

# RIM SQUARE PENDANT

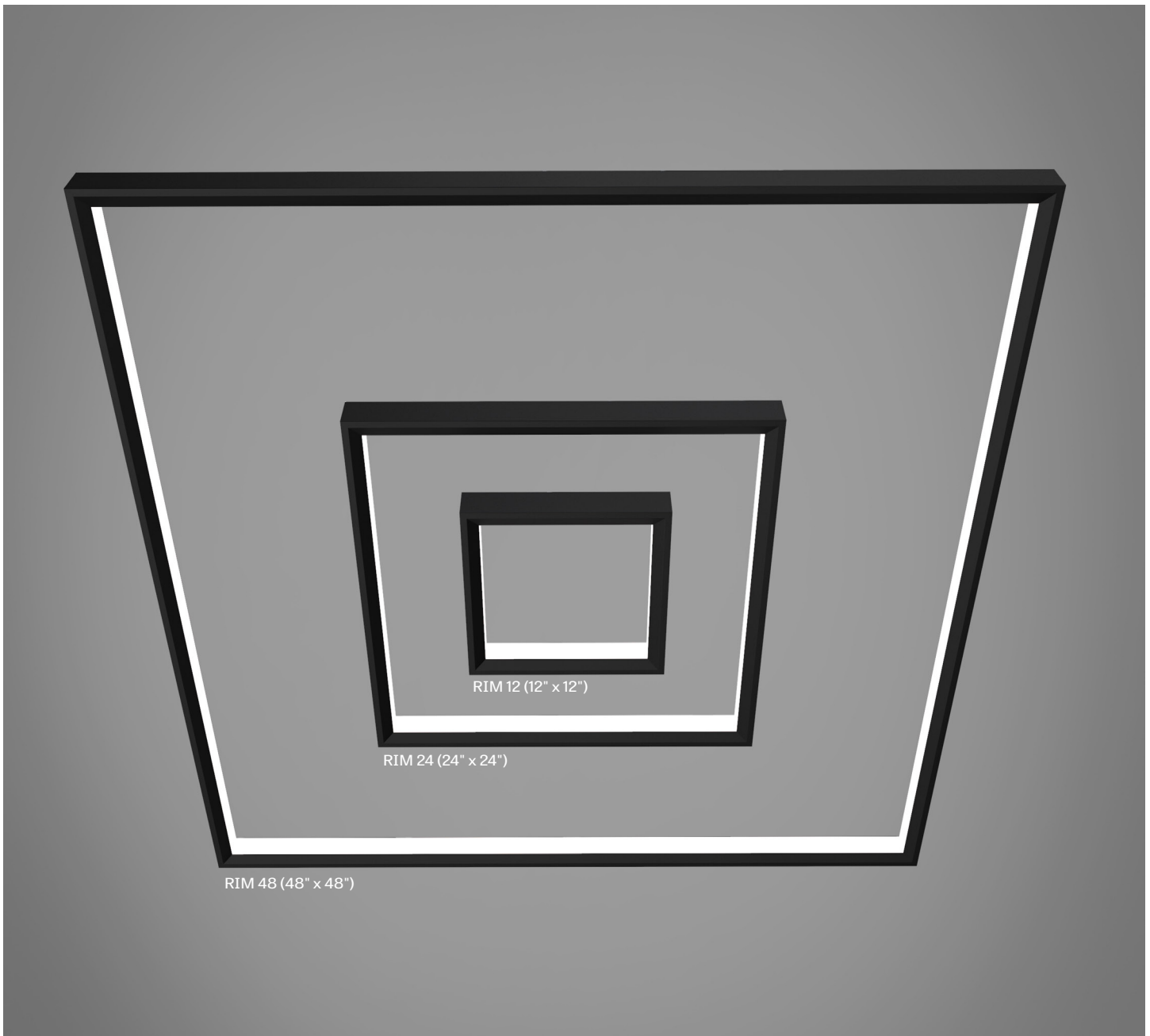


## DESCRIPTION

Rim Square combines generous ambient illumination with elegant geometry. The 2" high extruded aluminum frame is constructed with welded miter joint into a seamless form that can be painted in a wide range of standard and custom colors. The driver installs remotely, either above or below the ceiling. Mounted with aircraft cables, it is available with single canopy or multiple canopy options.

Rim Square is available in three sizes: 12" x 12", 24" x 24" and 48" x 48". Nominal light output ranges from 1200 to 10000 lumens, with efficacy up to 77 lumens per watt. Rim Square supports the full range of Chromawerx Sola, Duo, and Quadro options for tunable white and RGBW expressive color.

Rim is also available in Round and Linear forms (see separate specification sheets).



# RIM SQUARE PENDANT

**IMPORTANT: a qualified DMX integration consultant is required to ensure proper installation and function of any DMX network**

PROJECT: \_\_\_\_\_  
TYPE: \_\_\_\_\_  
NOTES: \_\_\_\_\_

## ORDER GUIDE

RIMSP		ULO		90
LUMINAIRE ID	SIZE	OPTIC	LIGHT SOURCE	CRI
RIMSP - Rim Square Pendant	12 - 12" x 12" 24 - 24" x 24" 48 - 48" x 48"	ULO - Uniform Lambertian optic	SOLA - Dim-to-warm single channel control 22K to 35K DUO - Tunable white 2-channel control 27K to 65K QUADRO - Four-channel RGB with 3500K white	90 - 90CRI

LUMEN PACKAGE	VOLTAGE	DRIVER	ELECTRICAL
####lm - L1200lm - M1900lm - H2500lm (RIM12) ####lm - L2500lm - M3800lm - H5000lm (RIM24) ####lm - L5100lm - M7600lm - H10000lm (RIM48) L-Low, M-Medium H-High, consult factory for other  34W - 34W output (RIM12 Quadro only) 68W - 68W output (RIM24 Quadro only) 136W <sup>1</sup> - 136W output (RIM48 Quadro only)  <sup>1</sup> Two power cords will be required.	120 - 120V 277 - 277V UNV - 120V-277V	Sola SD1 - Single 0-10V input  Duo DD1 - Dual 0-10V input for CCT/intensity DA <sup>2</sup> - DALI PSQO <sup>2</sup> - Lutron T-series 1% Tunable White DMX <sup>3</sup> - DMX  <sup>2</sup> On-site commissioning is required. <sup>3</sup> To specify, see pages 6 to 12.	Quadro DMX <sup>2,3</sup> - DMX  1 - 1 circuit

MOUNTING						
DRIVER BOX <sup>4</sup>	CANOPY FINISH	POWER	MOUNTING POINTS	HEIGHT		
<b>SCD</b> <sup>5 6</sup> - Square canopy driver box <b>RDB</b> - Remote driver box	<b>AL</b> - Aluminum <b>B</b> - Black <b>W</b> - Matte white <b>CF#</b> - Custom finish specify RAL#	<b>BAC</b> - Black power cord + aircraft cable <b>WAC</b> - White power cord + aircraft cable	<b>SC</b> - Single canopy <b>MC</b> <sup>7 8</sup> - Multiple canopies  <sup>7</sup> Not available with SCD. <sup>8</sup> 4 canopies provided.	<b>##IN</b> <sup>9</sup> - Distance from the canopy to the fixture in inches  <sup>9</sup> For <b>single canopy</b> option, the minimum mounting heights are:		
<sup>4</sup> For more information see page 3. <sup>5</sup> SCD is not available for lumen packages over 6000lm (3500lm for Lutron driver options). <sup>6</sup> SCD is not available for DMX.				Fixture size	Square canopy driver box	Remote driver box
				Ø 12"	min height 10.25"	min height 12.5"
				Ø 24"	min height 25"	min height 27"
				Ø 48"	min height 54.5"	min height 56.5"
<a href="#">See website for the Pendant Mounting Guide</a>						

[See website for the Pendant Mounting Guide](#)

### FINISH

AL - Aluminum  
B - Black  
W - Matte white  
CF# - Custom finish specify RAL#

### TOP VIEW

RIM12 - 10 1/2"  
RIM24 - 22 1/2"  
RIM48 - 46 1/2"

RIM12 - 12 5/8"  
RIM24 - 24 5/8"  
RIM48 - 48 5/8"

**RIMSP - Rim Square Pendant**

### 3D CROSS SECTION

2 1/8"  
1"

**RIMSP - Rim Square Pendant**

### DMX WALL CONTROLS

To specify see pages 6 to 12

# RIM SQUARE PENDANT

## MOUNTING OPTIONS

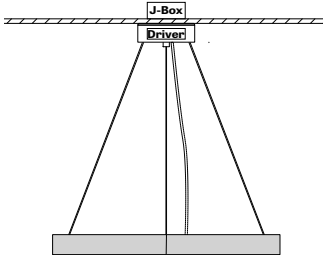
### SCD - SQUARE CANOPY DRIVER BOX

SCD - Square Canopy Driver Box - driver is in a 5 1/2" x 5 1/2" x 2" or 7 1/4" x 7 1/4" x 2 5/16" enclosure that also supports suspension and power cables. Enclosure is available in standard finishes (see ordering code).

#### SC - SINGLE CANOPY



WAC - White power cord + aircraft cable



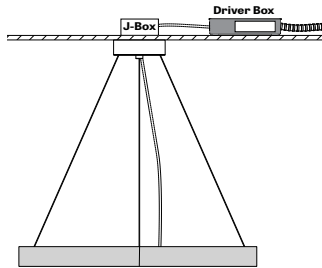
### RDB - REMOTE DRIVER BOX IN DRYWALL

RDB - Remote Driver Box - driver is in a 20"x4"x2" enclosure with brackets for mounting to ceiling joists, runners, or other supporting members. The 4 3/4" x 4 3/4" x 1 5/8" deep wiring compartment canopy conceals and supports suspension and power cables. It is available in standard finishes (see ordering code). It can be installed in drywall or grid ceilings. Note: Support hardware is not supplied.

#### SC - SINGLE CANOPY



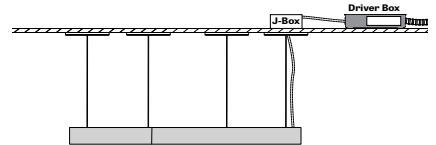
WAC - White power cord + aircraft cable



#### MC - MULTIPLE CANOPIES



WAC - White power cord + aircraft cable



The multiple canopy option, available with Remote Driver Box only, allows the fixture to be installed closer to the ceiling compared to the single canopy option. Four canopies are provided for multiple canopy option.

## OPTIC

**Uniform Lambertian Optic (ULO)** - Thermoformed from impact-modified white PMMA, the ULO optic provides even luminosity, with up to 88% transmission.

Combined with the LED array running around the inside of the housing, the open form and ULO optic create a widespread 50% direct and 50% direct light distribution with spacing criteria of 1.6.

## PERFORMANCE FOR 12" X 12"

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
low output	4000K	15.5	1200	77
medium output	4000K	25.5	1900	74
high output	4000K	34.5	2500	72

## PERFORMANCE FOR 24" X 24"

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
low output	4000K	32.5	2500	77
medium output	4000K	51.5	3800	74
high output	4000K	69.5	5000	72

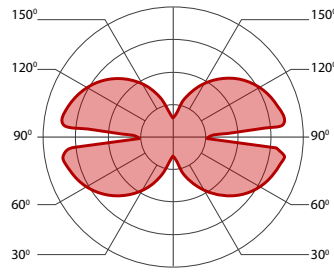
## PERFORMANCE FOR 48" X 48"

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
low output	4000K	66	5100	77
medium output	4000K	102.5	7600	74
high output	4000K	139	10000	72

# RIM SQUARE PENDANT

## Multiplier @ CRI90

CCT (K)	Watts	LPW
2700	1.09	0.92
3000	1.05	0.95
3500	1.02	0.98
4000	1.00	1.00
5000	0.94	1.07
6500	0.95	1.06



## CHROMAWERX - TUNABLE WHITE

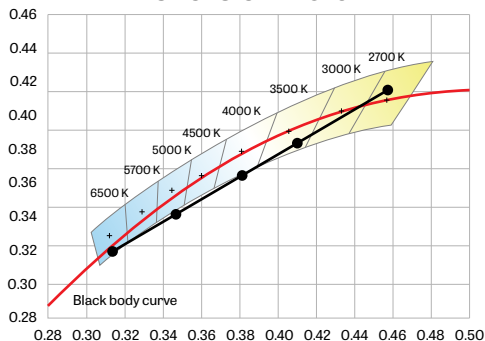
Custom linear array of alternating color temperature mid-flux LEDs are mounted directly to the housing for optimal thermal performance. For the Duo products, a color temperature range from 2700K-6500K is achievable with color points on or below the black body curve. For the Sola products, a color temperature range from 2700K-3500K is controlled synchronously with intensity. Color consistency between fixtures is maintained within 3SDCM. LEDs are operated at a reduced drive current to optimize efficacy and lumen maintenance.

All LEDs have been tested in accordance with IESNA LM-80-08 and the results have shown L80 lumen maintenance are greater than 60,000 hours. Absolute product photometry is measured and presented in accordance with IESNA LM-79, unless otherwise indicated.

**Chromawerx Sola** is a single-channel control that dims output while warming the color temperature in a pre-determined relationship. A simple digital or analog control sends a common signal to dual output digital drivers, which are programmed to adjust a specially populated LED array to emulate the effect of dimming a filament source. Dimming range is programmable, but the default option runs from 3500K at 100% full power to 2200K at 5% full power.

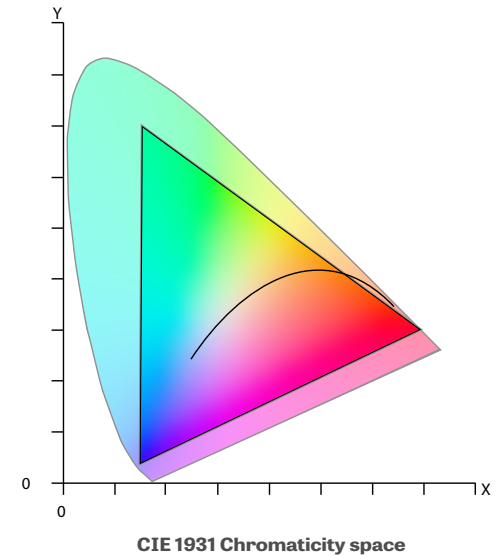
**Chromawerx Duo** is a two-channel control. It uses analog or digital protocols for synchronous control of both warm and cool LED arrays, enabling the user to set color temperature and light output. Commonly called "tunable white", Chromawerx two-channel control provides the range of warm (2700K) to cool (6500K) color that can be useful for helping to entrain circadian rhythms, stimulate alertness for improved educational and work productivity, and compensate for jet lag, among other applications. The Chromawerx drivers are programmed to limit maximum light output and power usage across all color temperatures.

## ANSI C78.377-2015



## CHROMAWERX - RGBW

**Chromawerx Quadro** is a four-channel control that operates an RGBW LED array and addresses the need for more expressive color in architectural applications. The DMX driver supports familiar programming tools for both dynamic multi-hued color and precise white color point control. While a typical user interface will be a DMX controller by others, Lumenwerx also offers a simple control station for stand-alone color changing applications.



## ELECTRICAL REMOTE

All remote drivers are furnished with factory enclosure for recessed installation in drywall and grid ceilings.

## 0-10V (not available for Quadro)

Driver features factory-set adjustable output current with 120-277V AC line input. Dimmable from 100% to 1% with multiple control options. Rated life (90% survivorship) is 50,000 hours at 50°C max. ambient (and 70°C max. case) temperature. 0-10V 1% Driver performance at maximum load, efficiency > 84%, Power Factor > 0.9, THD < 20%. See ordering code for other specifiable drivers.

# RIM SQUARE PENDANT

## **DALI (not available for Quadro))**

Factory-set, adjustable output current LED driver with universal (120-277VAC) input. Using an existing DALI control system (supplied by others), one control channel adjusts the fixture color temperature, and the other control channel adjusts fixture brightness. Dimming range from 100%-0%. At maximum driver load, efficiency<86%, PF>0.9, THD<20%.

## **DMX (Quadro & Duo only)**

Factory-set, adjustable output current, multi-channel LED driver with universal (120-277VAC) input. Using DMX wall controls (optionally supplied by Lumenwerx) or an existing DMX control system, either two channels of LEDs (warm-white & cool-white) for Duo or four channels of LEDs (Red/Green/Blue/White) for Quadro are independently adjustable. Each DMX driver has multiple output channels that can be independently addressed at the factory or on-site using built-in RDM (Remote Device Management) functionality. Dimming range from 100%-0%. At maximum driver load, efficiency<89%, PF>0.9, THD<20%.

## **FINISH**

**Interior** - 95% reflective, matte white powder coating

**Exterior** - Matte white, matte black or aluminum powder coating.

Custom finishes are also available.

## **CONSTRUCTION**

**Housing** - Seamlessly welded aluminum extrusion, wide variety of colored powder coating

**Diffuser** - Uniform Lambertian optic, co-extruded flexible polycarbonate satine finished lens

## **WEIGHT**

**Rim square 12** - 3.4lbs - 1.5kg

**Rim square 24** - 6.6lbs - 3kg

**Rim square 48** - 12lbs - 5.4kg

## **CERTIFICATIONS**

**ETL** - Rated for Indoor Dry/Damp locations. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0.

## **WARRANTY**

Lumenwerx provides a five-year limited warranty of electrical and mechanical performance of the luminaires, including the LED boards, drivers, and auxiliary electronics. Lumenwerx will repair or replace defective luminaires or components at our discretion, provided they have been installed and operated in accordance with our specifications. Other limitations apply, please refer to the full warranty on our website.

Wall controllers are covered by the manufacturer warranty.

# RIM SQUARE PENDANT

## CHROMAWERX TUNABLE WHITE AND DIM TO WARM

### DUO DMX SPECIFICATION

A qualified DMX integrator is required to assure proper installation and commissioning of the DMX network. **When placing the PO, please provide the contact information of your DMX integrator.**

Please answer the following questions to help us identify your DMX network requirements.

YES

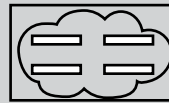
Do you require a wall controller provided by Lumenwerx?

NO

DMX control system supplied by others. Lumenwerx will supply DMX-enabled fixtures with default DMX addressing. See following pages for technical DMX informations. ✓

DMX controller supplied by Lumenwerx

**How many zones do you have?**  
A zone consists of one or more luminaires behaving identically.



1 Zone



2 Zones

**How to calculate the required number of drivers:**

Per fixture

1x Driver / 50W per side

To Calculate # of drivers

1 - 4 Zones

5 or more Zones

Do you have more than 32 drivers in total?

NO

YES

Order a standard Lumenwerx wall controller.

#### WALL CONTROLLER

**WCW** - wall controller white  
**WCB** - wall controller black

Add the control code at the end of your order code.

Please provide a fixture layout or RCP (Reflected Ceiling Plan) showing the locations of the DMX fixtures, zones and the DMX wall controller.

Refer to your DMX integrator for the installation. ✓

Subject to factory evaluation. Please contact our controls specialist at [controls@lumenwerx.com](mailto:controls@lumenwerx.com). Additional costs and equipment will be required. ✓

Subject to factory evaluation and approval. Please contact our controls specialist at [controls@lumenwerx.com](mailto:controls@lumenwerx.com). Additional costs and equipment will be required. ✓

# RIM SQUARE PENDANT

## CHROMAWERX QUADRO - RGBW

### QUADRO DMX SPECIFICATION

A qualified DMX integrator is required to assure proper installation and commissioning of the DMX network. **When placing the PO, please provide the contact information of your DMX integrator.**

Please answer the following questions to help us identify your DMX network requirements.

YES

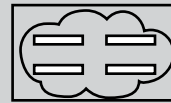
Do you require a wall controller provided by Lumenwerx?

NO

DMX control system supplied by others. Lumenwerx will supply DMX-enabled fixtures with default DMX addressing. See following pages for technical DMX informations. ✓

DMX controller supplied by Lumenwerx

**How many zones do you have?**  
A zone consists of one or more luminaires behaving identically.



1 Zone



2 Zones

#### How to calculate the required number of drivers:

Per fixture

1x Driver / 5000lm per side

To Calculate  
# of drivers

1 Zone

2 to 3 Zones

4 or more Zones

Do you have more than 32 drivers in total?

NO

YES

Order a standard Lumenwerx wall controller type 1.

#### WALL CONTROLLER

**WC1W** - Single zone wall controller white  
**WC1B** - Single zone wall controller black

Add the control code at the end of your order code.  
Please provide a fixture layout or RCP (Reflected Ceiling Plan) showing the locations of the DMX fixtures, zones and the DMX wall controller.  
Refer to your DMX integrator for the installation. ✓

Subject to factory evaluation. Please contact our controls specialist at [controls@lumenwerx.com](mailto:controls@lumenwerx.com). Additional costs and equipment will be required. ✓

NO

YES

Order a standard Lumenwerx wall controller type 2.

#### WALL CONTROLLER

**WC2W** - 3 zone wall controller white  
**WC2B** - 3 zone wall controller black

Add the control code at the end of your order code.  
Please provide a fixture layout or RCP (Reflected Ceiling Plan) showing the locations of the DMX fixtures, zones and the DMX wall controller.  
Refer to your DMX integrator for the installation. ✓

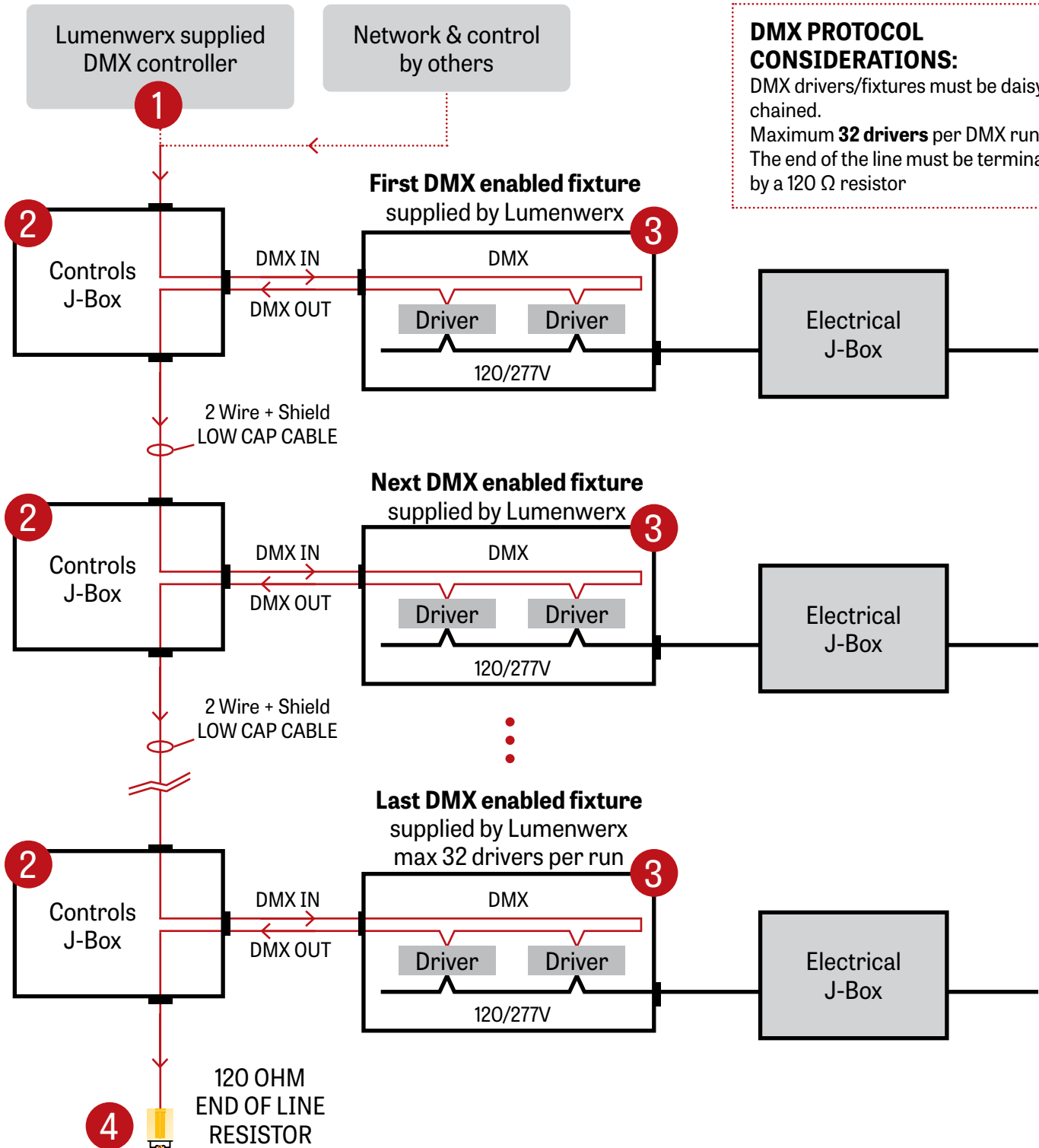
Subject to factory evaluation. Please contact our controls specialist at [controls@lumenwerx.com](mailto:controls@lumenwerx.com). Additional costs and equipment will be required. ✓

Subject to factory evaluation and approval. Please contact our controls specialist at [controls@lumenwerx.com](mailto:controls@lumenwerx.com). Additional costs and equipment will be required. ✓

# RIM SQUARE PENDANT

## CHROMAWERX TUNABLE WHITE AND RGBW

### GENERIC DMX NETWORK ARCHITECTURE





**LUMENWERX**  
WWW.LUMENWERX.COM

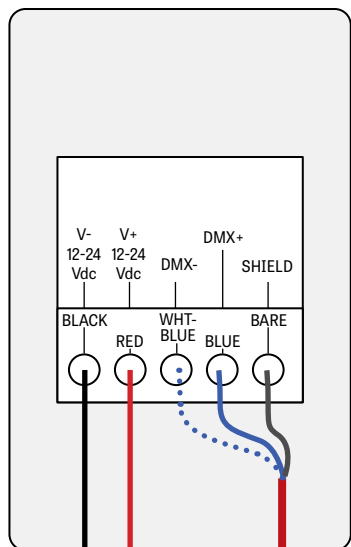
## 1 LUMENWERX SUPPLIED DMX CONTROLLER

## 2 Wire + Shield Low Cap Cable

## Back Panel

### RGBW Front Panel

## TW Front Panel



I.E.: Cerco Cable 7539-10  
Belden 9841  
Belden 8241

Power Supply  
120-277VAC / 24VDC

DC out

NL

Neutral

Line

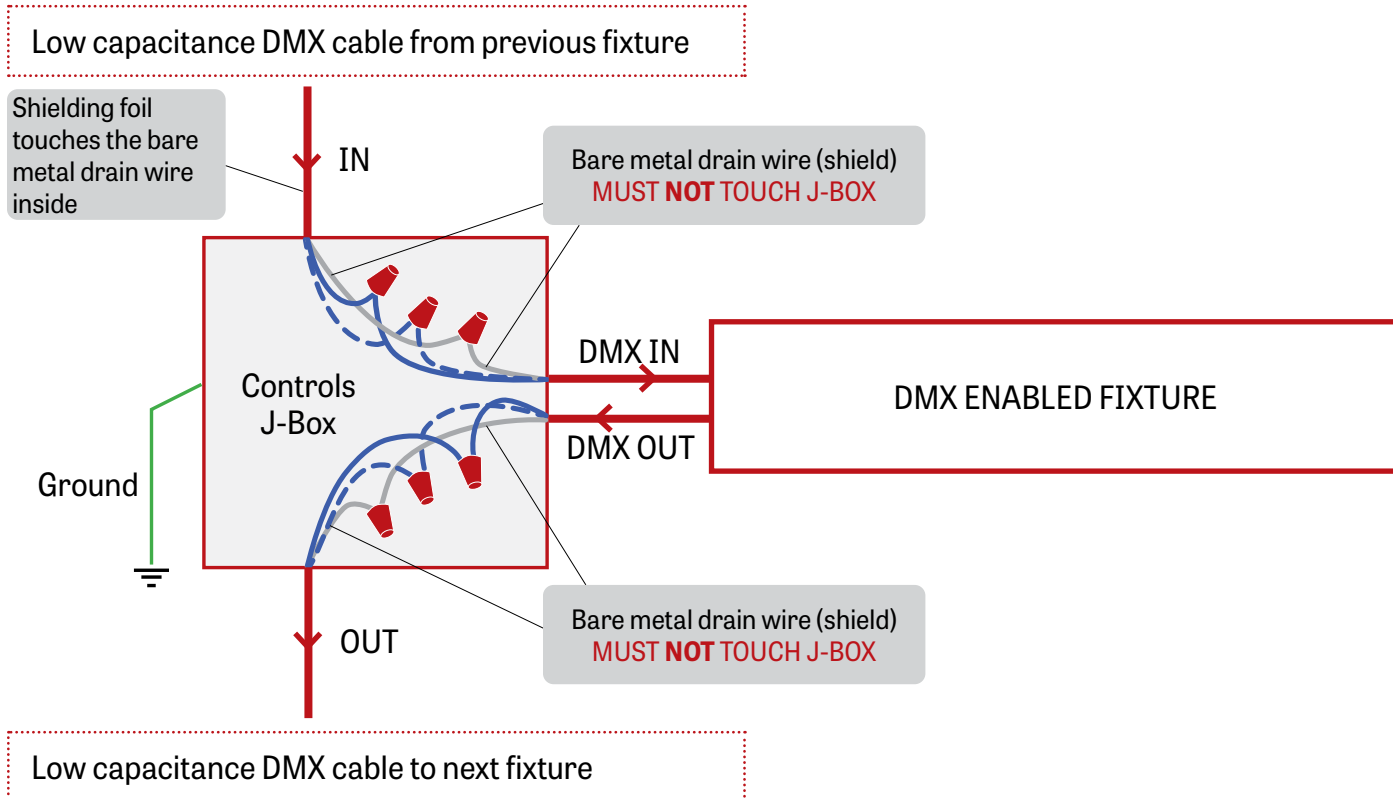
Ground

## Electrical J-Box

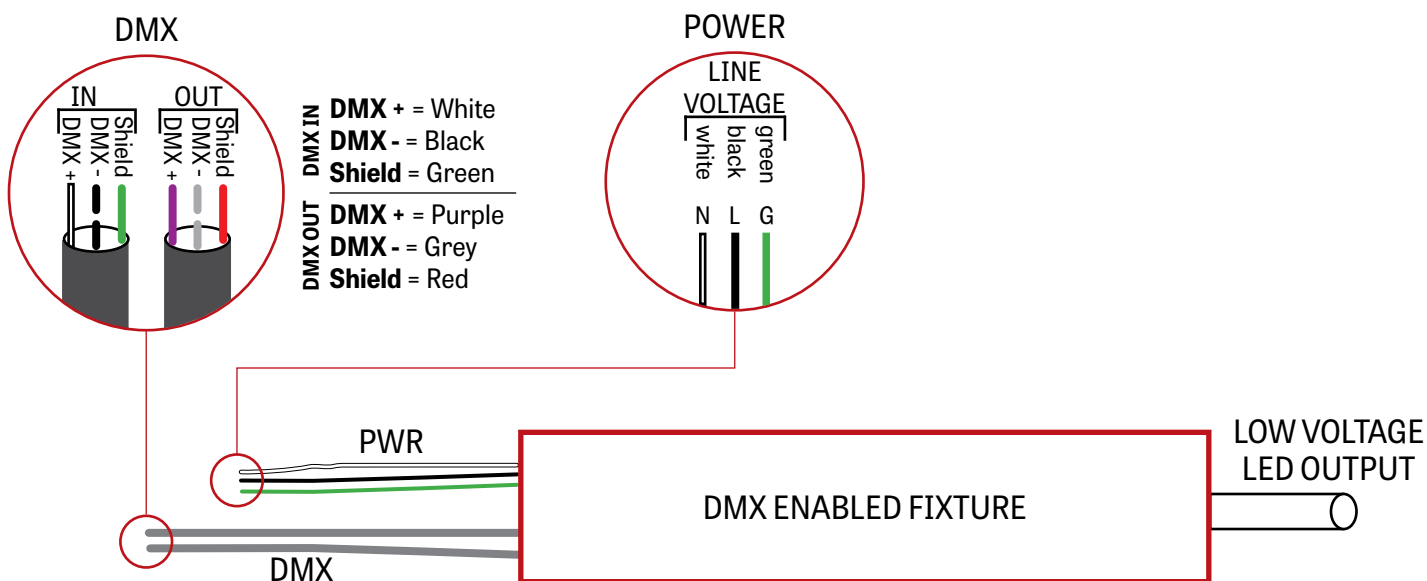
# RIM SQUARE PENDANT

## CHROMAWERX TUNABLE WHITE AND RGBW

### 2 J-BOX DMX DAISY CHAIN DETAIL



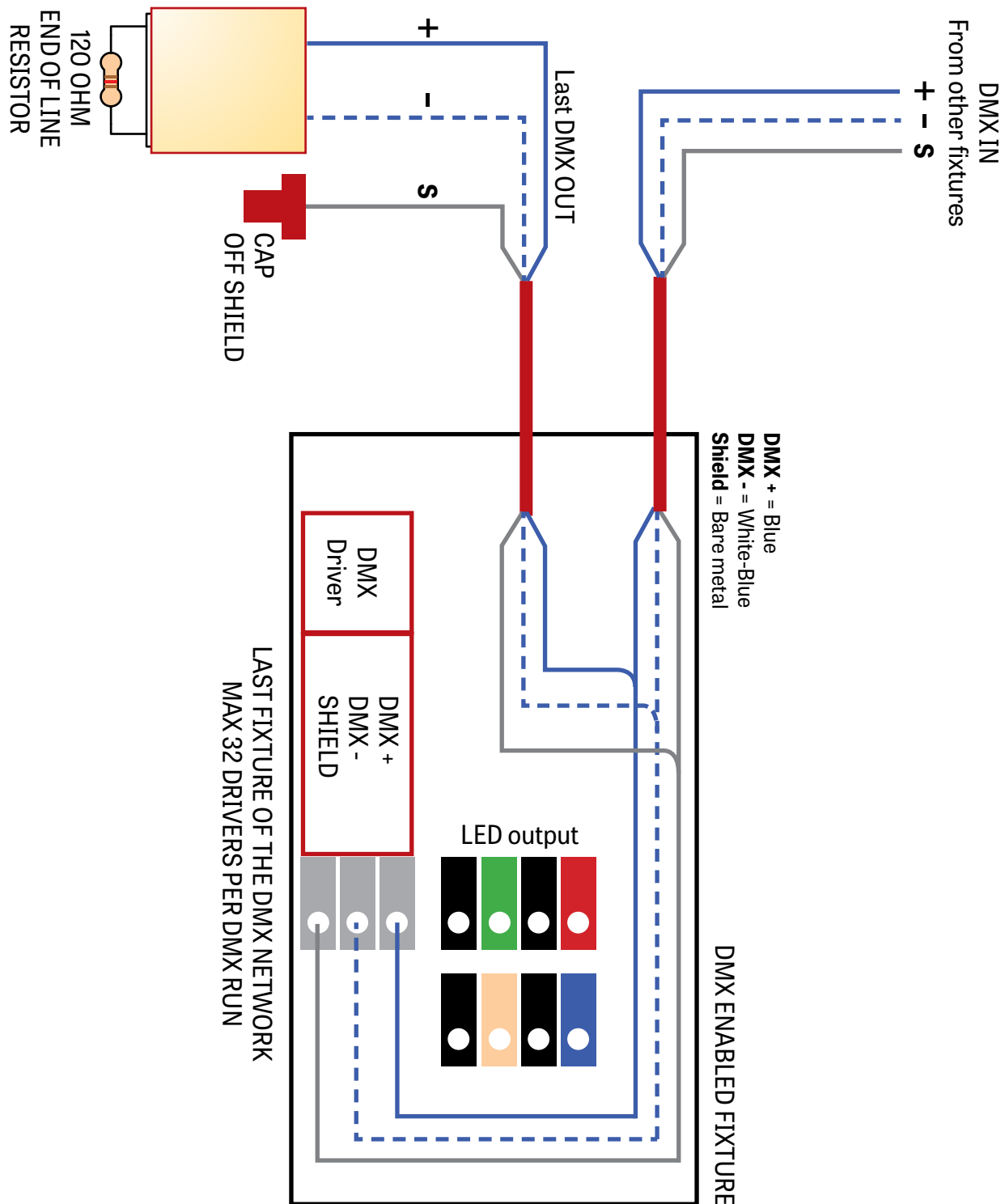
### 3 DMX CONNECTION PENDANT & WALL REMOTE DRIVER



# RIM SQUARE PENDANT

## CHROMAWERX TUNABLE WHITE AND RGBW

### 4 LAST DMX CONNECTION DETAIL



# RIM SQUARE PENDANT

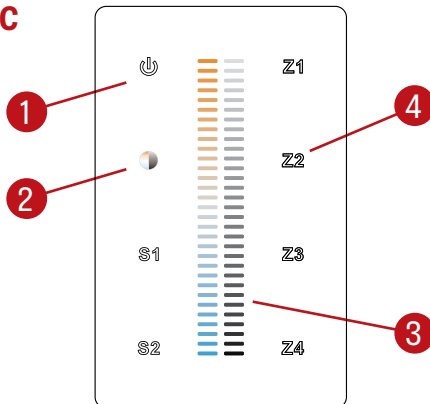
## CHROMAWERX TUNABLE WHITE AND RGBW

### DMX WALL CONTROLLER - TUNABLE WHITE

#### Default DMX Addresses:

1. WARM | 2. COOL

#### WC



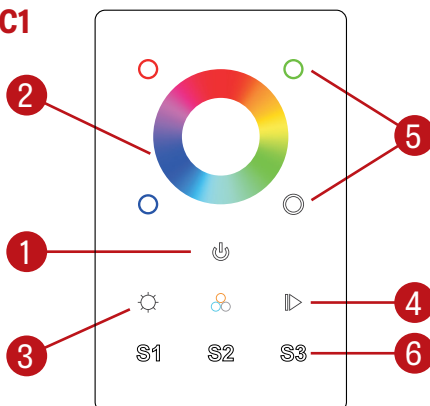
- (1) Power: Use this button to turn ON or OFF the fixture.
- (2) Brightness/CCT: Use the color/brightness toggle button to choose between color/brightness. When Blue: brightness is selected; when Yellow: color is selected.
- (3) Slider: Depending on the mode chosen in step 2, the slider will allow the user to set desired color or brightness.
- (4) Zone select: Up to 4 zones can be selected, either independently or together. Once selected, the commands will be sent to the zone identified by a Blue LED.

### DMX WALL CONTROLLER - RGBW

#### Default DMX Addresses:

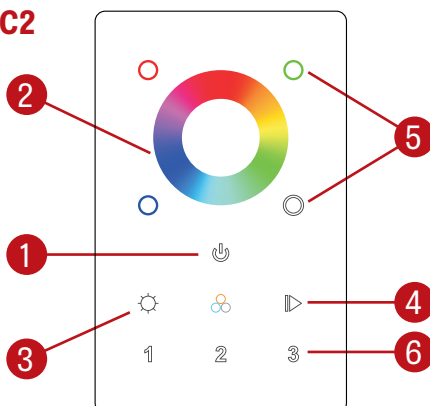
1. RED | 2. GREEN | 3. BLUE | 4. WHITE

#### WC1



- (1) Power: Use this button to turn ON or OFF the RGBW fixture.
- (2) Color Wheel: The wheel is used to rapidly select a color (RGB colors only).
- (3) Brightness (RGB): Hold down this button to either increase or decrease the brightness of the current RGB selection. White will not be affected by the RGB brightness button.
- (4) Color Cycle: This button will start an animation, rotating between reds, greens, and blues, the arrows allow the user to speed up or slow down the animation.
- (5) Individual Colors: By pressing and holding a color, it will be possible to brighten or dim it. Quickly pressing a color will either turn it OFF or turn it ON to its previous dim level. White: In order to activate or deactivate and dim the White channel, the White button needs to be used.
- (6) Scenes: By holding down one of the scenes button, the current color selection is saved. It can be later accessed by quickly pressing on one of the Scene buttons.

#### WC2



- (1) Power: Use this button to turn ON or OFF the RGBW fixture.
- (2) Color Wheel: The wheel is used to rapidly select a color (RGB colors only).
- (3) Brightness: Hold down this button to either increase or decrease the brightness of the current RGB selection. White will not be affected by the RGB brightness button.
- (4) Color Cycle: This button will start an animation, rotating between reds, greens, and blues, the arrows allow the user to speed up or slow down the animation.
- (5) Individual Colors: By pressing a color, it will be possible to brighten or dim that specific color. White: In order to activate or deactivate and dim the White channel, the White button needs to be used.
- (6) Zone: By holding down one of the zone buttons, a zone can be selected and controlled.