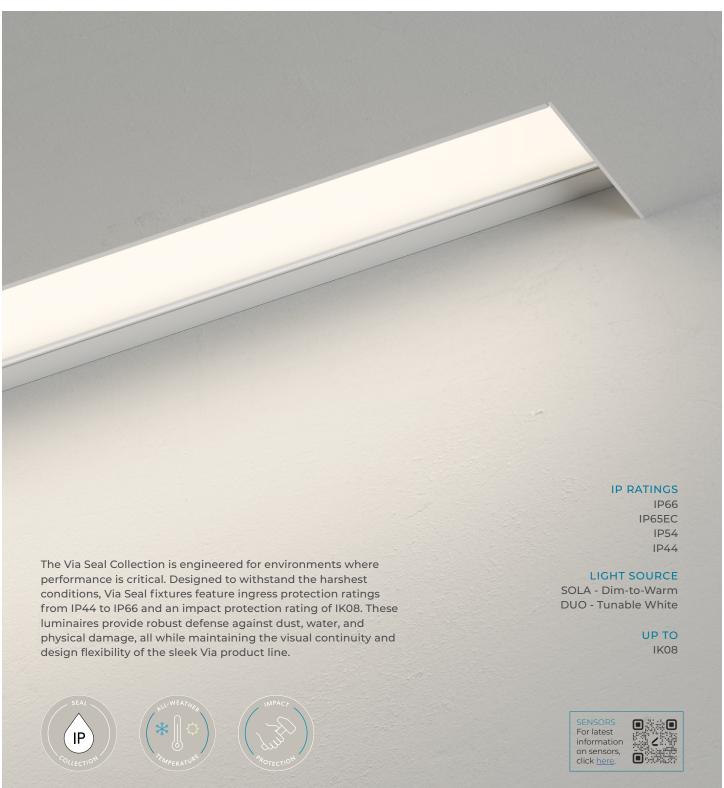
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SEALWERX SERIES

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DIRECT	

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JEA	$\mathbf{L} \mathbf{v} \mathbf{v}$	ニベヘ	SER	

Project:	
•	
Type:	

## Order Guide

LUMINAIRE ID	DISTRIBUTION	ENVIRONMENT <sup>1</sup>	OPTIC	LIGHT SOURCE 3
	D		EPDO	
V3SEALPERL - Via 3 Seal Perimeter Level V3SEALPERS - Via 3 Seal Perimeter Shallow	<b>D</b> - Direct	IP66 - IP66-Rated IP65PEC - IP65-Rated Electrical Components IP54 <sup>2</sup> - IP54-Rated IP44 <sup>2</sup> - IP44-Rated	EPDO - Environmentally Protected Direct Optic	SOLA - Dim-to-warm single channel control 35K to 22K DUO - Tunable white 2-channel control 65K to 27K
V3SEALPERD - Via 3 Seal Perimeter Deep		See page 4 for more information on the features and installation details for each environment option.  Fixture must be installed with direct lens facing down.		<sup>3</sup> Static white and BIOS also available. Consult factory for RGBW.

CRI	LUMEN PACKAGE	LUMINAIRE LENGTH	VOLTAGE	DRIVER 5	ELECTRICAL
					1C
<b>80CRI</b> - 80+ CRI <b>90CRI</b> - 90+ CRI	500LMF - Low output 500 lm/ft 750LMF - Medium output 750 lm/ft 1000LMF - High output 1000 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'  *Minimum 2'. Minimum 4' for DMX.	120V - 120V 277V - 277V UNV - 120V-277V	SOLA SD1 - Single 0-10V input  DUO DMX 6-7 - DMX DA 7 - DALI DT6 DDA8 7 - DALI DT8 DD1 - Dual 0-10V input for CCT/intensity LD2 7 - Lutron DALI-2 digital  See page 4 for driver temperature ranges. For more information, see pages 9 to 14. 7 On-site commissioning is required.	1C - 1 circuit

POWER FEED	MOUNTING	FINISH	OPTIONS 8
TF - Top feed EF - End feed	TC9 - Tegular 9/16" TC15 - Tegular 15/16" TB9 - T-bar 9/16" TB15 - T-bar 15/16" ST - Screw slot T-bar MTR - Trim MTL - Trimless DMF - Drywall mud flange	W - Matte white AL - Aluminum WA - White antimicrobial Silverwerx	NEF 9.10 - No end flanges FEP 10 - Flush end plates CRF - Corrosion-resistant finish GGK - Grid gasket NA - None *Separate codes with a "+" if more than one is specified. *For wall-to-wall installations. 10 See page 5 for details.

## Accessories

Optional, order separately

### WALL CONTROLLER 11

DMX	וסס
WCW##FT <sup>12</sup> - DMX wall controller white WCB##FT <sup>12</sup> - DMX wall controller black	TWCW##FT <sup>13</sup> - Dual 0-10V wall controller white TWCB##FT <sup>13</sup> - Dual 0-10V wall controller black
"Specify wire length (##) in feet.	

<sup>12</sup> Available with DMX only. For more information, see pages 9 to 14, or consult factory. <sup>13</sup> Available with DD1 only. For more information, see page 15, or consult factory.

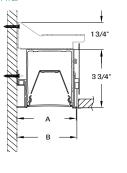


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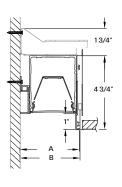
## **SEALWERX SERIES**

## **Dimensions**

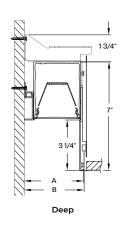




Level



Shallow



T-BAR	FIXTURE WIDTH A	TO CENTER OF T-BAR B
TB9/TG9 TB15/TG15	3 27/32" 3 15/16"	3 7/8" 4"
ST	3 27/32"	3 7/8"





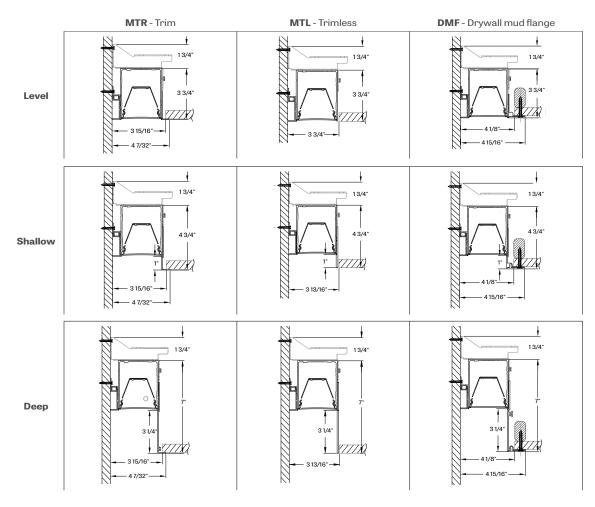


TB9 - T-bar 9/16

TG9 - Tegular 9/16" T-bar

TB15 - T-bar 15/16 TG15 - Tegular 15/16"

### DRYWALL







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SEALWERX SERIES

## **Environment Options**

	Direct					
IP66		<b>5</b> EC Components	IP5	4	IP4	4
Dust tight High water resistance	Dust tight	Moderate water resistance	Dust protected	Water splash resistance	Particles larger than 1mm protected	Water splash resistance
		OUTE	OOR			
Directly exposed to the elements	Moderate e the ele	exposure to ments		canopy, exposed		canopy, posed
INDOOR  Wipe down application  Healthcare application  Cleanroom application						
lens gasket external end cap gasket internal end cap gasket						
External joiner gasket every 12'  Continuous line of light over 12'		with soft s	iner gasket hadow line ry 12'		ous line of over 12'	
Driver: in a sealed enclos Electrical connections: v		st proof				
<b>LED boards</b> : conformal coated for maximum protection						

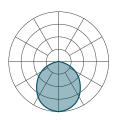
	Ambie	nt Temperature Range based on driver selection	
	LD2	SDI / DMX / DDA / DDA8	DDI
Minimum temperature:	0 °C / 32 °F	-20 °C / -4 °F	-25 °C / -13 °F
Maximum temperature:		40 °C / 104 °F	

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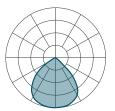
## SEALWERX SERIES

## Photometrics

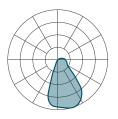
Values calculated based on a 4' fixture at 4000K and 80+ CRI.



_evei		
LM/FT	W/FT	LM/W
500	4.9	101
750	7.6	98
1000	10.5	94



W/FT	LM/W
5.1	97
8	93
11	90
	5.1



Deeb						
LM/FT	W/FT	LM/W				
500	5.3	94				
750	8.2	91				
1000	11.3	88				

#### **MULTIPLIER TABLES**

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

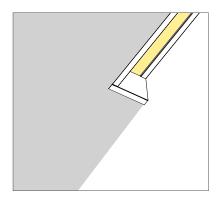
Δ

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

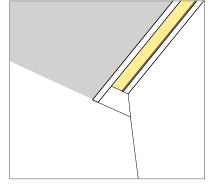
ССТ	WATTS		LPW	
	80+ CRI	90+ CRI	80+ CRI	90+ CRI
2700K	1.05	1.27	0.95	0.79
6500K	1.00	1.14	1.00	0.88

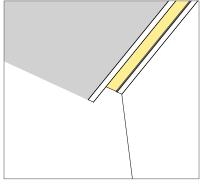
## **End Configurations**

### STANDARD



#### **OPTIONS**





FEP - Flush end plates



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### **SEALWERX SERIES**

## **Technical Specifications**

### OPTIC

#### **Environmentally Protected Direct Optic (EPDO)**

The Environmentally Protected Direct Optic creates a seal that blocks debris and moisture, and withstands UV distortion and moderate impact. This extruded snap-in lens has a gasket to ensure proper sealing. The lens is 1/16" thick and made of frosted polycarbonate. Internally, white, side kicking reflectors guide the light through the lens. The EPDO suits moderate climate environments.

#### LIGHT SOURCE

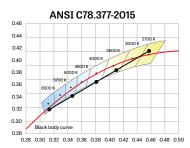
Custom linear array of alternating color temperature mid-flux LEDs are mounted directly to the housing for optimal thermal performance. For the DUO products, a color temperature range from 6500K-2700K is achievable with color points on or below the black body curve. For the SOLA products, a color temperature range from 3500K-2200K is controlled synchronously with intensity. Color consistency between fixtures is maintained to within 3 SDCM. LEDs are operated at 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 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.



#### WELL BUILDING STANDARD



WELL for Light: The WELL building standard focuses on light quality in several features. There are three categories that are fully attributed to the construction and features of a luminaire. In WELL V1, it's Feature 54 Circadian Lighting, Feature 55 Glare Control, and Feature 58 Color Quality. In WELL V2, it's Feature L03 Circadian Lighting, Feature L04 Glare Control, and Feature L07 Electric Light Quality.

This fixture meets Features:

- Feature 54 or L03 when DUO is selected
- Feature 55 or L04 meets WELL glare category (c-d) (not applicable with 1000 lm/ft)
- Feature 58 or L07 when 90+ CRI is selected

All LED drivers used at Lumenwerx are deemed to have a low risk level of flicker, of 5% or less below 90Hz operational as defined by IEEE standard 1789-2015 LED.



**WELL for Mind**: This luminaire meets WELL for mind as it is a human centric luminaire offering quality light, excellent color, and smooth optics. If any of these features are incorporated in a luminaire, it can improve the ability to focus, concentrate, and persist longer on a given task. This fixture harmoniously operates in a space to assist the mind.

For more information, please contact well@lumenwerx.com



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### **SEALWERX SERIES**

#### LUMINAIRE LENGTH

Via 3 Seal Perimeter 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' and can be ordered in 1' and/or 1" increments. All individual sections are joined together onsite using the joiner kits provided. Lumenwerx joiner kits 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.

#### TEMPERATURE VARIATION PROTECTION

The intergrated pressure equalization and moisture control GORE® protective vent allows air to flow while blocking water, dust, and contaminants. It reduces internal condensation, supports thermal stability, and preserves the fixture's sealed performance over time.



Location may vary.

#### **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.

#### 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

Recessed fixtures can be mounted into exposed or concealed T-bar or tegular ceiling, as well as in ceilings with trim, trimless, or mud flange options.

#### FINISH

**Interior**: 95%, reflective matte powder coated white paint **Exterior**: Powder-coat paint in matte white or aluminum. Optional antimicrobial finish.



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#### SEALWERX SERIES

#### CONSTRUCTION

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

Gaskets: closed-cell silicone foam

Reflectors: Die-formed cold rolled sheet steel

Recessed flanges: Extruded aluminum, up to 90% recycled

content

Mud flange: Extruded aluminum, up to 90% recycled content

End caps: Die-cast aluminum

Mounting bracket: Aluminum bracket with stainless steel PEM

studs and sealing washers

Grid gasket (GGK option): 1/16" closed-cell silicone foam, assures

a better seal between the fixture and the grid

#### WEIGHT

**4**': 12.8 lbs - 5.8 kg **8**': 23.6 lbs - 10.7 kg **12**': 34.4 lbs - 15.6 kg

#### **CERTIFICATIONS**

**ETL**: IP44-Rated environment option is rated for dry/damp locations. IP66-Rated, IP65-Rated Electrical Components, and IP54-Rated environment options are ETL Wet Listed. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0. During the installation of Wet Listed fixtures, the contractor is responsible for properly sealing all mounting and electrical connection points.

IC rated: Suitable for direct contact with insulation

#### WARRANTY

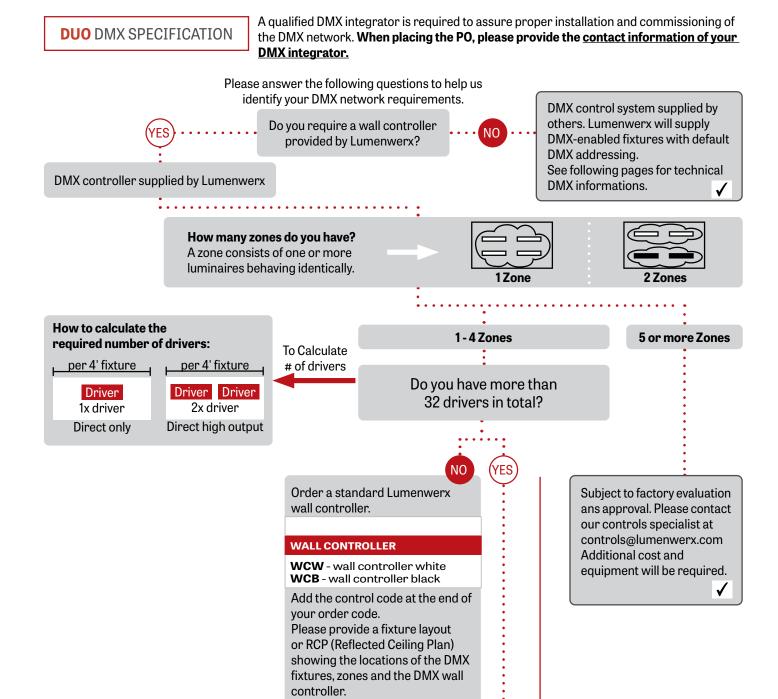
Lumenwerx provides a five-year limited warranty on electrical and mechanical performance of the luminaires, including the LED boards, drivers, and auxiliary electronics. Lumenwerx will repair or replace defective luminaires or components at our discretion, provided they have been installed and operated 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.



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### **SEALWERX SERIES**





Refer to your DMX integrator

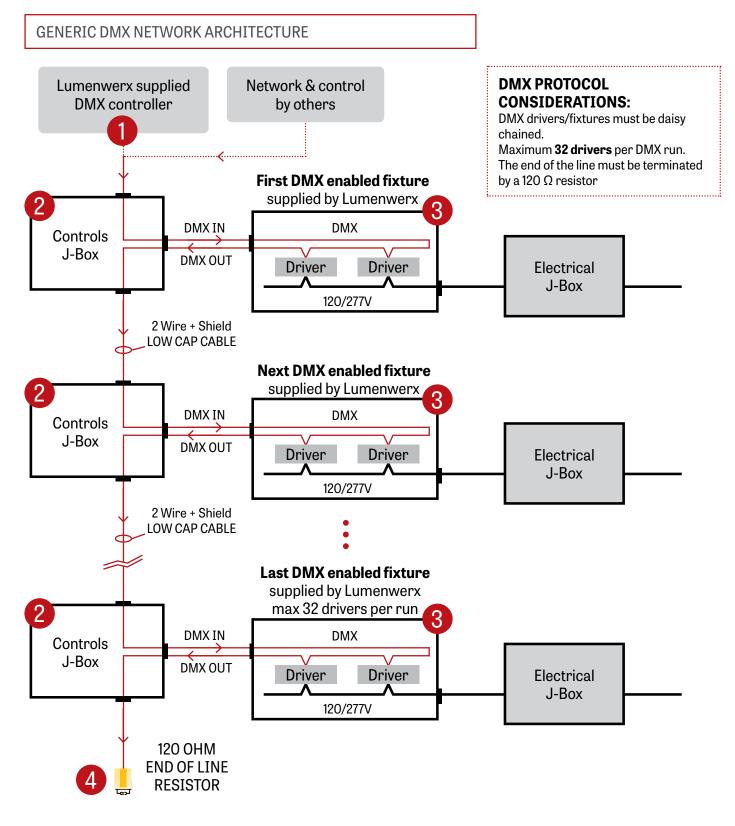
Subject to factory evaluation. Please contact our controls specialist at controls@lumenwerx.com
Additional cost and equipment

for the installation.

will be required.

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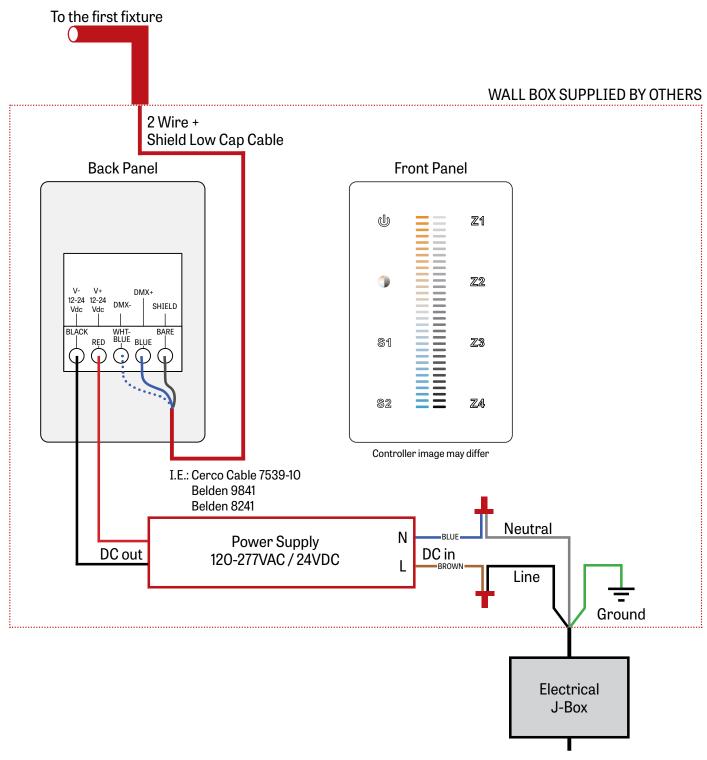
## **SEALWERX SERIES**



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## **SEALWERX SERIES**

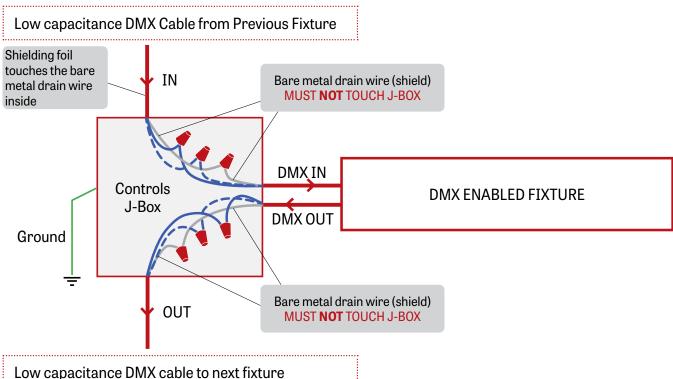
1 LUMENWERX SUPPLIED DMX CONTROLLER



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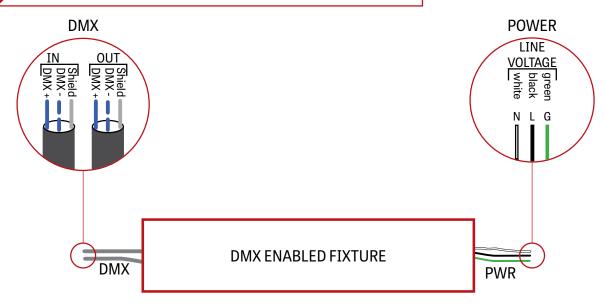
## **SEALWERX SERIES**

2 J-BOX DMX DAISY CHAIN DETAIL



Low capacitance DIMA cable to next fixture

3 DMX CONNECTION RECESSED & SURFACE

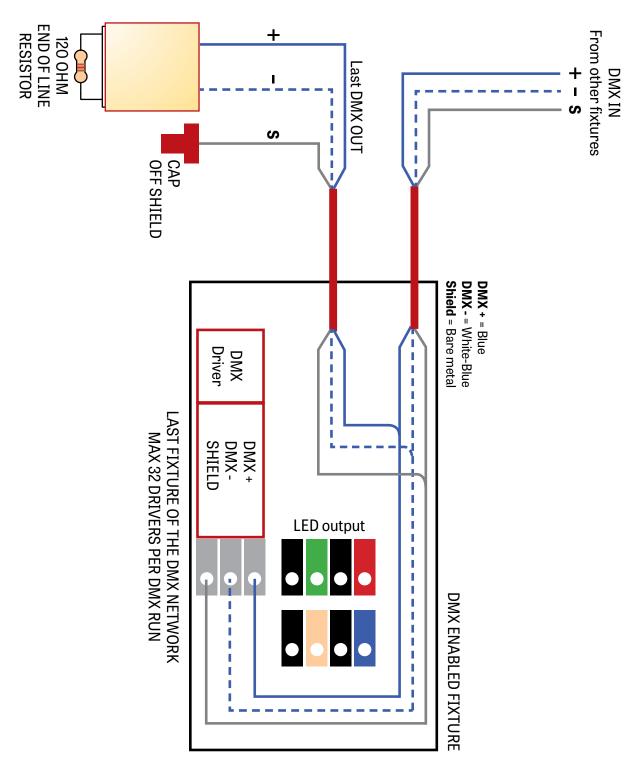




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## **SEALWERX SERIES**

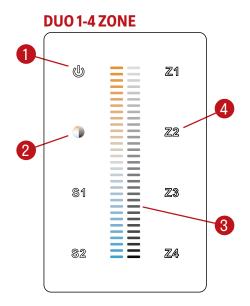
4 DMX LAST FIXTURE DETAIL



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### **SEALWERX SERIES**

## DMX WALL CONTROLLER



(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.

## **Default DMX Addresses:**

1Warm 2 Cool

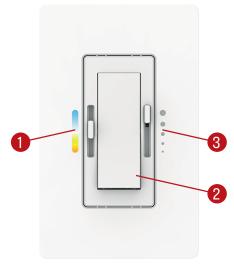


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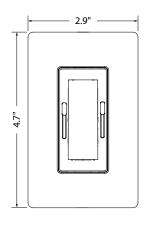
## **SEALWERX SERIES**

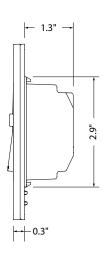
## **DUAL 0-10V WALL CONTROLLER**

## **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

