

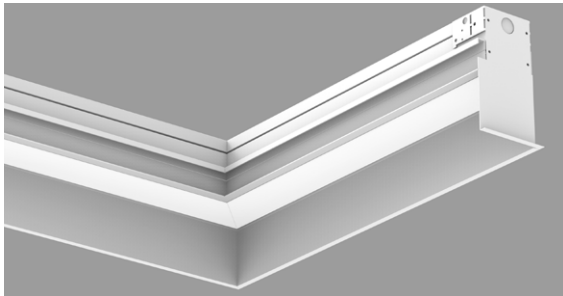
# VIA 3 PERIMETER

## RECESSED PATTERN

### CHROMAWERX - QUADRO - RGBW



Project: \_\_\_\_\_  
Type: \_\_\_\_\_



Via 3 Perimeter Deep Pattern

#### DESCRIPTION

Via 3 Perimeter creates a continuously illuminated "slot" at the wall/ceiling intersection. Lighted corners with adjustable end sleeves are available. Via Perimeter installs in grid or drywall ceilings in a choice of three arrangements: level, shallow 1", and deep 3 1/4".



## Order Guide

► A drawing of your pattern is required - anything from a line drawing to an architectural drawing.

**IC RATED**

LUMINAIRE ID		OPTIC	LIGHT SOURCE <sup>2</sup>	WHITE CRI Specify NA for solid colors	OUTPUT WATTAGE <sup>3</sup>	
V3PERLPAT - Via 3 Perimeter Level Pattern V3PERSPAT - Via 3 Perimeter Shallow Pattern V3PERDPAT - Via 3 Perimeter Deep Pattern		HLO - High-Efficiency Lambertian Optic ARFO <sup>1</sup> - Asymmetric Room Fill Optic  <sup>1</sup> Not available with Deep fixtures.	QUADRO - RGBW 4-channel control RS - Red solid GS - Green solid BS - Blue solid  <sup>2</sup> Static white, Chromawerx SOLA and DUO also available. Consult other spec sheets.	80CRI - 80 CRI 90CRI - 90 CRI NA - Not applicable	8WF - 8 W/ft output 10WF <sup>4</sup> - 10 W/ft output 12WF <sup>4</sup> - 12 W/ft output  <sup>3</sup> See page 3 for dedicated white channel lumen outputs. <sup>4</sup> Not available with solid colors.	
WHITE COLOR TEMP. Specify NA for solid colors	PATTERN LENGTH		CORNER TYPE <sup>6</sup>		VOLTAGE	
27K - 2700K 30K - 3700K 35K - 3500K 40K - 4000K 50K - 5000K NA - Not applicable	##FT##IN(##X##FT##IN-##X##FT##IN-...) <sup>5</sup> - ##FT##IN: total nominal length of pattern in feet and/or inches #X: quantity of each section #FT##IN: nominal length of each section in feet and/or inches  Continuous runs: lengths over 12'  <sup>5</sup> Minimum fixture length is 4'.		#LEVI2C(##) - 2-way leveled inside corner #LEVO2C(##) <sup>7</sup> - 2-way leveled outside corner  <sup>6</sup> Specify quantity (#) and angle (##) for each required corner type. <sup>7</sup> Not available with ARFO. <sup>8</sup> Minimum angle is 45°.		ANGLE (##): (90) - 90° (##) <sup>7,8</sup> - Custom  120V - 120V 277V - 277V UNV - 120V-277V	
DRIVER <sup>9</sup>		ELECTRICAL	MOUNTING	FINISH	OPTIONS <sup>12</sup>	ADJUSTABLE SLEEVE (optional) <sup>14</sup>
QUADRO DMX <sup>10,11</sup> - DMX  <div><div>PoE (Power-over-Ethernet) compatible. Consult factory for details. <sup>10</sup>To specify, see pages 7 to 12. <sup>11</sup>On-site commissioning is required.</div></div>		1C - 1 circuit	TC9 - Tegular 9/16" TC15 - Tegular 15/16" TB9 - T-bar 9/16" TB15 - T-bar 15/16" ST - Screw slot T-bar DTR - Drywall trim DTL - Drywall trimless DMF - Drywall mud flange	W - Matte white CF# - Custom finish, specify RAL#	NEF <sup>13</sup> - No end flanges FU120 - Fuse 120V FU277 - Fuse 277V FWC - Flexible whip cable (6' std) CP - Chicago Plenum NA - None  <sup>12</sup> Separate codes with a "+" if more than one is specified. <sup>13</sup> For wall-to-wall installations.	#TES - Adjustable end sleeve, specify quantity (#) #TMS <sup>15</sup> - Adjustable mid sleeve, specify quantity (#) NA - None  <sup>14</sup> See page 4 for details. <sup>15</sup> Minimum 6' fixture. Maximum 1 sleeve per section.

## Accessories optional, order separately

### DMX WALL CONTROLLER <sup>16</sup>

**WC1W** - Single zone wall controller white  
**WC1B** - Single zone wall controller black  
**WC2W** - 3 zone wall controller white  
**WC2B** - 3 zone wall controller black

<sup>16</sup> Available with DMX only. For more information, see pages 7 to 12, or consult factory.

**TECHZONE™ & USG** Compatible with 4" ceiling

3737 Cote Vertu St-Laurent, Quebec, Canada H4R 2C9  
 T (514) 225-4304 F (514) 931-4862  
[www.lumenwerx.com](http://www.lumenwerx.com)



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 VIA3-PERIMETER-RGBW-PATTERN-SPEC-REVO January 25, 2024



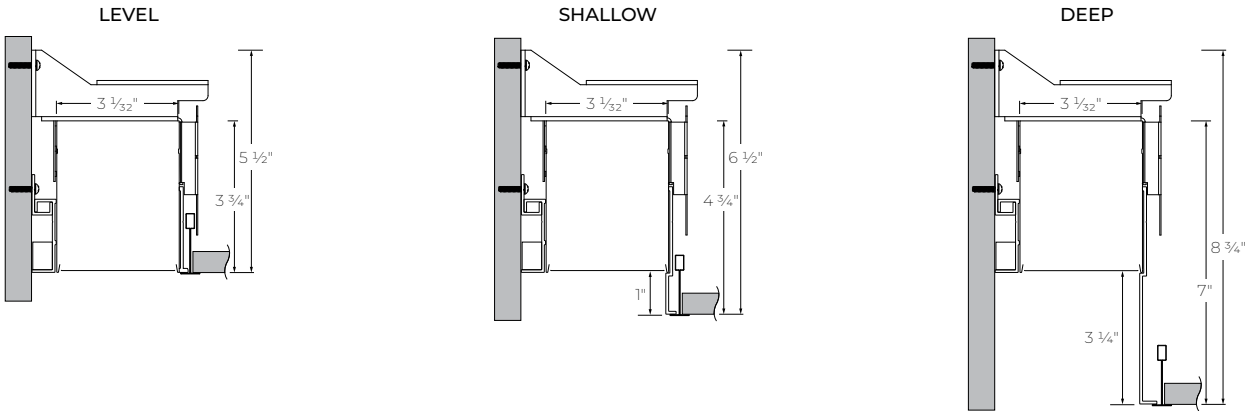
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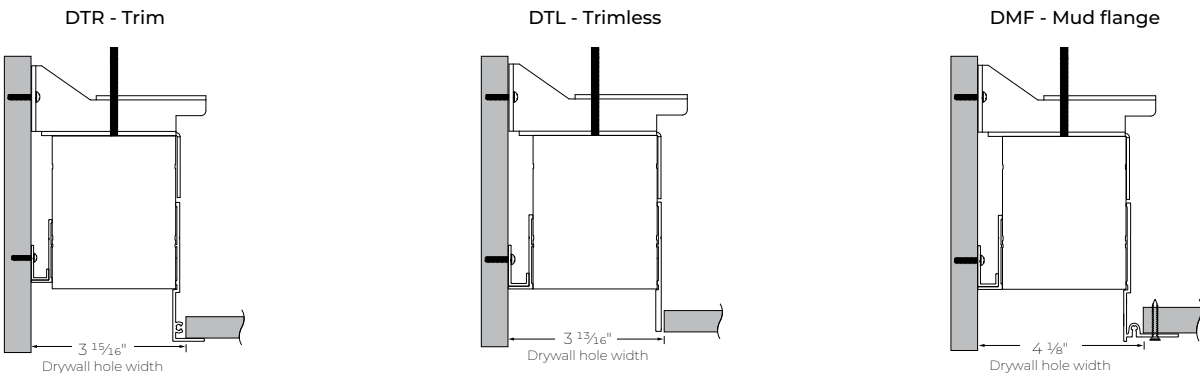
### CHROMAWERX - QUADRO - RGBW



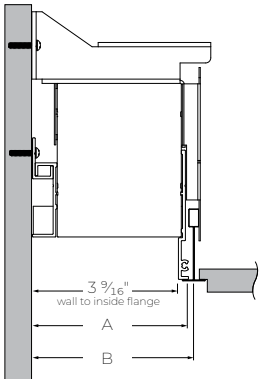
## Dimensions

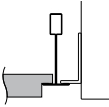
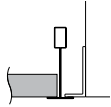
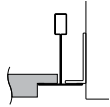
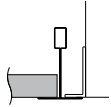
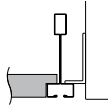


## DRYWALL



## GRID



	TC9	TB9	TC15	TB15	ST
					
	Regular 9/16"	T-bar 9/16"	Regular 15/16"	T-bar 15/16"	Screw slot T-bar
A wall to flange	3 13/16"		3 15/16"		3 13/16"
B wall to T-bar	3 7/8"		4"		3 7/8"

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### CHROMAWERX - QUADRO - RGBW



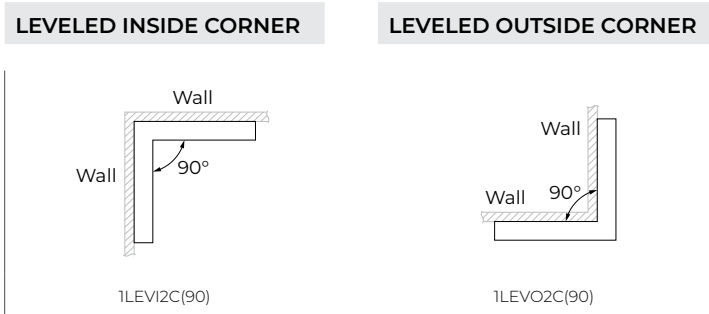
## Photometrics

Dedicated white channel lumen outputs are calculated with only white light on, and based on a 4' fixture at 3500K and 80 CRI.

OPTIC	W/FT	LM/FT	OPTIC	W/FT	LM/FT
HLO - Level	8	350	ARFO - Level	8	160
	10	425		10	200
	12	525		12	240
HLO - Shallow	8	350	ARFO - Shallow	8	150
	10	425		10	190
	12	500		12	230
HLO - Deep	8	325			
	10	400			
	12	475			

## Pattern Layout

### CORNER TYPES



### EXAMPLES



# VIA 3 PERIMETER

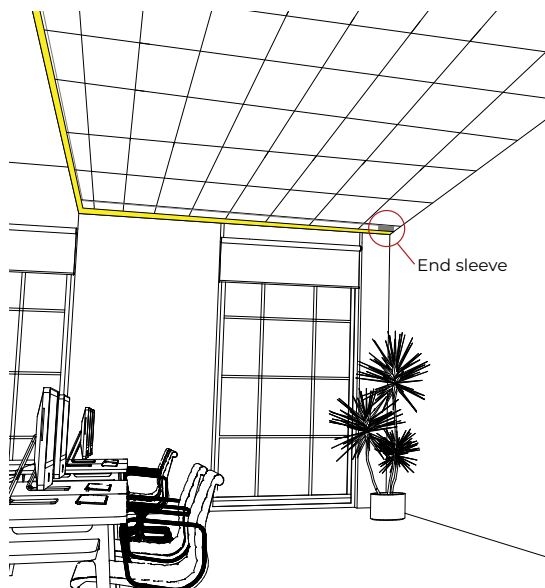
## RECESSED PATTERN

### CHROMAWERX - QUADRO - RGBW

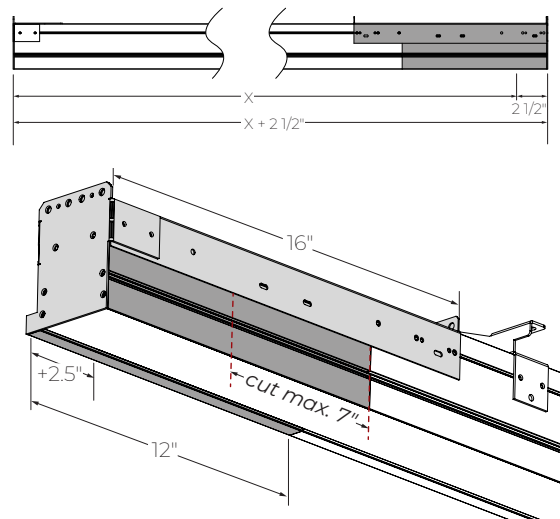


## Adjustable end sleeve - TES

Adjustable end sleeve (TES) is designed to provide on-site luminaire adjustability of +2.5" to -4.5". A sleeve accommodates an easy installation and maintenance. Please refer to the [End Sleeve Adjustment Installation Instructions](#) for more details.

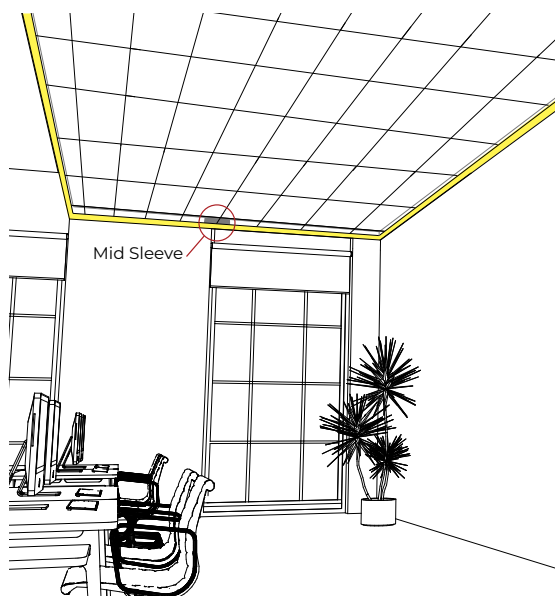


X = Fixture measure provided by client.  
X + 2.5" = Measurement built and supplied.

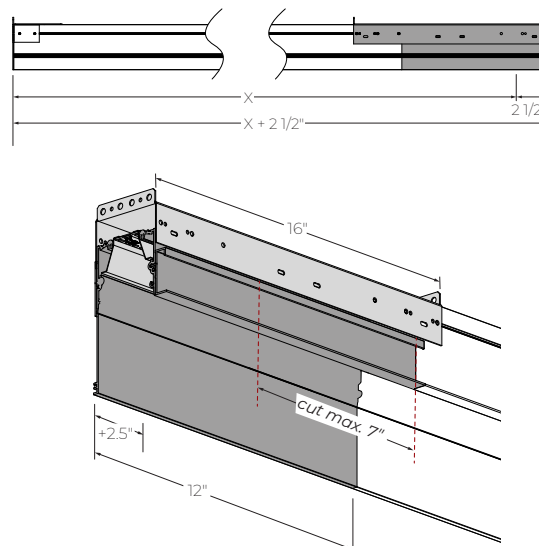


## Adjustable mid sleeve - TMS

Adjustable mid sleeve (TMS) is designed to provide on-site luminaire adjustability of +2.5" to -4.5". A sleeve accommodates an easy installation and maintenance. Please refer to the [Mid Sleeve Adjustment Installation Instructions](#) for more details.



X = Fixture measure provided by client.  
X + 2.5" = Measurement built and supplied.



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### CHROMAWERX - QUADRO - RGBW



## Technical Specifications

### 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. Luminaire brightness is controlled by the flux-to-shielding area ratio.

#### Asymmetric Room Fill Optic (ARFO)

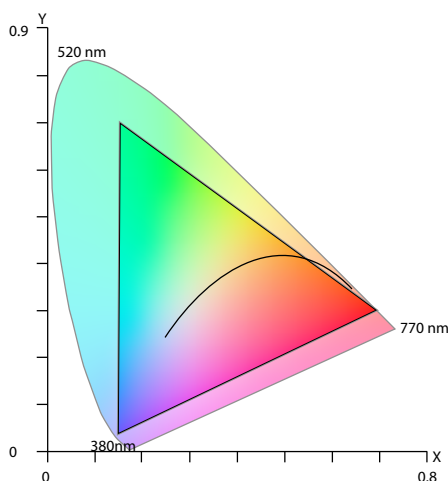
Our Asymmetric Room Fill Optic employs an advanced optical system to illuminate rooms and corridors from the perimeter, providing a direct distribution of light with precision and minimal glare.

### LIGHT SOURCE

Custom linear array of mid-flux LEDs, comprised of an alternation of an RGB and a dedicated white LED. The white LED is used for when a static white CCT is required in the space. RGB LEDs are tightly binned for excellent color control between fixtures. The white 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 QUADRO

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.



The above diagram overlays the full gamut of colors attainable with the RGBW on top of the CIE 1931 color space. Any color point inside of the triangle can be obtained by setting the correct output levels for each of the individual red, green, blue, and white channels.

### PATTERN LENGTH

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

#### DMX

Factory-set, adjustable output current, multi-channel LED driver with universal (120-277 VAC) input. Using DMX wall controls (optionally supplied by Lumenwerx) or an existing DMX control system, four channels of LEDs (Red/Green/Blue/White) 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%.

#### 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 regular ceiling, as well as in drywall ceilings with trim, trimless, or mud flange options.

### FINISH

**Interior:** 95%, reflective matte powder coated white paint

**Exterior:** Matte white powder coating.

Custom finishes are also available.

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#### CONSTRUCTION

**Housing:** Extruded aluminum, up to 90% recycled content

**Interior brackets:** Die-formed cold rolled sheet steel

**Joining system:** Die-cast zinc

**Reflectors:** Flat rolled aluminum sheet or die-formed cold rolled steel, 95% reflective matte white painted

**Lens:** Acrylic

**Recessed flanges:** Extruded aluminum, up to 90% recycled content

**End plate:** Die-formed cold rolled sheet steel

#### MAINTENANCE

LED boards are housed in a removable cartridge for easy replacement. Driver is accessible from below.

#### CERTIFICATIONS

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

**Chicago Plenum:** City of Chicago Approved (CCEA) when specified with CP option.

**IC rated:** Suitable for direct contact with insulation

#### 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.

# VIA 3 PERIMETER

RECESSED PATTERN

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 4' fixture  
**Driver**  
1x driver  
Less than 12.5W/ft, direct only

per 4' fixture  
**Driver Driver**  
2x driver  
Above 12.5W/ft or for all direct/indirect fixture

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 cost 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 cost 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 cost and equipment will be required. ✓

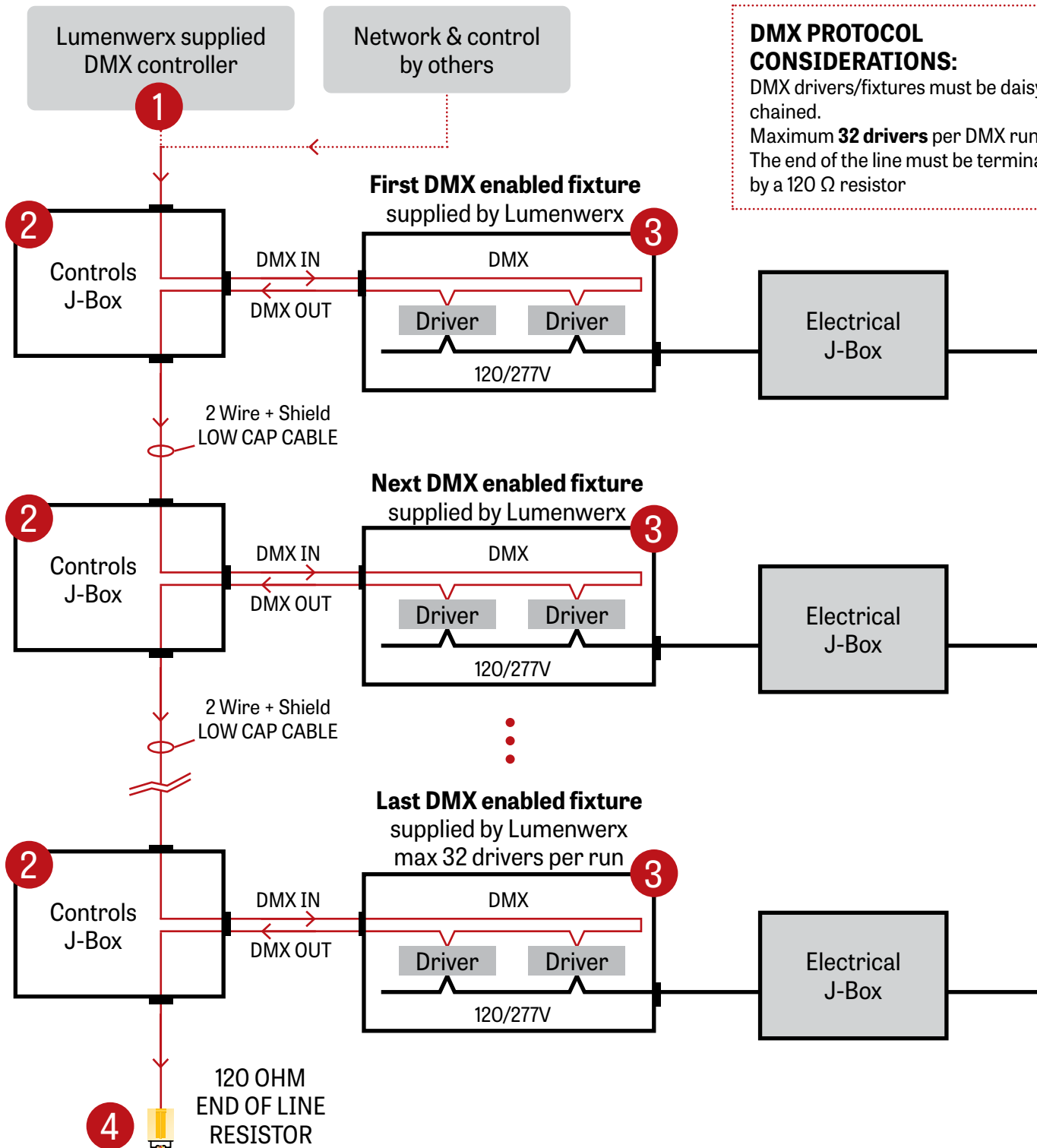
# VIA 3 PERIMETER

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CHROMAWERX - QUADRO - RGBW



## GENERIC DMX NETWORK ARCHITECTURE



### 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  $\Omega$  resistor



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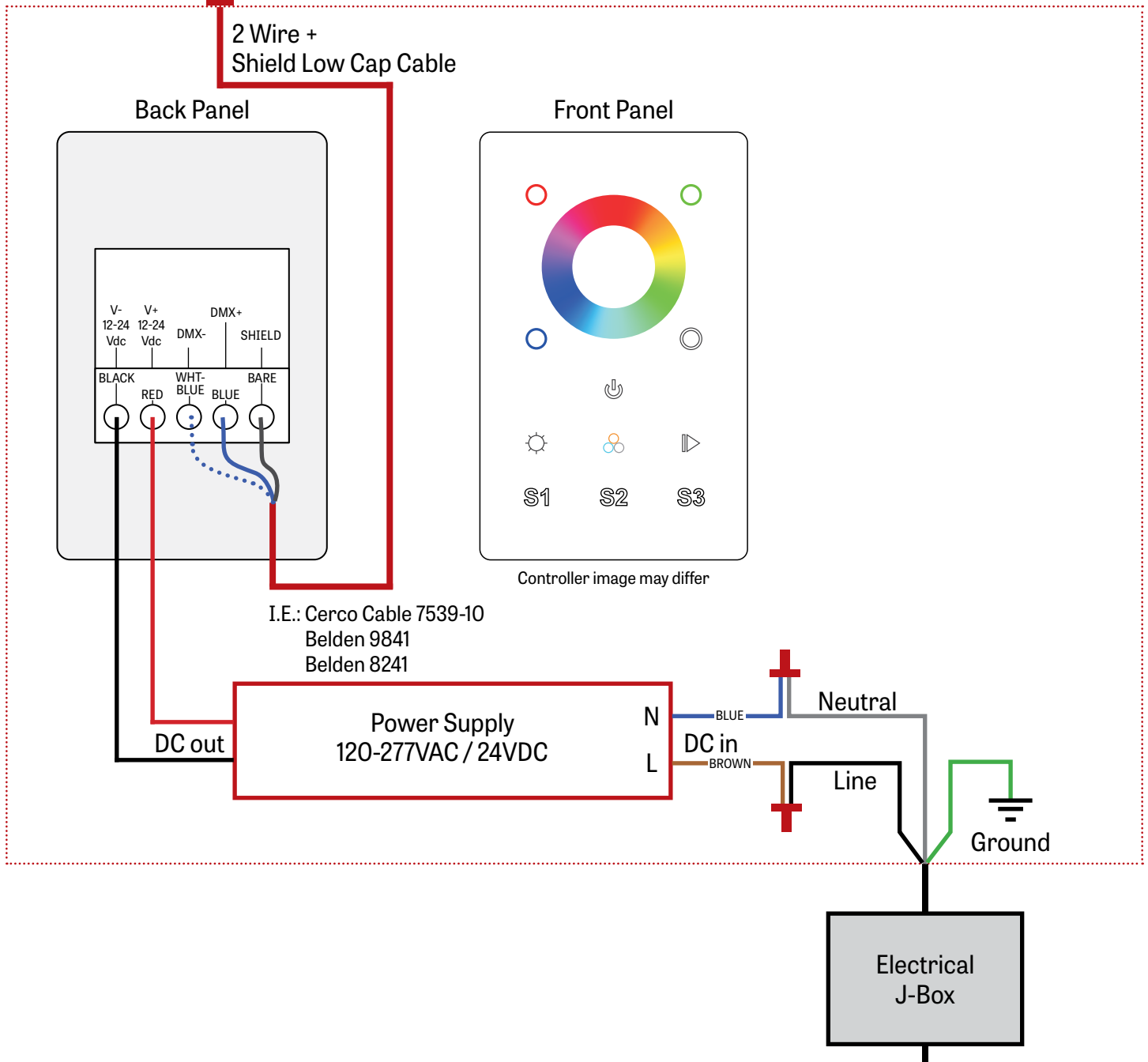


## 1 LUMENWERX SUPPLIED DMX CONTROLLER

To the first fixture

2 Wire +  
Shield Low Cap Cable

WALL BOX SUPPLIED BY OTHERS



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

Power Supply  
120-277VAC / 24VDC

N  
L

Neutral

DC in  
BROWN

Line

Ground

Electrical  
J-Box

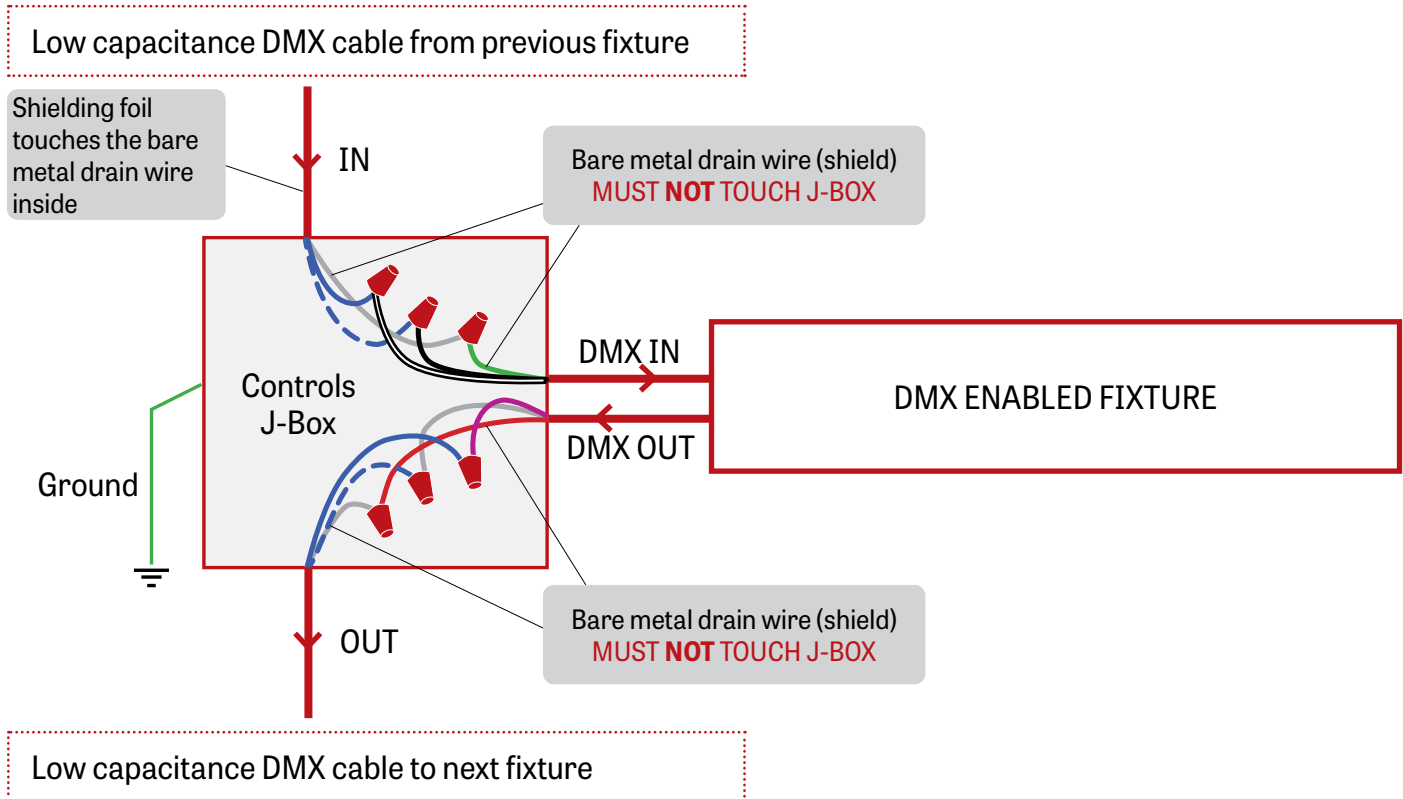
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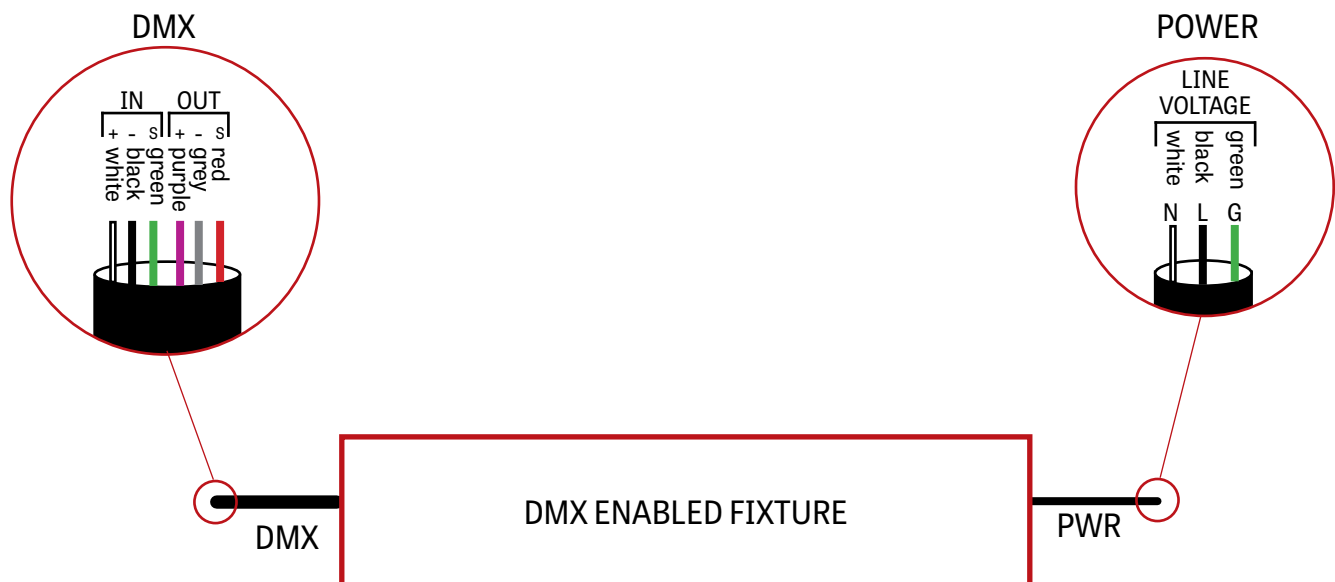
CHROMAWERX - QUADRO - RGBW



## 2 J-BOX DMX DAISY CHAIN DETAIL



## 3 DMX CONNECTION PENDANT & WALL



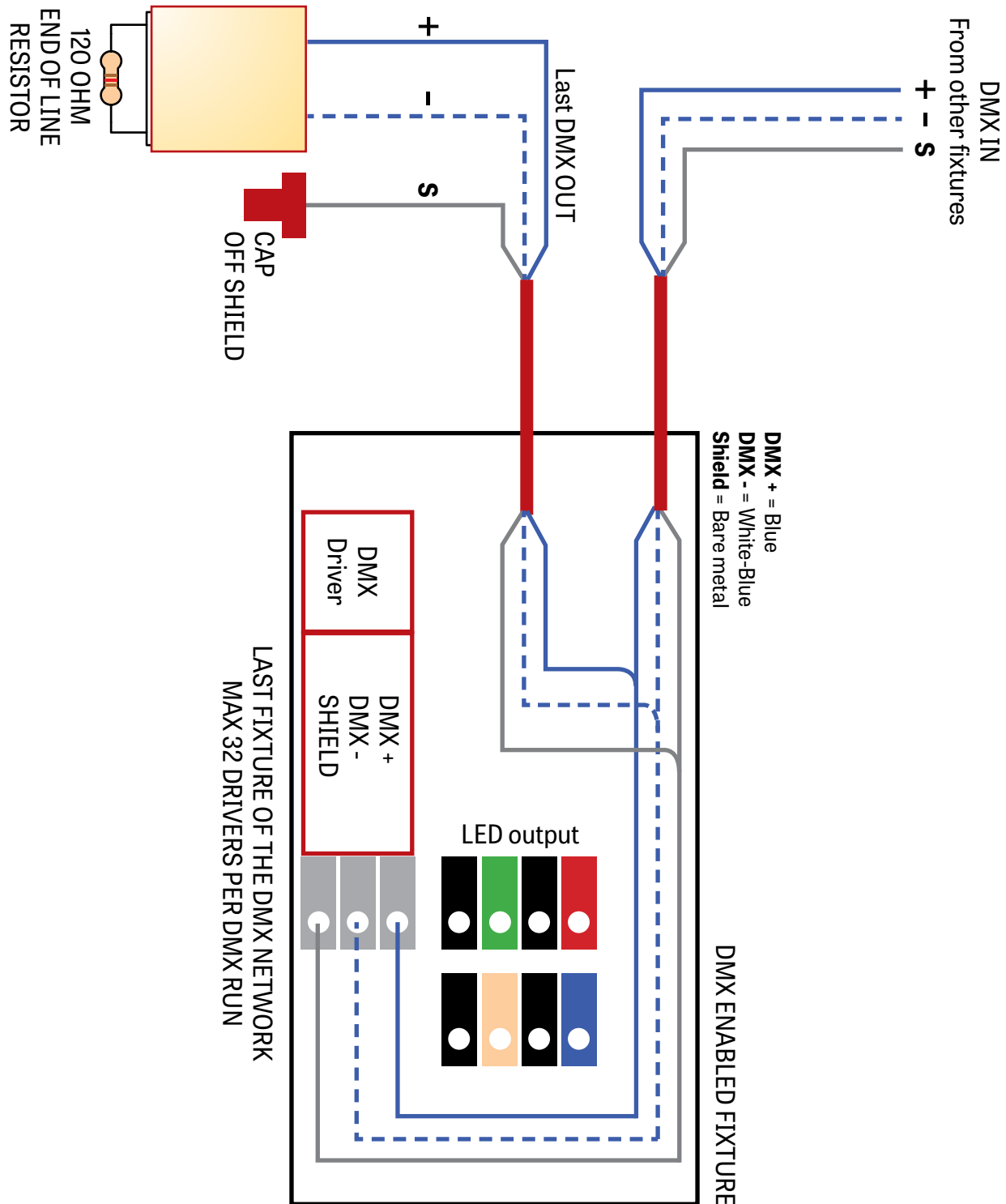
# VIA 3 PERIMETER

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## 4 DMX LAST FIXTURE DETAIL



# VIA 3 PERIMETER

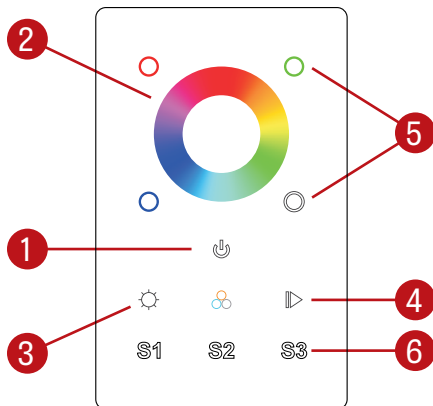
RECESSED PATTERN

CHROMAWERX - QUADRO - RGBW



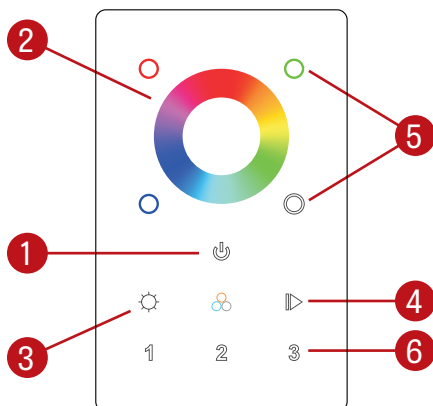
## DMX WALL CONTROLLER

### 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 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.

### Default DMX Addresses:

- 1 Red
- 2 Green
- 3 Blue
- 4 White