VIA 4 SEAL
SURFACE
DIRECT

Lumenwerx

IP RATINGS
IP66
IP65
IP65EC
IP54
IP44

LIGHT SOURCE
SOLA - Dim-to-Warm
DUO - Tunable White

UP TO
IK08

The Via Seal Collection is engineered for environments where performance is critical. Designed to withstand the harshest conditions, Via Seal fixtures feature ingress protection ratings from IP44 to IP66 and an impact protection rating of IK08. These luminaires provide robust defense against dust, water, and physical damage, all while maintaining the visual continuity and design flexibility of the sleek Via product line.
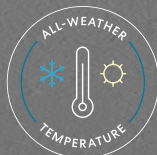
SEAL COLLECTION — IP

ALL-WEATHER TEMPERATURE

IMPACT PROTECTION

SENSORS
For latest information on sensors, click here.

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Project: _____

_____

Type: _____

Order Guide

LUMINAIRE ID	DISTRIBUTION	ENVIRONMENT [1]		OPTIC	LIGHT SOURCE [3]	CRI
V4SEALS	**D**					
V4SEALS - Via 4" Seal Surface	**D** - Direct	**IP66** - IP66-Rated **IP65EC** - IP65-Rated Electrical Components **IP54** [2] - IP54-Rated **IP44** [2] - IP44-Rated [1] See page 4 for more information on the features and installation details for each environment option. [2] Fixture must be installed with direct lens facing down.		**EPDO** - Environmentally Protected Direct Optic **ASDO** - Asymmetric Soft Direct Optic	**SOLA** - Dim-to-warm single channel control 35K to 22K **DUO** - Tunable white 2-channel control 65K to 27K [3] Static white and BIOS also available. Consult factory for RGBW.	**80CRI** - 80+ CRI **90CRI** - 90+ CRI

LUMEN PACKAGE	LUMINAIRE LENGTH	VOLTAGE	DRIVER [5]		ELECTRICAL
					1C
500LMF - Low output 500 lm/ft **750LMF** - Medium output 750 lm/ft **1000LMF** - High output 1000 lm/ft	**#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' [4] • Minimum 2' for Direct. • Minimum 4' for DMX.	**120V** - 120V **277V** - 277V **UNV** - 120V-277V	<u>SOLA</u> **SD1** - Single 0-10V input <u>DUO</u> **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 [5] See page 4 for driver temperature ranges. [6] For more information, see pages 9 to 14. [7] On-site commissioning is required.		**1C** - 1 circuit

POWER FEED	MOUNTING	FINISH	OPTION
	GSM		
TF - Top feed **EF** - End feed	**GSM** - Gasketed surface mount	**W** - Matte white **AL** - Aluminum **B** - Matte black **WA** - White antimicrobial Silverwerx **CF#** - Custom finish, specify RAL#	**CRF** - Corrosion-resistant finish **NA** - None

Accessories
Optional, order separately

WALL CONTROLLER [8]	
DMX	**DD1**
WCW##FT [9] - DMX wall controller white **WCB##FT** [9] - DMX wall controller black	**TWCW##FT** [10] - Dual 0-10V wall controller white **TWCB##FT** [10] - Dual 0-10V wall controller black

[8] Specify wire length (##) in feet.
[9] Available with DMX only. For more information, see pages 9 to 14, or consult factory.
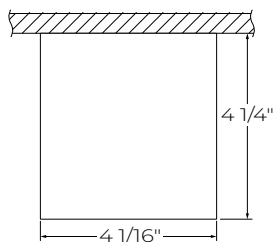[10] Available with DD1 only. For more information, see page 15, or consult factory.

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Dimensions

4 1/4"

4 1/16"

3737 Cote Vertu St-Laurent, Quebec, Canada H4R 2C9
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www.Lumenwerx.com

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VIA4SEAL-SURFACE-TW-SPEC-REV5   July 24, 2025

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SEALWERX SERIES

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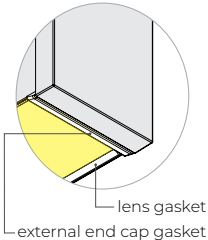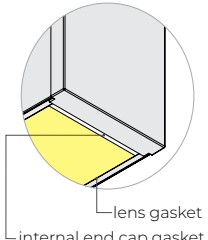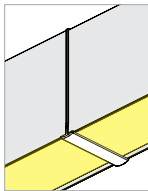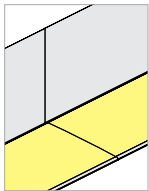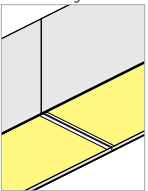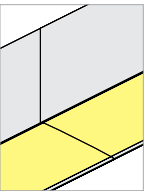
Environment Options

Direct			
IP66	**IP65EC** Electrical Components	**IP54**	**IP44**
Dust tight / High water resistance	Dust tight / Moderate water resistance	Dust protected / Water splash resistance	Particles larger than 1mm protected / Water splash resistance
OUTDOOR			
Directly exposed to the elements	Moderate exposure to the elements	Under canopy, slightly exposed	Under canopy, not exposed
INDOOR			
Wipe down application Healthcare application Cleanroom application	Wipe down application Healthcare application		
 lens gasket external end cap gasket		 lens gasket internal end cap gasket	
External joiner gasket every 12' 	Continuous line of light over 12' 	Internal joiner gasket with soft shadow line every 12' 	Continuous line of light over 12'
Driver: in a sealed enclosure **Electrical connections**: water and dust proof			
LED boards: conformal coated for maximum protection			

Ambient Temperature Range based on driver selection			
	LD2	**SD1 / DMX / DDA / DDA8**	**DD1**
Minimum temperature:	0 °C / 32 °F	-20 °C / -4 °F	-25 °C / -13 °F
Maximum temperature:		40 °C / 104 °F	

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Photometrics

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

DIRECT

EPDO

LM/FT	W/FT	LM/W
500	4.9	101
750	7.7	98
1000	10.5	95

ASDO

LM/FT	W/FT	LM/W
500	4.4	113
750	7	107
1000	9.7	103
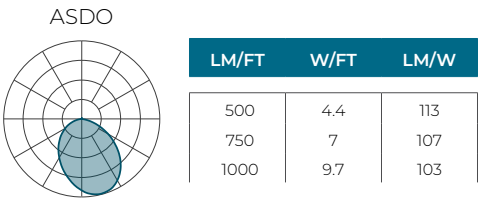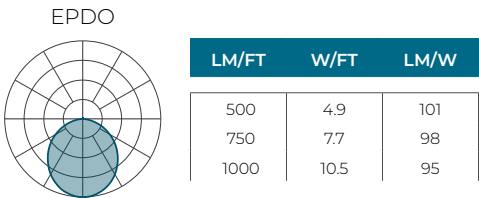
MULTIPLIER TABLES

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

SOLA

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

DUO

CCT	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

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Technical Specifications

OPTICS

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.

Asymmetric Soft Direct Optic (ASDO)
The Asymmetric Soft 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 specifically angled to guide the light through the lens to create a nice asymmetric distribution. The ASDO 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. 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.

ANSI C78.377-2015
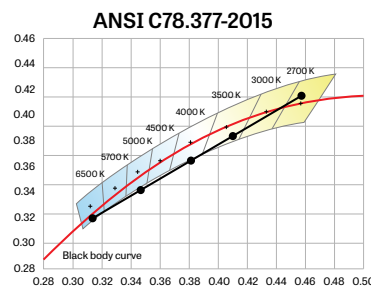
WELL BUILDING STANDARD

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.

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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

LUMINAIRE LENGTH

Via 4 Seal 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

Fixtures can be mounted directly to hard surface ceilings only. Hardware supplied by others. Long runs require a minimum of 6" from the vertical wall.

FINISH

Interior: 95%, reflective matte powder coated white paint
Exterior: Powder-coat paint in matte white, matte black, or aluminum. Custom finishes are also available. Optional antimicrobial finish.

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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, 95% reflective matte white painted
End cap: Die-cast aluminum
Mounting: Sealing washer for 1/4" threaded rods

WEIGHT

4': 15.0 lbs - 6.8 kg
8': 27.6 lbs - 12.5 kg
12': 40.1 lbs - 18.2 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.
IK08: Impact resistance rated to IK08

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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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 4' fixture	per 4' fixture
Driver	Driver Driver
1x driver	2x driver
Direct only	Direct high output

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
Additional cost and equipment will be required. ✓

Subject to factory evaluation ans approval. Please contact our controls specialist at controls@lumenwerx.com
Additional cost and equipment will be required. ✓

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GENERIC DMX NETWORK ARCHITECTURE

Lumenwerx supplied DMX controller

Network & control by others

(1)

DMX PROTOCOL CONSIDERATIONS:
DMX drivers/fixtures must be daisy chained.
Maximum **32 drivers** per DMX run.
The end of the line must be terminated by a 120 Ω resistor

(2) Controls J-Box

First DMX enabled fixture
supplied by Lumenwerx

(3)

DMX IN

DMX OUT

DMX

Driver   Driver

120/277V

Electrical J-Box

2 Wire + Shield LOW CAP CABLE

(2) Controls J-Box

Next DMX enabled fixture
supplied by Lumenwerx

(3)

DMX IN

DMX OUT

DMX

Driver   Driver

120/277V

Electrical J-Box

2 Wire + Shield LOW CAP CABLE

(2) Controls J-Box

Last DMX enabled fixture
supplied by Lumenwerx
max 32 drivers per run

(3)

DMX IN

DMX OUT

DMX

Driver   Driver

120/277V

Electrical J-Box

(4) 120 OHM END OF LINE RESISTOR

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1   LUMENWERX SUPPLIED DMX CONTROLLER

To the first fixture

WALL BOX SUPPLIED BY OTHERS

2 Wire +
Shield Low Cap Cable

Back Panel

V- 12-24 Vdc	V+ 12-24 Vdc	DMX-	DMX+	SHIELD
BLACK	RED	WHT- BLUE	BLUE	BARE

Front Panel

⏻   Z1

◐   Z2

S1   Z3

S2   Z4
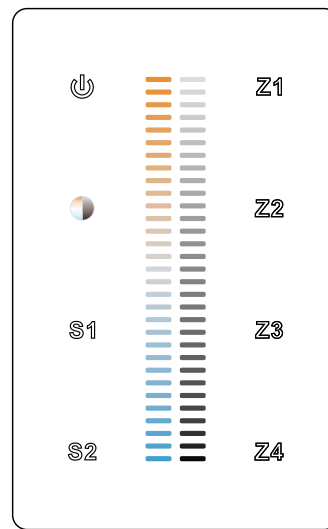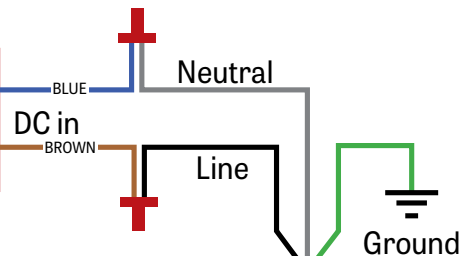
Controller image may differ

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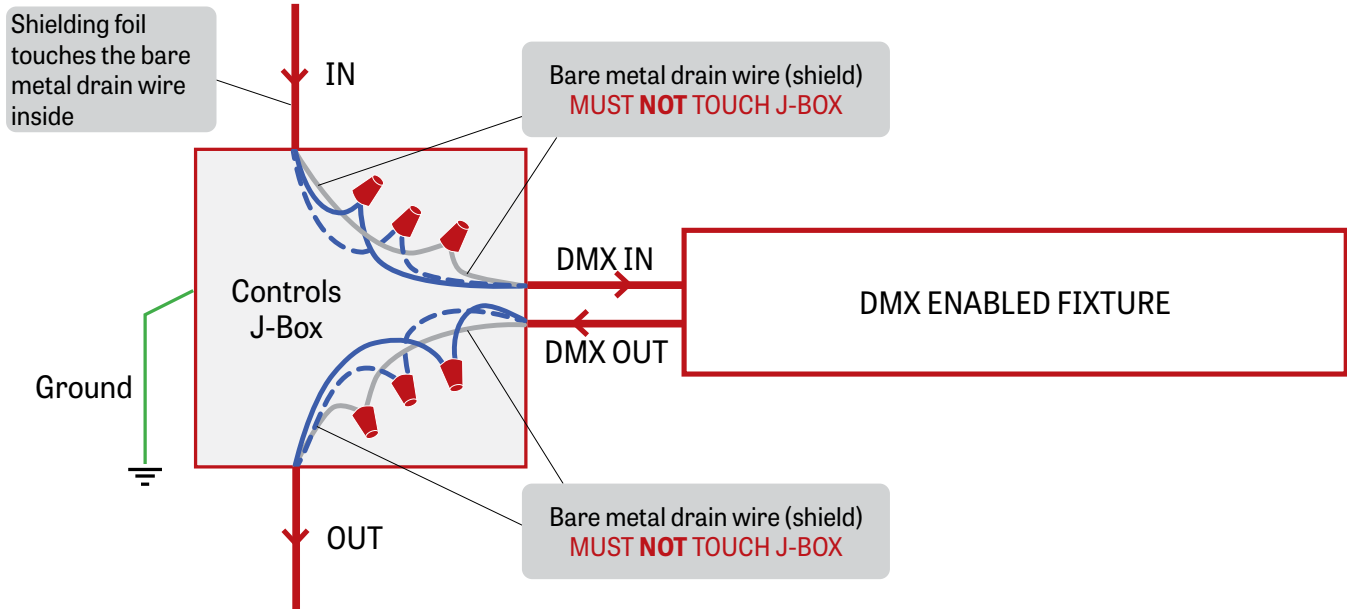   Belden 8241

DC out

Power Supply
120-277VAC / 24VDC

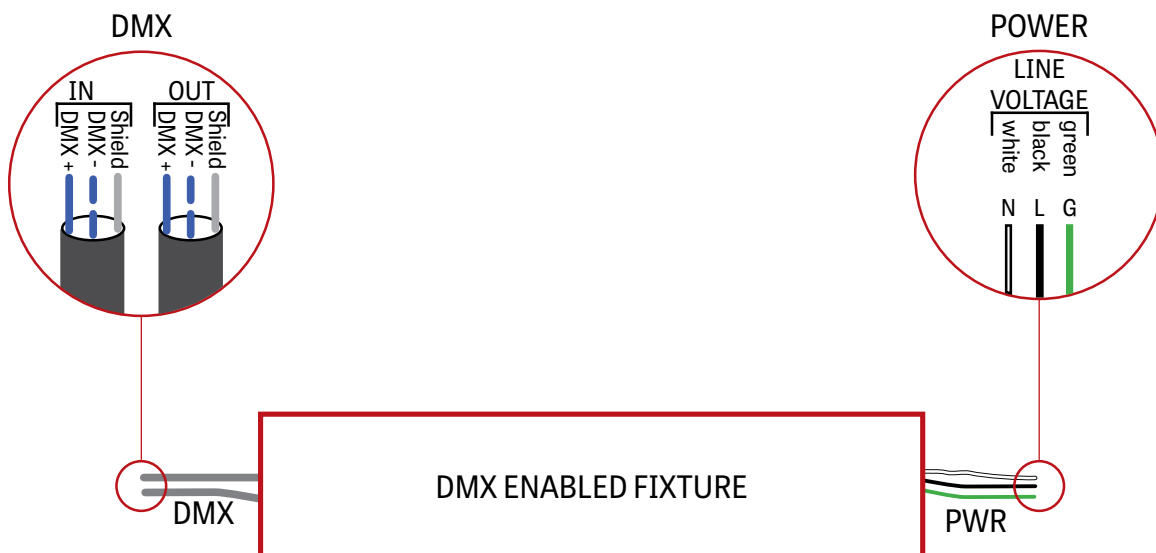N   BLUE   Neutral

DC in

L   BROWN   Line

Ground

Electrical
J-Box

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2   J-BOX DMX DAISY CHAIN DETAIL

Low capacitance DMX Cable from Previous Fixture

Shielding foil touches the bare metal drain wire inside

IN

Bare metal drain wire (shield) MUST **NOT** TOUCH J-BOX

Controls J-Box

DMX IN

DMX ENABLED FIXTURE

DMX OUT

Ground

Bare metal drain wire (shield) MUST **NOT** TOUCH J-BOX

OUT

Low capacitance DMX cable to next fixture

---

3   DMX CONNECTION RECESSED & SURFACE

DMX

IN   OUT
Shield   DMX -   DMX +   Shield   DMX -   DMX +

POWER

LINE VOLTAGE
green   black   white

N   L   G

DMX ENABLED FIXTURE

DMX

PWR

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4 DMX LAST FIXTURE DETAIL

120 OHM
END OF LINE
RESISTOR

+

−

Last DMX OUT

DMX IN
From other fixtures

+

−

S

S

CAP
OFF SHIELD

DMX + = Blue
DMX − = White-Blue
Shield = Bare metal

DMX
Driver

DMX +
DMX −
SHIELD

LAST FIXTURE OF THE DMX NETWORK
MAX 32 DRIVERS PER DMX RUN

LED output

DMX ENABLED FIXTURE

3737 Cote Vertu St-Laurent, Quebec, Canada H4R 2C9
T (514) 225-4304 F (514) 931 -4862
www.Lumenwerx.com

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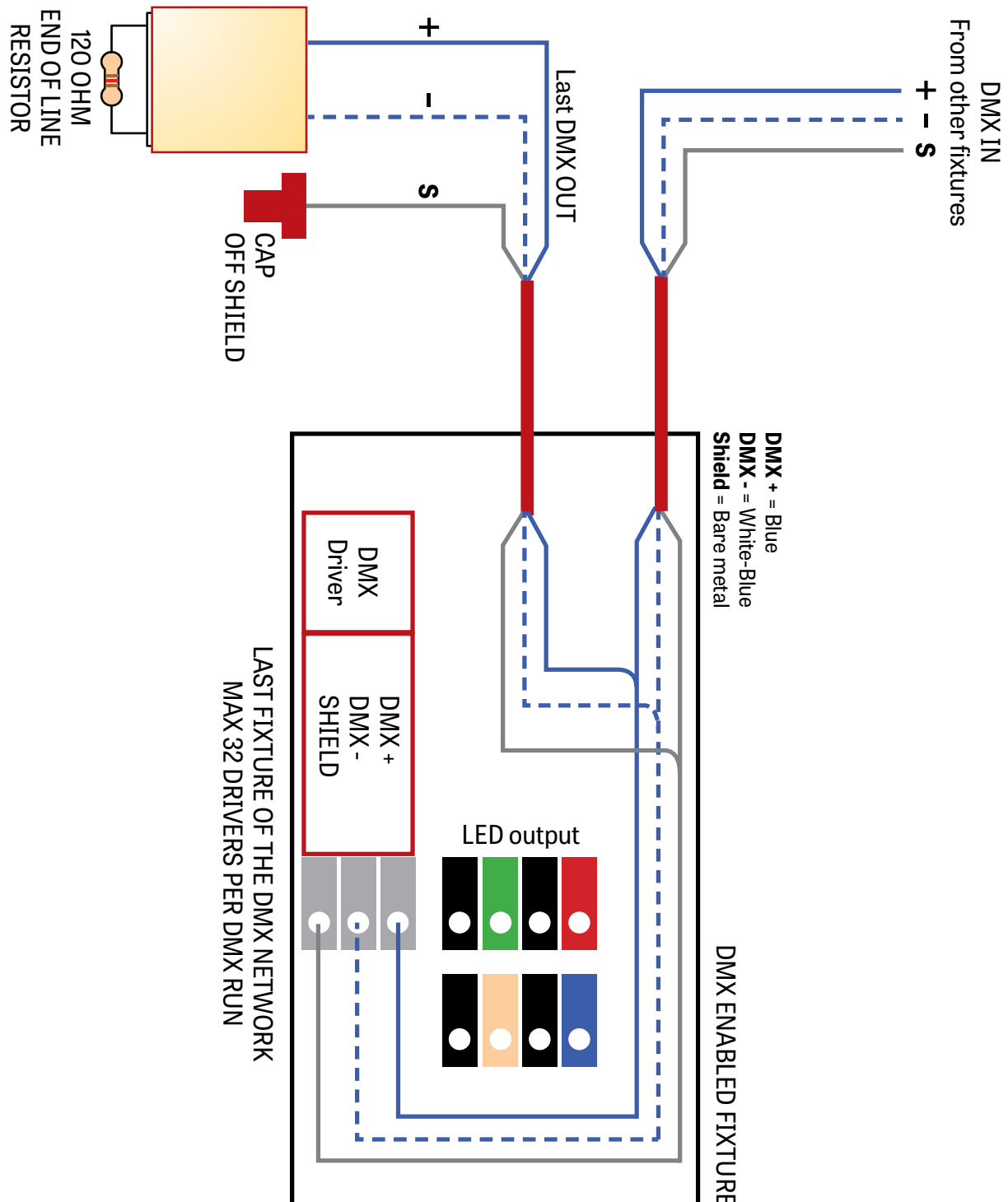
VIA 4 SEAL
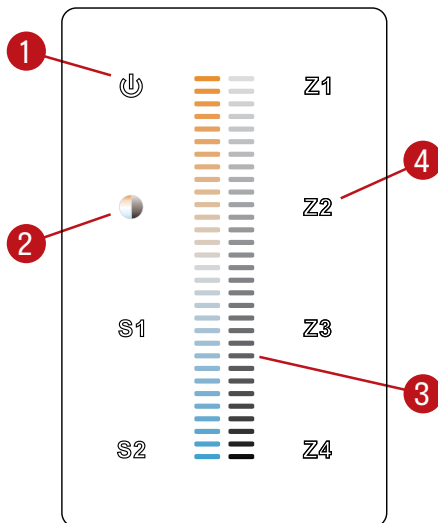
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DMX WALL CONTROLLER

DUO 1-4 ZONE

(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.

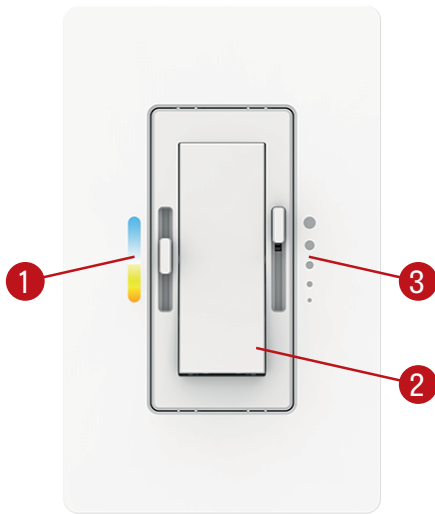**Default DMX Addresses:**
1 Warm
2 Cool

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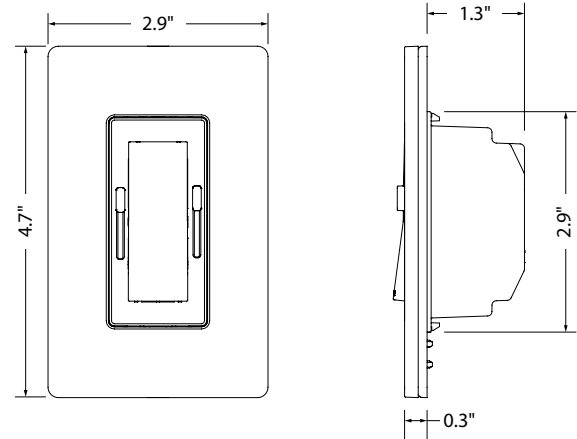
DUAL 0-10V WALL CONTROLLER

Front Panel

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.

Dimensions

2.9"

4.7"

1.3"

2.9"

0.3"

Wiring Diagram

Ground — Green

0-10V Ch 1 (TW Control) + –   Yellow
                                Brown
0-10V Ch 2 (Intensity) + –   Purple
                                Gray

Wall Switch
(In-Wall Dimmer)

Line / Hot — Black   Red

120 V~
50/60 Hz

White

Neutral

* 2 Channel LED Driver / Controller   – + – +   – +

Tunable White LED's

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