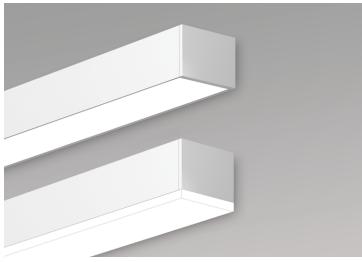
DIRECT/INDIRECT, DIRECT, INDIRECT CHROMAWERX - SOLA, DUO







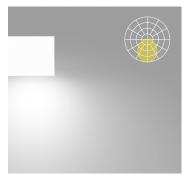


DESCRIPTION

Our elegant, flexible Via family is composed of linear, pendant, surface, recessed, and wall mounted luminaires. Each lighting fixture can be installed as a discrete luminaire or in continuous runs or patterns. Via 5 Wall is offered with Lambertian, asymmetric, or low-glare optics.

Lens Positions 1

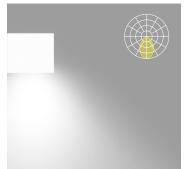
DIRECT OPTICS



High-Efficiency Lambertian Optic

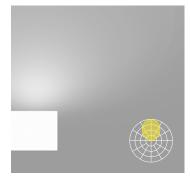


ARO2 Asymmetric Refractive Optic



LGO Low-Glare Optic

INDIRECT OPTICS



TIO 2 Translucent Indirect Optic



WAI2² Widespread Asymmetric Indirect Optic



HLO³ High-Efficiency Lambertian Optic



ARO23 Asymmetric Refractive Optic





¹Drop lens position available with HLO direct lens only. ²Available only with Direct/Indirect. ³Not available with Direct/Indirect.



DIRECT/INDIRECT, DIRECT, INDIRECT CHROMAWERX - SOLA, DUO



Project:	
Туре:	

Order Guide

LUMINAIRE ID	DISTRIBUTION	DIRECT OPTIC Specify NA for Indirect fixture	LENS POSITION Specify NA for Indirect fixture	INDIRECT OPTIC Specify NA for Direct fixture	LIGHT SOURCE 4
VIA5W					
VIA5W - Via 5" Wall	DI - Direct/ Indirect D - Direct I - Indirect	HLO - High-Efficiency Lambertian Optic ARO2 - Asymmetric Refractive Optic LGO - Low-Glare Optic NA - Not applicable	FH¹-Flush 1.0D¹-1.0" drop NA¹-Not applicable ¹-For HLO, specify FH or 1.0DFor ARO2 and LGO, specify FHFor an Indirect fixture, specify NA.	TIO ² - Translucent Indirect Optic WAI2 ² - Widespread Asymmetric Indirect Optic HLO ³ - High-Efficiency Lambertian Optic ARO2 ³ - Asymmetric Refractive Optic NA - Not applicable ² Available only with Direct/Indirect. ³ Not available with Direct/Indirect.	SOLA - Dim-to-warm single channel control 35K to 22K DUO - Tunable white 2-channel control 65K to 27K *Static white, BIOS, and Chromawerx QUADRO also available. Consult other spec sheets.

CRI	DIRECT LUMEN PACKAGE Specify NA for Indirect fixture	INDIRECT LUMEN PACKAGE Specify NA for Direct fixture	LUMINAIRE LENGTH	VOLTAGE
80CRI - 80+ CRI 90CRI - 90+ CRI	350LMF ⁵ - Hypo output 350 lm/ft 500LMF - Low output 500 lm/ft 750LMF - Medium output 750 lm/ft 1000LMF - High output 1000 lm/ft 1200LMF ⁶ - Ultra high output 1200 lm/ft 1500LMF ^{7,8,9} - Hyper output 1500 lm/ft	350LMF ⁵ - Hypo output 350 lm/ft 500LMF - Low output 500 lm/ft 750LMF - Medium output 750 lm/ft 1000LMF - High output 1000 lm/ft 1200LMF ¹⁰ - Ultra high output 1200 lm/ft 1500LMF ^{7,9} - Hyper output 1500 lm/ft	#FT#IN " - 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
	NA - Not applicable Shinimum 3' fixture. For Direct/Indirect, Indirect must not exceed 1000 lm/f Available with HLO only. For Direct/Indirect, Indirect must not exceed 750 lm/ft	10 For Direct/Indirect, Direct must not exceed	II - Minimum 2' for Direct or Indirect Minimum 3' for Direct/Indirect Minimum 4' for DMX.	

DRIVER 12	ELECTRICAL	MOUNTING	FINISH	OPTION
	1C	DMB		
SOLA SD1 - Single 0-10V input DUO DMX ^{15, 14} - DMX DDA ¹⁴ - DALI DT6 DDA8 ¹⁴ - DALI DT8 DD1 - Dual 0-10V input for CCT/intensity LD2 ¹⁴ - Lutron DALI-2 digital	1C - 1 circuit	DMB - Drywall mounting bracket	W - Matte white AL - Aluminum B - Matte black CF# - Custom finish, specify RAL#	FU120 - Fuse 120V FU277 - Fuse 277V NA - None
12 PoE (Power-over-Ethernet) compatible. Consult factory for details. 13 For more information, see pages 7 to 13. 14 On-site commissioning is required.				

Accessories

WALL CONTROLLER

Optional, order separately

DMX	DDI
WCW ¹⁵ - DMX wall controller white WCB ¹⁵ - DMX wall controller black	TWCW ¹⁶ - Dual 0-10V wall controller white TWCB ¹⁶ - Dual 0-10V wall controller black
¹⁵ Available with DMX only. For more information, see pages 7 to 13, or consult factory.	¹⁶ Available with DD1 only. For more information, see page 14, or consult factory.

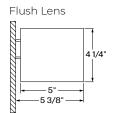






DIRECT/INDIRECT, DIRECT, INDIRECT CHROMAWERX - SOLA, DUO

Dimensions



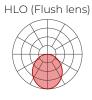


¹Drop lens position available with HLO direct lens only.

Photometrics

Values calculated based on a 4' fixture at 3500K and 80+ CRI for all optics.

DIRECT OPTICS



LM/FT	W/FT	LM/W
350	2.7	132
500	3.9	129
750	6.0	126
1000	8.2	122
1200	10.1	119
1500	13.0	116





LM/FT	W/FT	LM/W
350	3.0	116
500	4.4	113
750	7.0	107
1000	9.7	103
1200	12.1	99
LN4/ET	VAL/ET	1.54/54/

LM/FT	W/FT	LM/W
350	3.0	119
500	4.3	116
750	6.6	113
1000	9.1	110
1200	11.2	107

DIRECT/INDIRECT - LPW CALCULATION

For Direct/Indirect performance values, follow the formula.

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

INDIRECT OPTICS



LM/FT	W/FT	LM/W
350	2.7	127
500	4.0	124
750	6.3	119
1000	8.8	114
1200	10.9	110





LIVI/IT I	VV/ I- I	LIVI/ VV
350	2.5	139
500	3.7	135
750	5.8	130
1000	8.0	125
1200	10.0	120
LM/FT	W/FT	LM/W



W/FT	LM/W
2.7	132
3.9	129
6.0	126
8.2	122
10.1	119
13.0	116
	3.9 6.0 8.2 10.1

ARO2

LM/FT	W/FT	LM/W
350	3.0	116
500	4.4	113
750	7.0	107
1000	9.7	103
1200	12.1	99

MULTIPLIER TABLES

Use these tables to get results for different color temperatures, CRI, and drop lenses, for all Direct and Indirect photometric tables.

SOLA

сст	WATTS		LPW	
CCI	80+ CRI	90+ CRI	80+ CRI	90+ CRI
3500K	1.00	1.19	1.00	0.84

DUU				
ССТ	WATTS		LPW	
CCI	80+ CRI	90+ CRI	80+ CRI	90+ CRI
2700K	1.05	1.27	0.95	0.79
6500K	100	11/	100	000

Multiplier - Drop lens			
DIRECT LENS	WATTS	LPW	
Flush lens	1.00	1.00	
Drop lens 1.0"	0.88	1.12	



DIRECT/INDIRECT, DIRECT, INDIRECT CHROMAWERX - SOLA, DUO



Technical Specifications

DIRECT OPTICS

High-Efficiency Lambertian Optic (HLO)

The High-Efficiency Lambertian Optic (HLO) uses matte white reflectors to distribute LED output across 0.075" acrylic shielding, providing up to 88% transmission and good obscuration. Available as a flush lens or as a drop lens, the HLO has a spacing criterion of 1.22.

Asymmetric Refractive Optic (ARO2)

The Asymmetric Refractive Optic (ARO2) uses a sophisticated reflector combined with a matte beam-shaping film to create a smooth, effective downward light component without shadows or hot spots. It provides directional Gaussian light distribution with peak intensity at 20° above nadir and a 55° Full Width at Half Maximum (FWHM) beam angle. Microstructure material applied to the snap-in lens provides the precise refractive power and visual comfort, while achieving a high luminous efficacy.

Low-Glare Optic (LGO)

The Low-Glare Optic (LGO) is designed to cut off high-angled light and control glare. The carefully crafted lens refracts light downward through its center from which it then disperses into a wide conical distribution that negates any illumination at about 40°. The LGO provides the visual comfort of a louver in a smooth acrylic lens.

INDIRECT OPTICS

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.

High-Efficiency Lambertian Optic (HLO)

The High-Efficiency Lambertian Optic (HLO) uses matte white reflectors to distribute LED output across 0.075" acrylic shielding, providing up to 88% transmission and good obscuration. HLO has a spacing criterion of 1.22.

Asymmetric Refractive Optic (ARO2)

The Asymmetric Refractive Optic (ARO2) uses a sophisticated reflector combined with a matte beam-shaping film to create a smooth, effective downward light component without shadows or hot spots. It provides directional Gaussian light distribution with peak intensity at 20° above nadir and a 55° Full Width at Half Maximum (FWHM) beam angle. Microstructure material applied to the snap-in lens provides the precise refractive power and visual comfort, while achieving a high luminous efficacy.

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.



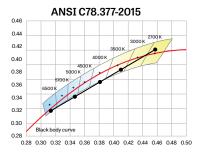


DIRECT/INDIRECT, DIRECT, INDIRECT CHROMAWERX - SOLA, DUO



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 5 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 or Indirect fixtures, 3' for Direct/Indirect fixtures, and 4' for DMX. Lengths can be ordered in 1' and/or 1" increments. 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.

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%.

<u>DD1</u>

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.





Lumenwerx

DIRECT/INDIRECT, DIRECT, INDIRECT CHROMAWERX - SOLA, DUO

PoE

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

Fixtures may be horizontally mounted to the wall using a bracket. For long runs, a minimum of 6" from adjacent wall is required.

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**: Acrylic

Drop lens: Extruded with glued end caps

End caps: Die-cast aluminum

WEIGHT

Direct/Indirect Dire	ect or Indirect
8' : 26 lbs - 11.79 kg	.78 lbs - 5.35 kg 3.79 lbs - 10.8 kg 35.24 lbs - 16 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.



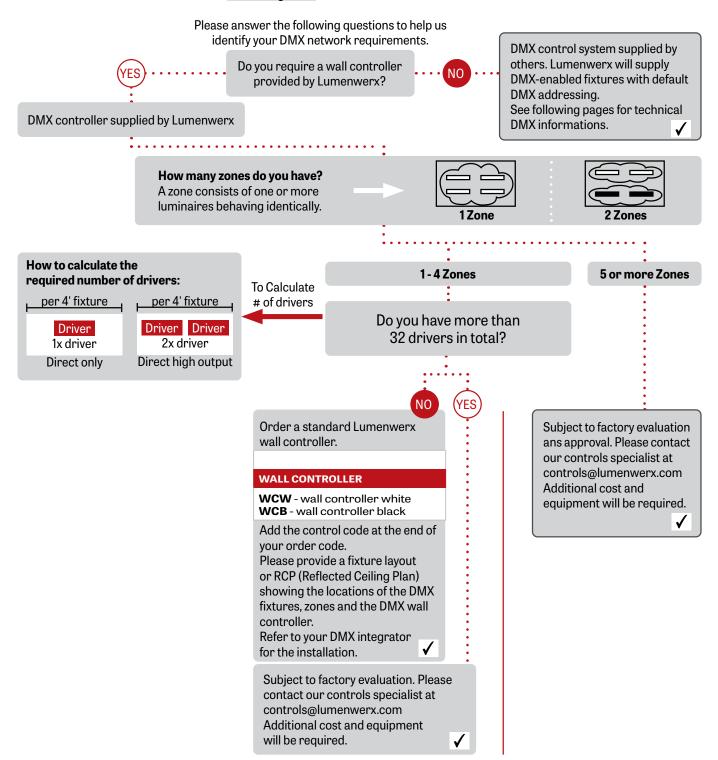




DIRECT/INDIRECT, DIRECT, INDIRECT CHROMAWERX - SOLA, DUO

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.



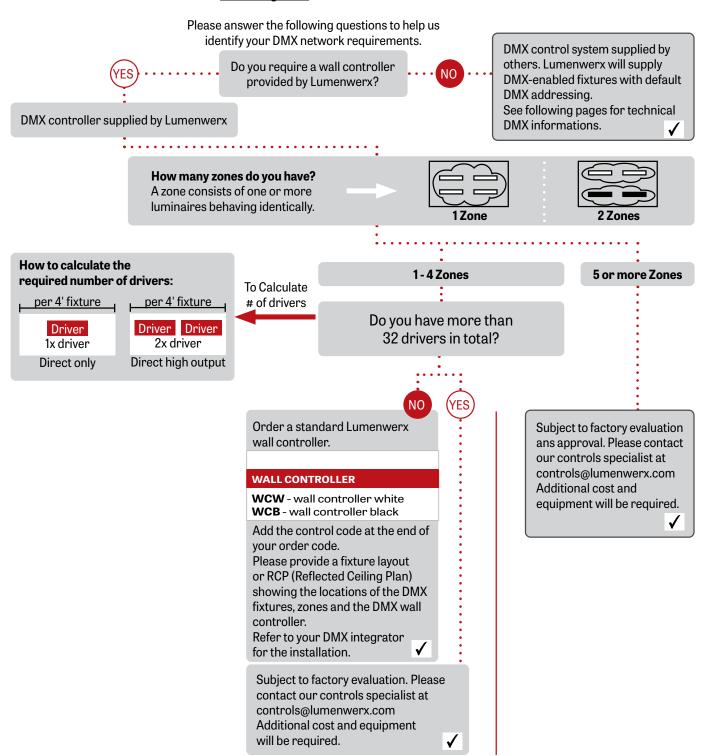




DIRECT/INDIRECT, DIRECT, INDIRECT CHROMAWERX - SOLA, DUO



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





DIRECT/INDIRECT, DIRECT, INDIRECT CHROMAWERX - SOLA, DUO

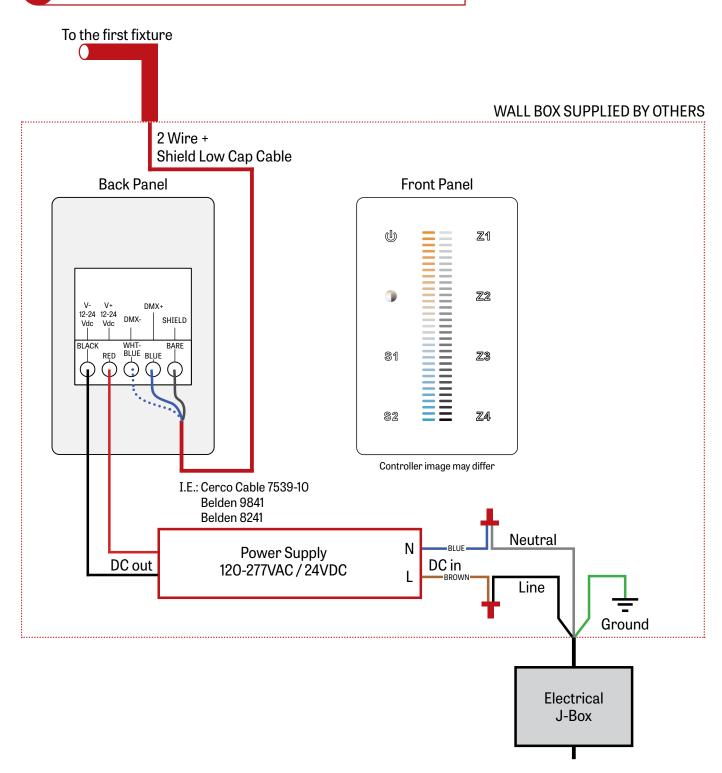
GENERIC DMX NETWORK ARCHITECTURE Lumenwerx supplied Network & control **DMX PROTOCOL** DMX controller by others **CONSIDERATIONS:** DMX drivers/fixtures must be daisy chained. Maximum 32 drivers per DMX run. The end of the line must be terminated First DMX enabled fixture by a 120 Ω resistor supplied by Lumenwerx **DMX IN** DMX Controls J-Box **DMX OUT** Driver Driver Electrical J-Box 120/277V 2 Wire + Shield LOW CAP CABLE **Next DMX enabled fixture** supplied by Lumenwerx **DMX IN** DMX Controls J-Box **DMX OUT** Driver Driver Electrical J-Box 120/277V 2 Wire + Shield LOW CAP CABLE Last DMX enabled fixture supplied by Lumenwerx max 32 drivers per run **DMX IN** DMX Controls J-Box DMX OUT Driver Driver Electrical J-Box 120/277V 120 OHM **END OF LINE RESISTOR**





DIRECT/INDIRECT, DIRECT, INDIRECT CHROMAWERX - SOLA, DUO

LUMENWERX SUPPLIED DMX CONTROLLER





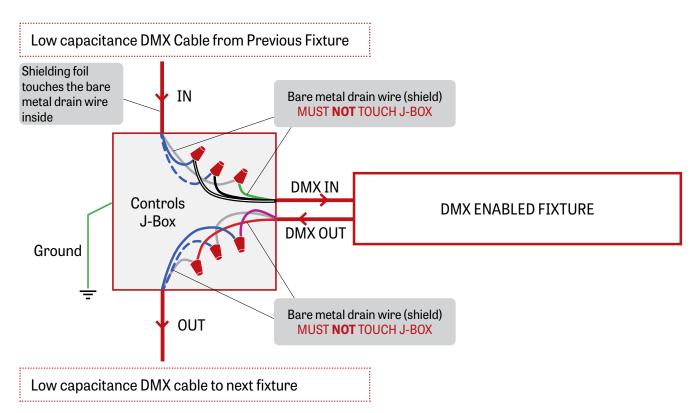




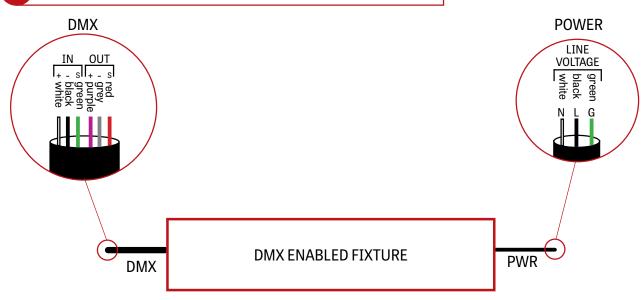


DIRECT/INDIRECT, DIRECT, INDIRECT CHROMAWERX - SOLA, DUO





3 DMX CONNECTION PENDANT & WALL

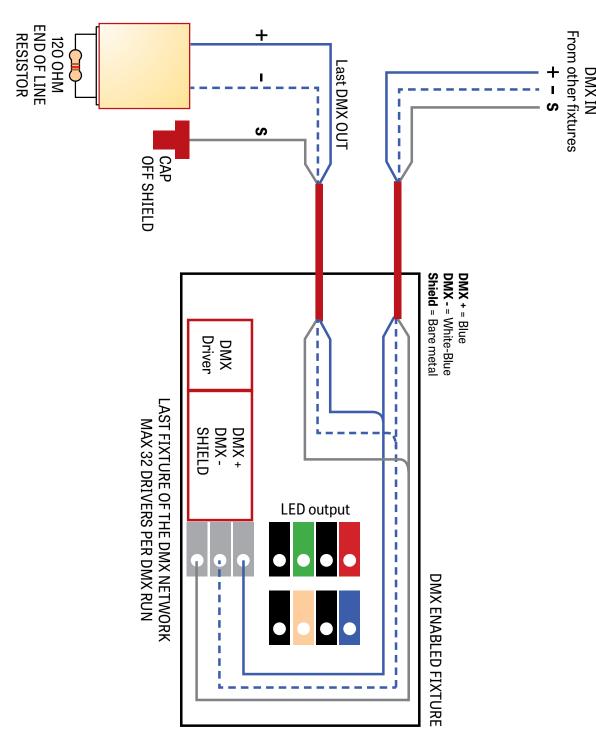






DIRECT/INDIRECT, DIRECT, INDIRECT CHROMAWERX - SOLA, DUO







DIRECT/INDIRECT, DIRECT, INDIRECT CHROMAWERX - SOLA, DUO

DMX WALL CONTROLLER

DUO 1-4 ZONE

(J) $\mathbb{Z}1$ 4 $\mathbb{Z}2$ \$1 $\mathbb{Z}3$ 3 **\$2** $\mathbb{Z}4$

(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.

(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.

Default DMX Addresses:

1Warm 2 Cool

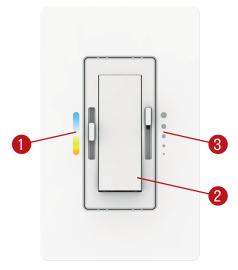




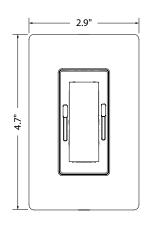
DIRECT/INDIRECT, DIRECT, INDIRECT CHROMAWERX - SOLA, DUO

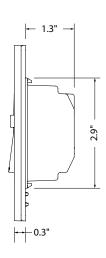
DUAL 0-10V WALL CONTROLLER

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

