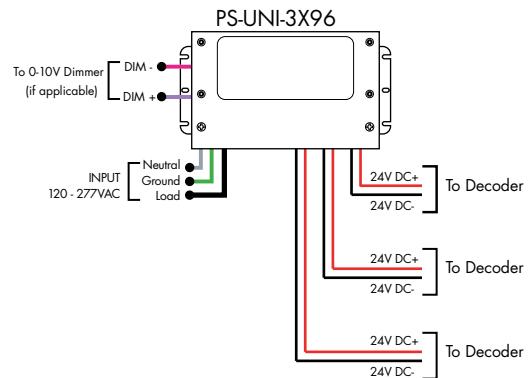
#### Ordering Code - Universal Dimming Power Supplies 0.1% 120VAC - 277VAC

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
<b>Length</b>	6.50"	7.40"	8.66"	11.85"
<b>Width</b>	3.73"	3.73"	3.73"	4.32"
<b>Depth</b>	1.61"	1.61"	1.61"	1.81"

REQUIRES A CONTROLLER AND A DECODER TO WORK PROPERLY

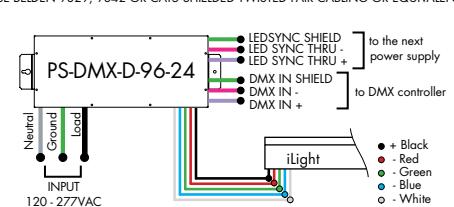


### For use with RGB/RGBW

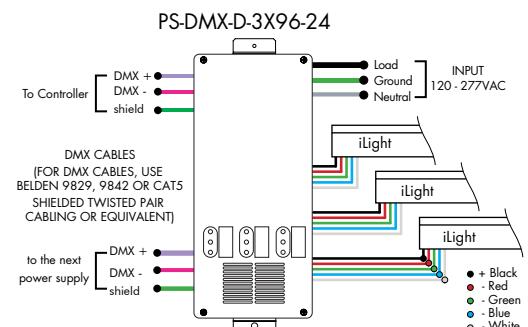
#### Ordering Code - DMX Dimming Power Supplies 0.1% 120VAC - 277VAC

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

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



MODELS	96W	3X96
<b>Length</b>	14.40"	15.00"
<b>Width</b>	5.20"	6.62"
<b>Depth</b>	2.60"	4.56"



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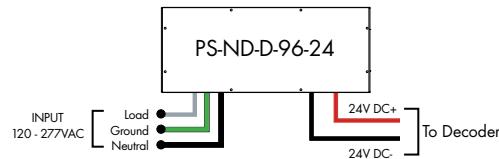
## Power Supplies

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/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 RGB/RGBW Power Supplies



ORDERING CODE

MODEL	DDMX-RGBW
	DDMX-RGBW - DMX decoder

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	RGBW-RC-R
	RGBW-RC-R - RGBW receiver

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

### Controllers and Decoders

#### For use with RGB/RGBW Power Supplies



ORDERING CODE

MODEL

**RGBW-SR**

RGBW-SR - RGBW signal repeater

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

#### Operating Temperature Range

from -4°F to +122°F in case

#### Power Capacity

up to 96W at 24V



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

ZONE

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

# Plexineon Catenary Mount

RGB, RGBW and RGBW Pixel



ilight  
by luminii

## Controllers and Decoders

### For use with RGB/RGBW, Pixel Power Supplies



ORDERING CODE

MODEL

**TSMDMX-E**

TSMDMX-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

### For use with 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

**Ambient Operating Temperature Range**  
-20 to 50°C

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

**Environment**  
Dry (IP20)

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



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

#### PWM Output Resolution Ratio

8 or 16 bit

#### Inputs

RJ45, XLR-5Pin, Terminal Block

#### PWM Output Frequency

500Hz - 30KHz

#### DMX Channels

1 to 5 settable

#### Output Dimming Curve Gamma Value

0.1 ~ 9.9

### Controllers and Decoders

#### For use with RGB/RGBW Power Supplies



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

#### For use with Pixel Power Supplies



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