

PENDANT CHROMAWERX - SOLA, DUO

Project:		
Type:		

Order Guide

LUMINAIRE ID	DISTRIBUTION	DIRECT OPTIC	INDIRECT OPTIC Specify NA for Direct fixture	LIGHT SOURCE 1
VIA2PCP				
VIA2PCP - Via 2" Peak Candela Pendant	DI - Direct/ Indirect D - Direct	PCO40 - Peak Candela Optic, 40° beam PCO60 - Peak Candela Optic, 60° beam	WIO2 - Widespread Indirect Optic TIO - Translucent Indirect Optic WAI2 - Widespread Asymmetric Indirect Optic NA - Not applicable	SOLA - Dim-to-warm single channel control 35K to 22K DUO - Tunable white 2-channel control 65K to 27K 1 Static white also available. Consult other spec sheet.

CRI	DIRECT LUMEN PACKAGE	INDIRECT LUMEN PACKAGE Specify NA for Direct fixture	LUMINAIRE LENGTH	VOLTAGE
80CRI - 80+ CRI 90CRI - 90+ CRI	350LMF - Low output 350 lm/ft 500LMF - Medium output 500 lm/ft 750LMF - High output 750 lm/ft 1000LMF ² - Ultra high output 1000 lm/ft	350LMF - Low output 350 lm/ft 500LMF - Medium output 500 lm/ft 750LMF - High output 750 lm/ft 1000LMF ³ - Ultra high output 1000 lm/ft NA - Not applicable	#FT#IN ⁴ - Specify nominal length (#) in 1' and/or 1" increments Standard nominal lengths: Single units: 2' to 12' Continuous runs: lengths over 12'	120V - 120V 277V - 277V UNV - 120V-277V
	² For Direct/Indirect, Indirect must not exceed 750 lm/ft. ³ For Direct/Indirect, Direct must not exceed 750 lm/ft.		4• Minimum 2' for Direct. • Minimum 3' for Direct/Indirect. • Minimum 4' for DMX. • PCO is available in 7" and 11" increments. If the fixture length is not a multiple of these optic increments, blanks of equal length will be added at both ends of the fixture.	

DRIVER ⁵	ELECTRICAL	MOUNTING 8	FINISH	OPTIONS ¹⁰
	1C			
SOLA SD1 - Single 0-10V input DUO DMX ^{6,7} - DMX DDA ⁷ - DALI DT6 DDA8 ⁷ - DALI DT8 DD1 - Dual 0-10V input for CCT/intensity LD2 ⁷ - Lutron DALI-2 digital SPOE (Power-over-Ethernet) compatible. Consult factory for details. For more information, see pages 8 to 13. 'On-site commissioning is required.	1C - 1 circuit	ACS - Aircraft cable, standard STS 9 - Stem, standard ACC() - Aircraft cable, custom STC() 9 - Stem, custom *Standard canopies are black for black fixtures, and white for all other finishes. See page 3 for full details on standard and custom options. *Not available with DMX.	W - Matte white AL - Aluminum B - Matte black CF# - Custom finish, specify RAL#	FU120 - Fuse 120V FU277 - Fuse 277V CTB9 ¹¹ - T-bar caddy clip, 9/16" CTB15 ¹¹ - T-bar caddy clip, 15/16" CTG9 ¹¹ - Tegular caddy clip, 9/16" CTG15 ¹¹ - Tegular caddy clip, 15/16" CST ¹¹ - Screw slot caddy clip NA - None 10 Separate codes with a "+" if more than one is specified. 11 Available with aircraft cable only.

Accessories

Optional, order separately

WALL CONTROLLER 12					
DMX	DDI				
WCW##FT ¹³ - DMX wall controller white WCB##FT ¹³ - DMX wall controller black	TWCW##FT 14 - Dual 0-10V wall controller white TWCB##FT 14 - Dual 0-10V wall controller black				
¹² Specify wire length (##) in feet. ¹³ Available with DMX only. For more informal					





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Pendant Mounting Code

Standard

For a standard mounting, please refer to the information below.

м	O	U	NT	IN	G

ACS - Aircraft cable, standard	STS - Stem, standard
ACS - Aircraft Cable, Standard	S15 - Stern, Standard
∙Ø 5" for power canopy	•Ø 5" for power canopy
Ø 3" for non-power canopy	•Ø 5" for non-power canopy
· Canopies are black for black fixtures, and white for all other fixture finishes	 Canopies are black for black fixtures, and white for all other fixture finishes
 Power cord is black for black fixtures, and white for all other fixture finishes 	• Stem finish is the same color as fixture
· Aircraft cable length is 36"	• Stem length is 18"
ğ	• Stem is not field adjustable

Custom

MOUNTING

Aircraft Cable

For a custom mounting, specify the options in the parentheses.

Example: ACC(3NPC-72IN-W-PCB-NA)

ACC()					
	NON-POWER CANOPY SIZE	AIRCRAFT CABLE LENGTH	CANOPY FINISH	POWER CORD COLOR	OPTION
ACC	3NPC - Ø 3" non-power canopy 5NPC - Ø 5" non-power canopy	120IN - 120" #IN ¹ - Other lengths, specify in	W - Matte white AL - Aluminum B - Matte black CF# - Custom finish,	PCW - White PCB - Black	SEM ² - Seismic mounting SLC ² - Sloped ceiling for aircraft cable NA - None
		inches 1 Maximum length is 288". For longer lengths, please consult factory.	specify RAL#		² Not available with the Ø 3" non-power canopy size.

Stem

For a custom mounting, specify the options in the parentheses.

Example: STC(5NPC-36IN-W-STW-SLS)

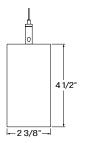
STC()					
	NON-POWER CANOPY SIZE	STEM LENGTH	CANOPY FINISH	STEM COLOR	OPTION
STC	5NPC - Ø 5" non-power canopy	18IN - 18" 36IN - 36" #IN ³ - Specify length in inches	W - Matte white AL - Aluminum B - Matte black CF# - Custom finish,	STW - Matte white STAL - Aluminum STB - Matte black STCF# - Custom finish,	SLS - Sloped ceiling for stem NA - None
		³ Minimum length is 6". Maximum length is 72". Stem is not field adjustable.	specify RAL#	specify RAL#	

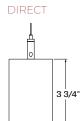


PENDANT CHROMAWERX - SOLA, DUO

Dimensions

DIRECT/INDIRECT





-23/8"→



PENDANT

CHROMAWERX - SOLA, DUO

Photometrics

Values calculated based on a 4' fixture at 3500K for all optics.

DIRECT OPTICS



LM/FT	W/FT	LM/W
350	2.5	143
500	3.6	140
750	5.4	138
1000	7.4	135



LM/FT	W/FT	LM/W
350	2.4	144
500	3.5	141
750	5.4	139
1000	7.4	136

INDIRECT OPTICS

WIO2



LM/FT	W/FT	LM/W
350	2.4	145
500	3.5	141
750	5.5	136
1000	7.7	130

TIO

W/FT	LM/W
2.7	127
4.0	124
6.3	119
8.8	114
	2.7 4.0 6.3



LM/FT	W/FT	LM/W
350	2.5	139
500	3.7	135
750	5.8	130
1000	8.0	125

MULTIPLIER TABLES

Use these tables to get results for different color temperatures for all photometric tables.

SOLA

PCO40 / PCO60

ССТ	WATTS 80+ CRI / 90+ CRI	LPW 80+ CRI / 90+ CRI	
3500K	1.00	1.00	

DUO

PCO40 / PCO60

сст	WATTS 80+ CRI / 90+ CRI	LPW 80+ CRI / 90+ CRI
2700K	1.04	0.96
6500K	0.96	1.04

SOLA.

WIO2/TIO/WAI2

сст	WATTS 80+ CRI / 90+ CRI	LPW 80+ CRI / 90+ CRI	
3500K	1.00	1.00	

DUO

WIO2/TIO/WAI2

сст	WATTS	LPW	
CCI	80+ CRI / 90+ CRI	80+ CRI / 90+ CRI	
2700K	1.05	0.95	
6500K	1.00	1.00	

DIRECT/INDIRECT - LPW CALCULATION

For Direct/Indirect performance values, follow the formula.

$$\frac{\left(\begin{array}{ccc} \text{DIRECT} \\ \text{LM/FT} \end{array} + \begin{array}{ccc} \text{INDIRECT} \\ \text{LM/FT} \end{array}\right)}{\left(\begin{array}{ccc} \text{DIRECT} \\ \text{W/FT} \end{array} + \begin{array}{ccc} \text{INDIRECT} \\ \text{W/FT} \end{array}\right)} = \text{LPW}$$



PENDANT CHROMAWERX - SOLA, DUO

Technical Specifications

Peak Candela Optic (PCO)

The Peak Candela Optic (PCO) combines TIR technology with louver shielding, producing a narrow beam with significantly higher central intensity than opal lenses while maintaining exceptional visual comfort. Its translucent surface softly reflects light onto the ceiling, creating a subtle, pleasant glow.

INDIRECT OPTICS

Widespread Indirect Optic (WIO2)

The Widespread Indirect Optic (WIO2) is a horizontal LED array with a widespread indirect micro prismatic optic that offers an impressive 160° spread. WIO2 creates an even illumination for smooth brightness on the ceiling that can achieve uniformity ratios of up to 2:1.

Uniformity [max/min]

Based on 18' continuous runs, in a 20' x 40' room, 10' wall height

Mounting height	Spacing (Center to center)		
from ceiling	8'	10'	12'
12"	5.5	10.0	9.0
18"	3.5	6.0	6.0
24"	2.5	4.0	4.5

Translucent Indirect Optic (TIO)

The Translucent Indirect Optic (TIO) is composed of a horizontal LED array that has a translucent lens to mask pixilation from the diodes. TIO has a 100° spread in the indirect that is ideal when the fixture is mounted farther away from the ceiling.

Widespread Asymmetric Indirect Optic (WAI2)

The Widespread Asymmetric Indirect Optic (WAI2) offers an upward grazing effect with a 45° forward throw. It softly highlights the ceiling in the up-light while distributing the required illumination of the rest of an interior space. For avoiding glare and enjoying visual comfort, WAI2 is an ideal solution.

LIGHT SOURCE

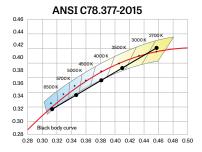
Custom linear array of alternating color temperature mid-flux LEDs are mounted directly to the housing for optimal thermal performance. For the DUO products, a color temperature range from 6500K-2700K is achievable with color points on or below the black body curve. For the SOLA products, a color temperature range from 3500K-2200K is controlled synchronously with intensity. Color consistency between fixtures is maintained to within 3 SDCM. All LEDs have been tested in accordance with IESNA LM-80-08 and the results have shown L80 lumen maintenance greater than 60,000 hours. Absolute product photometry is measured and presented in accordance with IESNA LM-79, unless otherwise indicated.

Chromawerx SOLA

It is a single-channel control that dims output while warming the color temperature in a pre-determined relationship. A simple 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% of full power to 2200K at 5% of full power. CRI is maintained above 80 throughout the dimming range.

Chromawerx DUO

It is a two-channel control. It uses an analog (0-10V) protocol for separate control of luminaire CCT and intensity or a digital (DMX, DALI, and LD2) protocol for synchronous control of both warm and cool LED arrays to enable the user to set color temperature and light output. Commonly called "tunable white", Chromawerx two-channel control provides the range of cool (6500K) to warm (2700K) 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. CRI is maintained above 80. When paired with DALI drivers (DDA/DDA8), color tuning follows a linear dimming curve



LUMINAIRE LENGTH

Via 2 Peak Candela is available in standard lengths of 2' to 12'. Continuous runs are available for run lengths over 12'. Exact run length must be noted in the product code. The minimum length is 2' for Direct, 3' for Direct/Indirect fixtures, and 4' for DMX. Lengths can be ordered in 1' and/or 1" increments. PCO is available in 7" and 11" increments. If the fixture length is not a multiple of these optic increments, blanks of equal length will be added at both ends of the fixture.

All individual sections are joined together onsite using the joiner kits provided. Lumenwerx offers joiner kits that are extremely simple to work with in the field and result in a fixture that appears virtually seamless with no light leak at any connection.





PENDANT CHROMAWERX - SOLA, DUO

ELECTRICAL

SOLA

SD1

Factory-set, adjustable output current LED driver with universal (120-277 VAC) input. Using a single 0-10V control signal, the light output warms in color temperature as it dims down to 1% and 2200K. At maximum driver load, efficiency<86%, PF>0.9, THD<20%.

DUO

DMX

Factory-set adjustable output current electronic driver with 120-277 VAC line input. Using DMX wall controls (optionally supplied by Lumenwerx) or an existing DMX control system, both channels of LEDs are independently adjustable. Each DMX driver can be independently addressed using the built-in RDM (Remote Device Management) in the field. Dimming down to 1% is attainable. Rated life (90% survivorship) of 50,000 hours at 50°C maximum ambient temperature. At maximum driver load, efficiency<84%, PF>0.9, THD<20%.

DALI

Factory-set adjustable output current electronic driver with 120-277 VAC line 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. With DALI Type 6, two DALI addresses are required to control both channels. With DALI Type 8, one DALI address is required to control both channels. Dimming down to 1% is attainable. Rated life (90% survivorship) of 50,000 hours at 50°C maximum ambient temperature. At maximum driver load, efficiency<84%, PF>0.9, THD<20%.

DD1

Factory-set adjustable output current LED driver with universal (120-277 VAC) input. Controlled via two individual 0-10V signals, one for setting light output down to a minimum of 1% and the other for adjusting the CCT (default range of 6500K-2700K). Rated life of 50,000 hours at 70°C maximum driver case temperature and 100% load conditions. Typical efficiency of 86%, PF>0.9, THD<20% at 100% load conditions.

LD2

Lutron DALI-2 digital drivers provide a high-performance tunable white solution with single-address digital control. Guaranteed performance and compatibility when used with Lutron DALI-2 controls.

PoF

Depending on the PoE manufacturer selected, Lumenwerx will install the node in factory as either integral to the luminaire or as a remote module. Factory programming of the PoE node may or may not enable the following functionalities: lumen package, DUO (tunable white), QUADRO (RGBW), emergency battery backup, and sensor integration. These must be addressed and evaluated on a case-by-case basis.

MOUNTING

Pendant fixtures can be mounted either with aircraft cable or with stem. See page 3 for details.

FINISH

Interior: 95%, reflective matte powder coated white paint Exterior: Matte white, matte black, or aluminum powder coating. Custom finishes are also available.

CONSTRUCTION

Housing: Extruded aluminum, up to 90% recycled content Interior brackets: Die-formed cold rolled sheet steel

Joining system: Die-cast zinc

Reflectors: Die-formed cold rolled steel, 95% reflective matte

white painted

Lens: Polycarbonate or acrylic End caps: Die-cast aluminum

Hanger: Chromed griplock securely attached in end caps and/or

joiners with stainless steel hardware

Aircraft cable suspension: Ø 1/16" stainless steel aircraft cable

Stem: Ø 1/2" threaded steel tube

WEIGHT

Direct/Indirect	Direct or Indirect
4': 10.68 lbs - 4.85 kg	4': 9.03 lbs - 4.1 kg
8': 22.03 lbs - 10 kg	8': 18.28 lbs - 8.3 kg
12': 32.60 lbs - 14.8 kg	12': 27.97 lbs - 12.7 kg

CERTIFICATION

ETL: Rated for indoor dry/damp locations. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0.

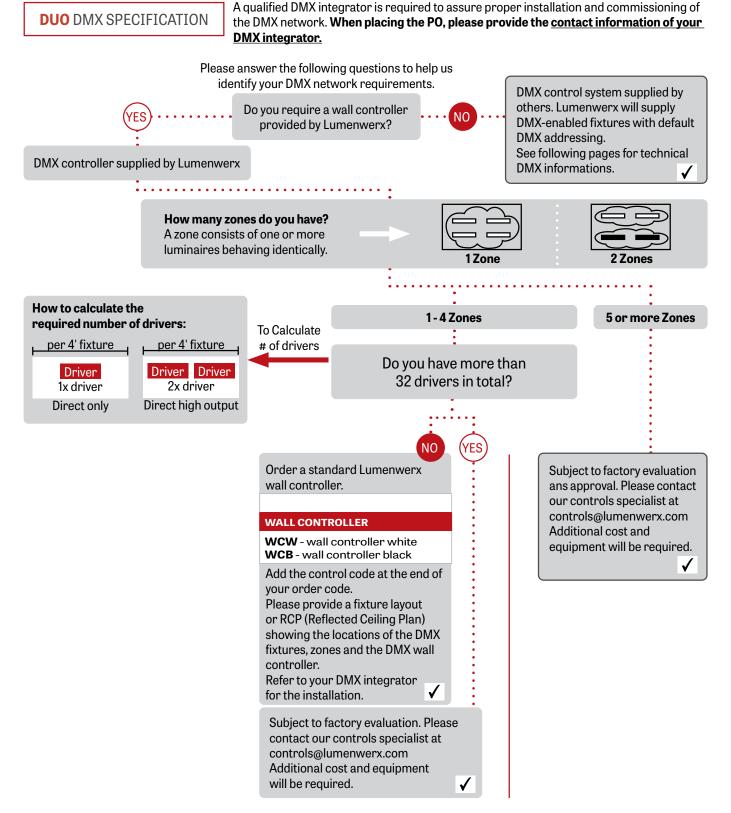
WARRANTY

Lumenwerx provides a five-year limited warranty on 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.

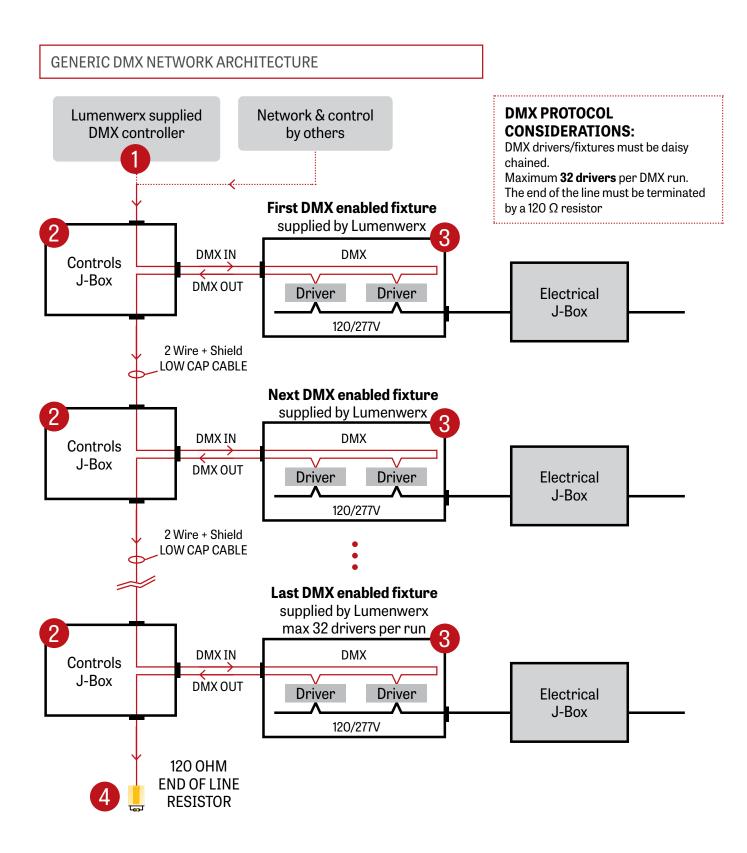
Wall controllers are covered by the manufacturer warranty.







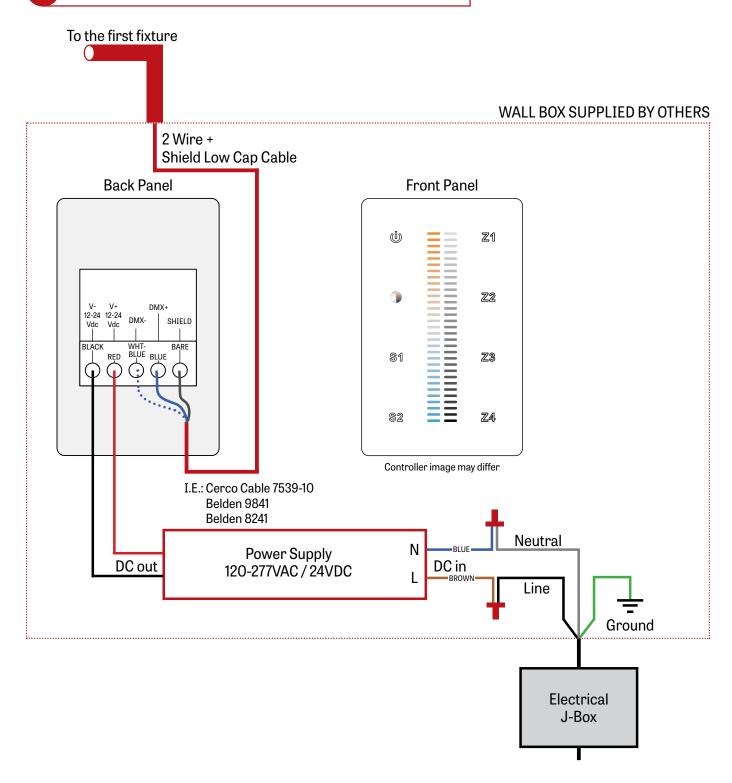






PENDANT CHROMAWERX - SOLA, DUO

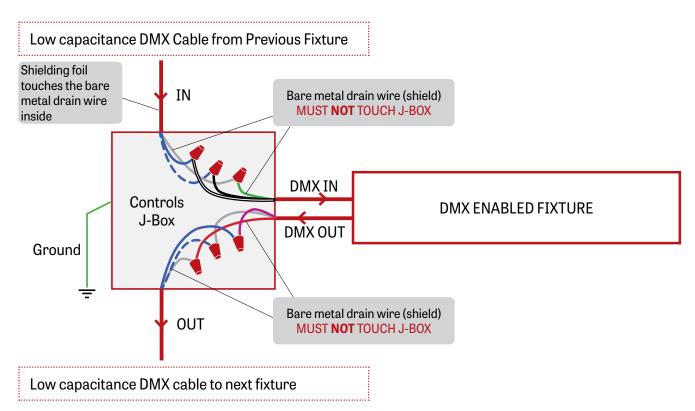
LUMENWERX SUPPLIED DMX CONTROLLER



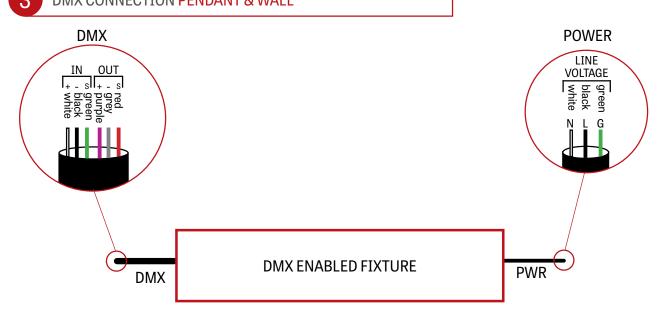


PENDANT CHROMAWERX - SOLA, DUO

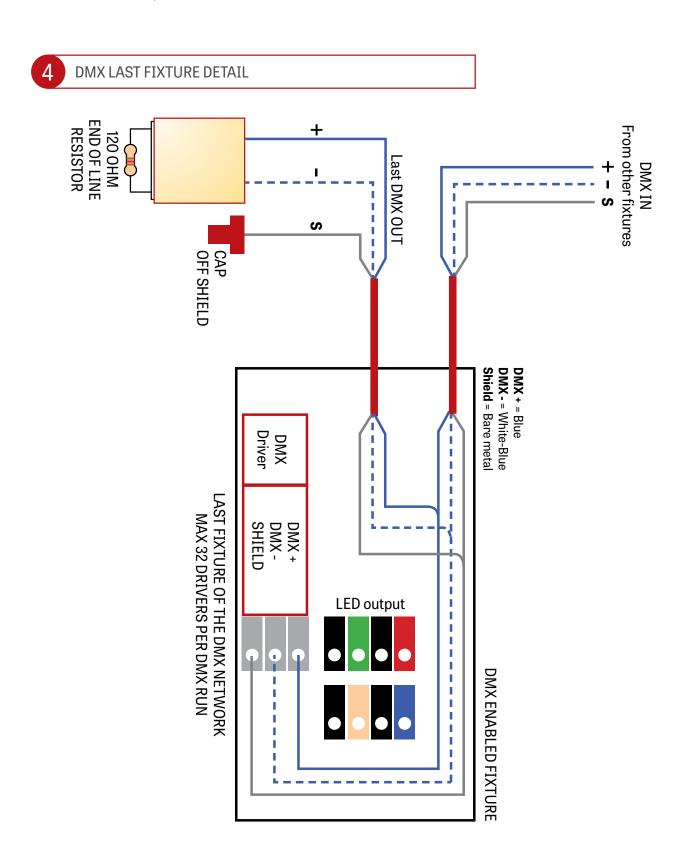




DMX CONNECTION PENDANT & WALL











PENDANT CHROMAWERX - SOLA, DUO

DMX WALL CONTROLLER

DUO 1-4 ZONE ദ്ര $\mathbb{Z}1$ $\mathbb{Z}2$ **\$1** $\mathbb{Z}3$ 3 **Z4 \$2**

(1) Power: Use this button to turn ON or OFF the fixture.

Use the color/brightness toggle button to choose between color/brightness. When Blue: brightness is selected, when (2) Brightness/CCT:

Yellow: color is selected.

Depending on the mode chosen in step 2, the slider will allow (3) Slider:

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.

Default DMX Addresses:

1Warm 2 Cool

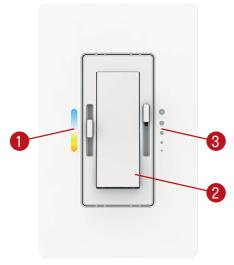




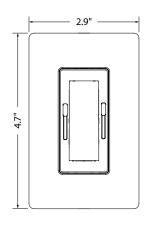
PENDANT CHROMAWERX - SOLA, DUO

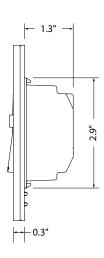
DUAL 0-10V WALL CONTROLLER

Front Panel



Dimensions





Controller image may differ

(1) CCT control: Use this button to adjust the color temperature. (2) On/Off switch: Use this button to turn ON or OFF the fixture.

(3) Dimming control: Use this button to adjust the brightness.

Wiring Diagram

