

# VIA 1.5 - PATTERNS

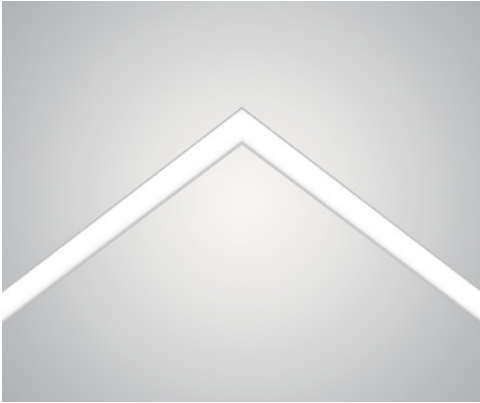
RECESSED



**LUMENWERX**  
WWW.LUMENWERX.COM

## CHROMAWERX QUADRO - RGBW

**IMPORTANT: a qualified DMX integration consultant is required to ensure proper installation and function of any DMX network**



LEV - leveled corner

### DESCRIPTION

At LumenWerx, we make it simple to design patterns customized for you. Whether surface, wall mount, pendant or recessed - or even a combination of different mounting types, we make it easy to achieve the results you're looking for. While our standard is a 90° corner, we can customize angles to suit your needs. Efficient and flexible, the Via 1.5 features numerous optical configurations including flush, and drop diffusers. Via 1.5 is an ideal vehicle for ChromaWerx color tuning in education, office, and healthcare applications where modular luminaires are used.

PROJECT: \_\_\_\_\_

TYPE: \_\_\_\_\_

NOTES: \_\_\_\_\_



### ORDER GUIDE

IC RATED

VIA1.5RPAT	HLO		LED		
LUMINAIRE ID	OPTICS	LENS POSITION	LIGHT SOURCE	CHROMAWERX	OUTPUT WATTAGE
VIA1.5RPAT - via 1.5" recessed pattern	HLO - High-Efficiency Lambertian Optic	FH - Flush 0.5D - 0.5" drop 1.5D - 1.5" drop	LED - high performance LED	QUADRO - four-channel RGB with 3500K white RS - red solid GS - green solid BS - blue solid	2.5WF - 2.5 w/ft output (for solid colors only) 3WF - 3 w/ft output (quadro only) 6WF - 6 w/ft output (quadro only) 9WF - 9 w/ft output (quadro only)

	LEV				1
PATTERN LENGTH	CORNER TYPE	CORNERS DEGREE	VOLTAGE	DRIVER	ELECTRICAL
#FT - nominal length in feet (2' increments only) Continuous Run - for luminaires over 12'	LEV - leveled corner	90 - 90 degrees # - other degrees	120 - 120V 277 - 277V	DMX - to specify see pages 5 to 10 DA - Dali (solid colors only) local on-site commissioning is required 0-10 - 0-10 (solid colors only)	1 - 1 circuit

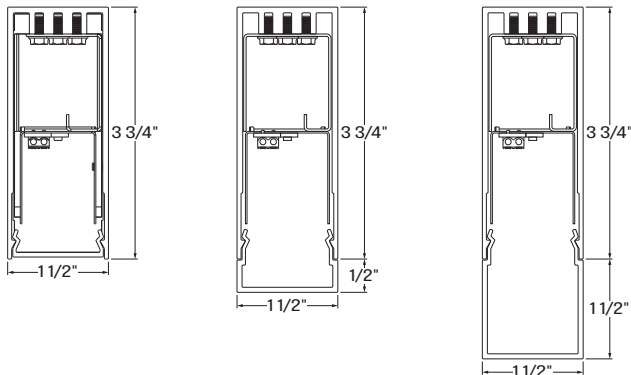
MOUNTING CEILING	MOUNTING WALL	FINISH	OPTIONS
DTR - drywall trim DTL - drywall trimless DMF - drywall mud flange NA - not applicable	DTR - drywall trim DTL - drywall trimless DMF - drywall mud flange NA - not applicable	W - matte white CF# - custom finish specify RAL#	FU - fuse FWC - flexible whip cable (6' std) CP - Chicago Plenum CU - custom

### DMX WALL CONTROLS

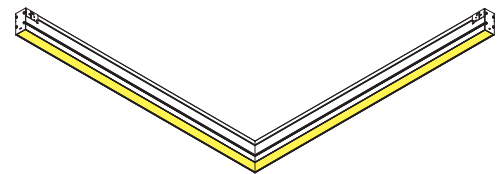
To specify see pages 5 to 10

See page 2 for ordering code detailed information

### CROSS SECTION



### 3D VIEW



VIA1.5RPAT - HLO-FH VIA1.5RPAT - HLO-0.5D VIA1.5RPAT - HLO-1.5D

LEV - leveled corner

File Name: VIA1\_5-RGBW-PAT-RECESSED-SPEC

Page: 1/10

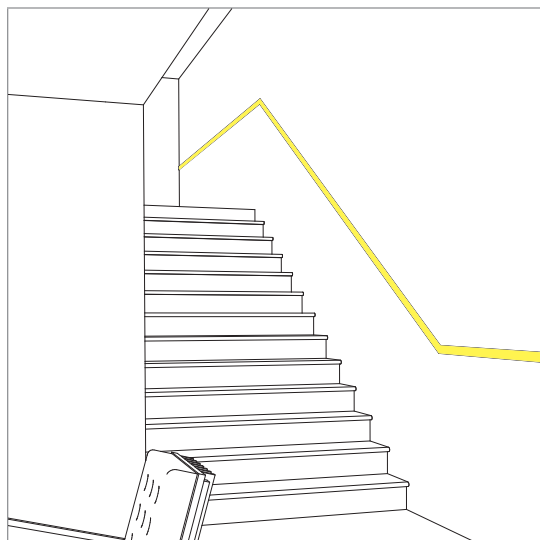
September 16, 2019

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## CHROMAWERX QUADRO - RGBW

## LEVELED CORNER - DRYWALL



## HOW TO SPECIFY A PATTERN?

Please follow these steps when specifying in order to be as precise as possible.

- (1) We require a drawing illustrating the pattern you are trying to achieve - anything from a simple line drawing to elaborate architectural drawings will suffice.
- (2) Under **PATTERN LENGTH**, enter the overall length of your pattern - either in feet or inches.
- (3) Under **CORNER TYPE**, please enter the type (or types) of corner you require. If more than one type of corner is required, please separate types with a plus (+).
- (4) Under **CORNERS DEGREE**, please enter the angle in degrees of each corner required to complete your pattern (for example 90+90+90).

	LEV	
PATTERN LENGTH	CORNER TYPE	CORNERS DEGREE
#FT - nominal length in feet (2' increments only) Continuous Run - for luminaires over 12'	LEV - leveled corner	90 - 90 degrees # - other degrees

### CHROMAWERX QUADRO - RGBW

#### OPTICS

**High Efficiency Lambertian Optic (HLO)** shielding of diffusing 0.075" thick acrylic provides up to 88% transmission and good source obscuration. Matte white reflectors distribute LED output across the shielding. Luminaire brightness is controlled by the ratio of luminous flux to shielding area. HLO is available as a flush diffuser or as a drop diffuser, extending 0.5" or 1.5" below the luminaire housing. Drop diffusers are extruded with glued end caps. HLO optics have a Spacing Criteria of 1.12.

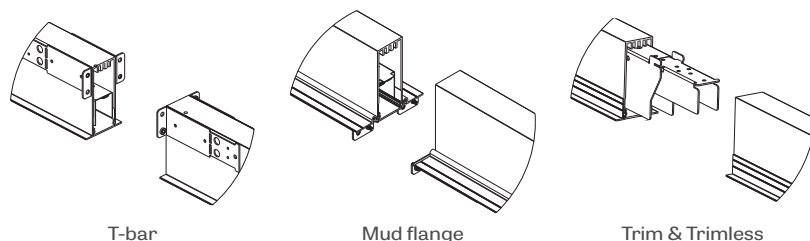
#### LIGHT SOURCE - LED

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.

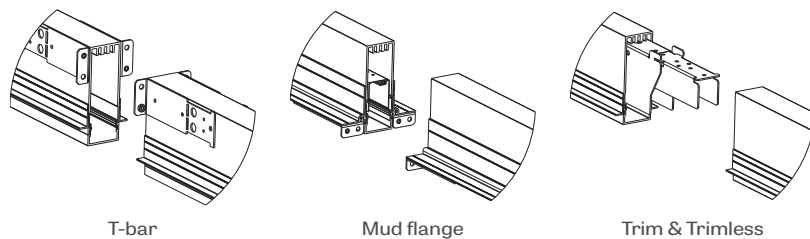
#### PATTERN LENGTH

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.

#### Joining system for flush

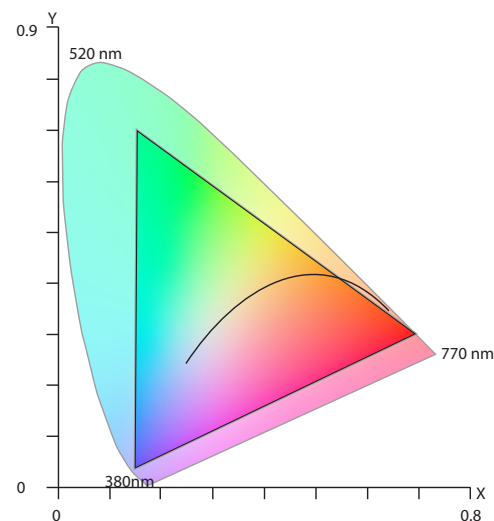


#### Joining system for drop lens



#### CHROMAWERX - RGBW

**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.



CIE 1931 Chromaticity space

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.

#### ELECTRICAL

##### DMX

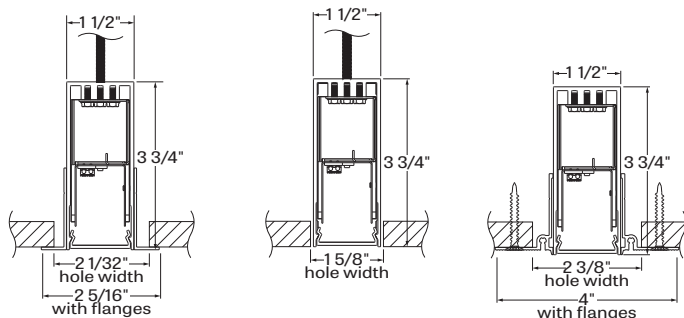
Factory-set, adjustable output current, multi-channel LED driver with universal (120-277VAC) input. Using DMX wall controls (optionally supplied by LumenWerx) or an existing DMX control system, four channels of LEDs (Red/Green/Blue/White) are independently adjustable. Each DMX driver has multiple output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

### CHROMAWERX QUADRO - RGBW

#### MOUNTING OPTIONS

##### Mounting Ceiling

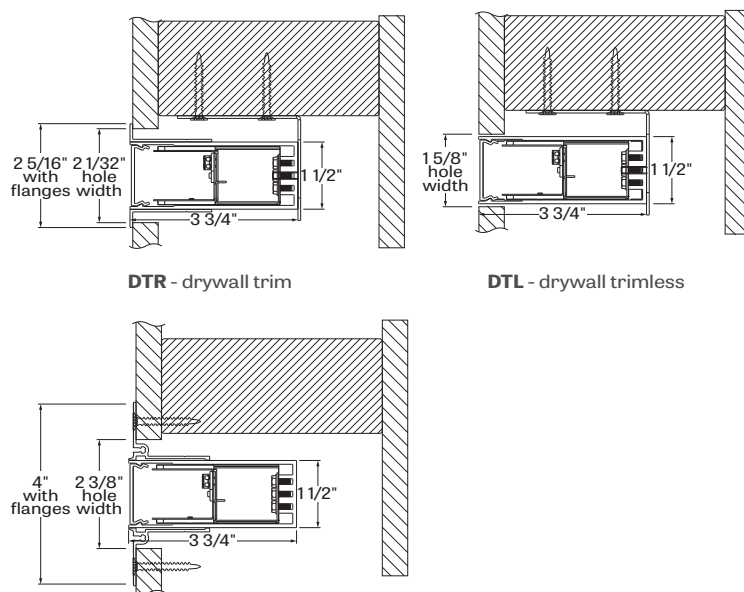
Mounting for drywall ceilings are available with visible trim, mud flange trim or trimless



**DTR** - drywall trim      **DTL** - drywall trimless      **DMF** - drywall mud flange

##### Mounting Wall

Recessed Wall Mounting for drywall is available with visible trim, mud flange trim or trimless



**DTR** - drywall trim

**DTL** - drywall trimless

**DMF** - drywall mud flange

#### FINISH

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

**Exterior** - matte white or aluminum powder coating.

Custom finishes are also available.

#### CONSTRUCTION

**Housing** - Extruded Aluminum (0.095" nominal) up to 90% Recycled Content

**Interior brackets** - Die formed cold rolled sheet steel 18 gauge thick

**Joining system** - Die cast Zinc (0.95" nominal) and die Formed galvanized sheet 18 gauge

**Reflectors** - Cold rolled steel 0.024" thick precisely die formed, 95% reflective matte white painted

**Recessed flanges** - Extruded Aluminum (0.075" nominal) up to 90% Recycled Content

**Mud flange** - Extruded Aluminum (0.075" nominal) up to 90% Recycled Content

**Slip-through bracket** - Die Formed galvanized sheet 18 gauge

**End plate** - Die formed cold rolled sheet steel 18 gauge thick

#### 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)

**IC rated** - suitable for direct contact with insulation.

#### WARRANTY

For all ChromaWerx products, LumenWerx provides a three-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 1.5 - PATTERNS

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## 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** - wall controller 1 white  
**WC1B** - wall controller 1 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. ✓

Order a standard Lumenwerx wall controller type 2.

#### WALL CONTROLLER

**WC2W** - wall controller 2 white  
**WC2B** - wall controller 2 black

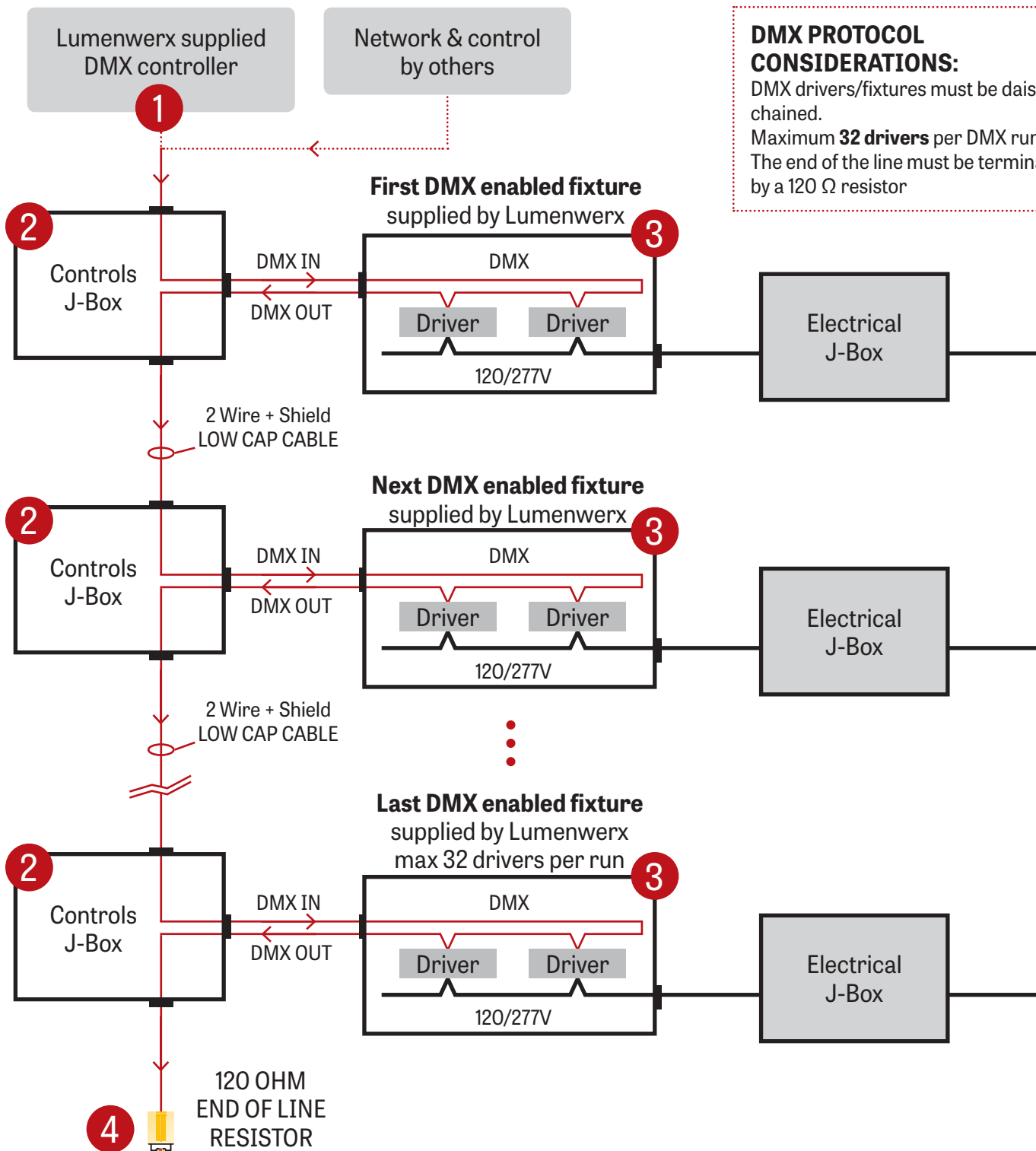
Add the control code at the end of your order code.  
Please provide a fixture layout or RCP (Reflected Ceiling Plan) showing the locations of the DMX fixtures, zones and the DMX wall controller.  
Refer to your DMX integrator for the installation. ✓

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. ✓

## 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

# VIA 1.5 - PATTERNS

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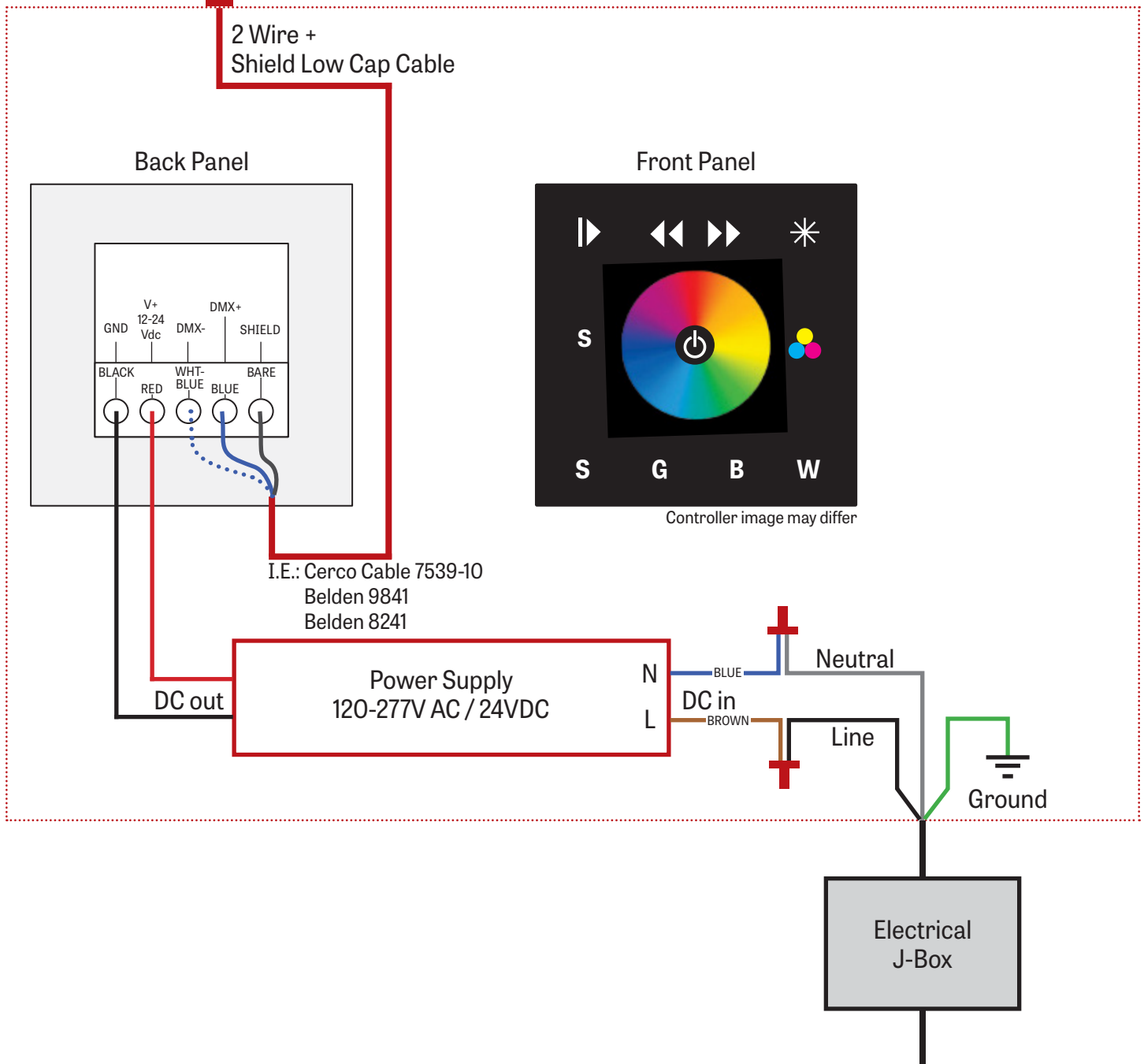
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## CHROMAWERX QUADRO - RGBW

### 1 LUMENWERX SUPPLIED DMX CONTROLLER

To the first fixture

WALL BOX SUPPLIED BY OTHERS



# VIA 1.5 - PATTERNS

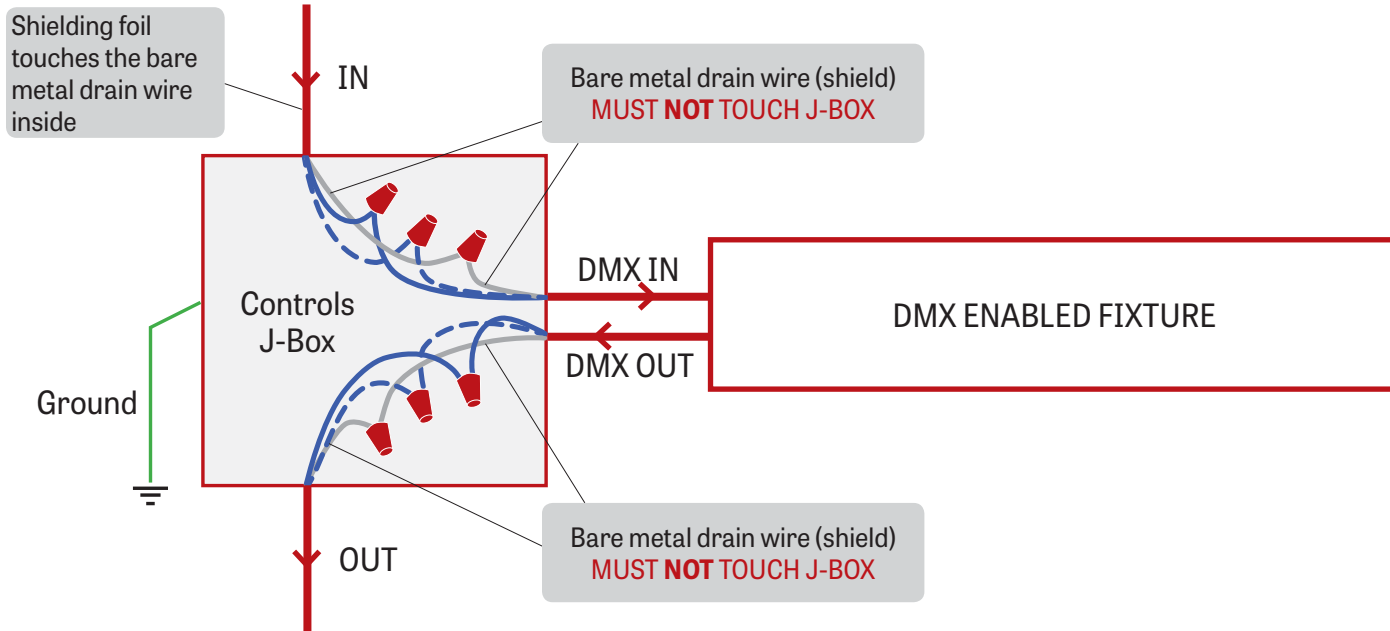
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## CHROMAWERX QUADRO - RGBW

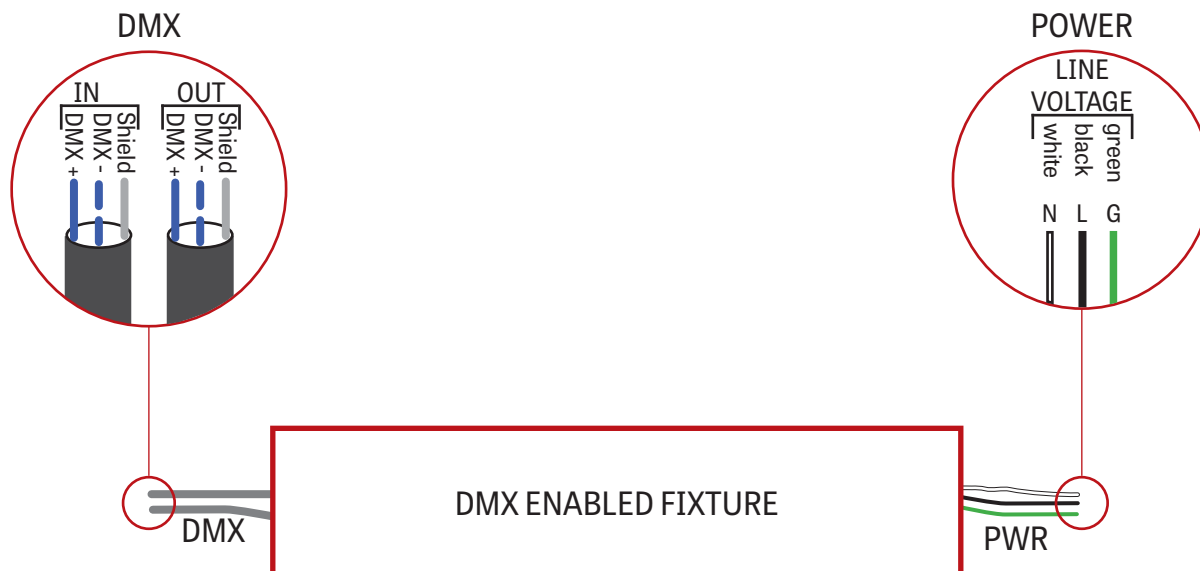
### 2 J-BOX DMX DAISY CHAIN DETAIL

Low capacitance DMX Cable from Previous Fixture



Low capacitance DMX cable to next fixture

### 3 DMX CONNECTION RECESSED & SURFACE



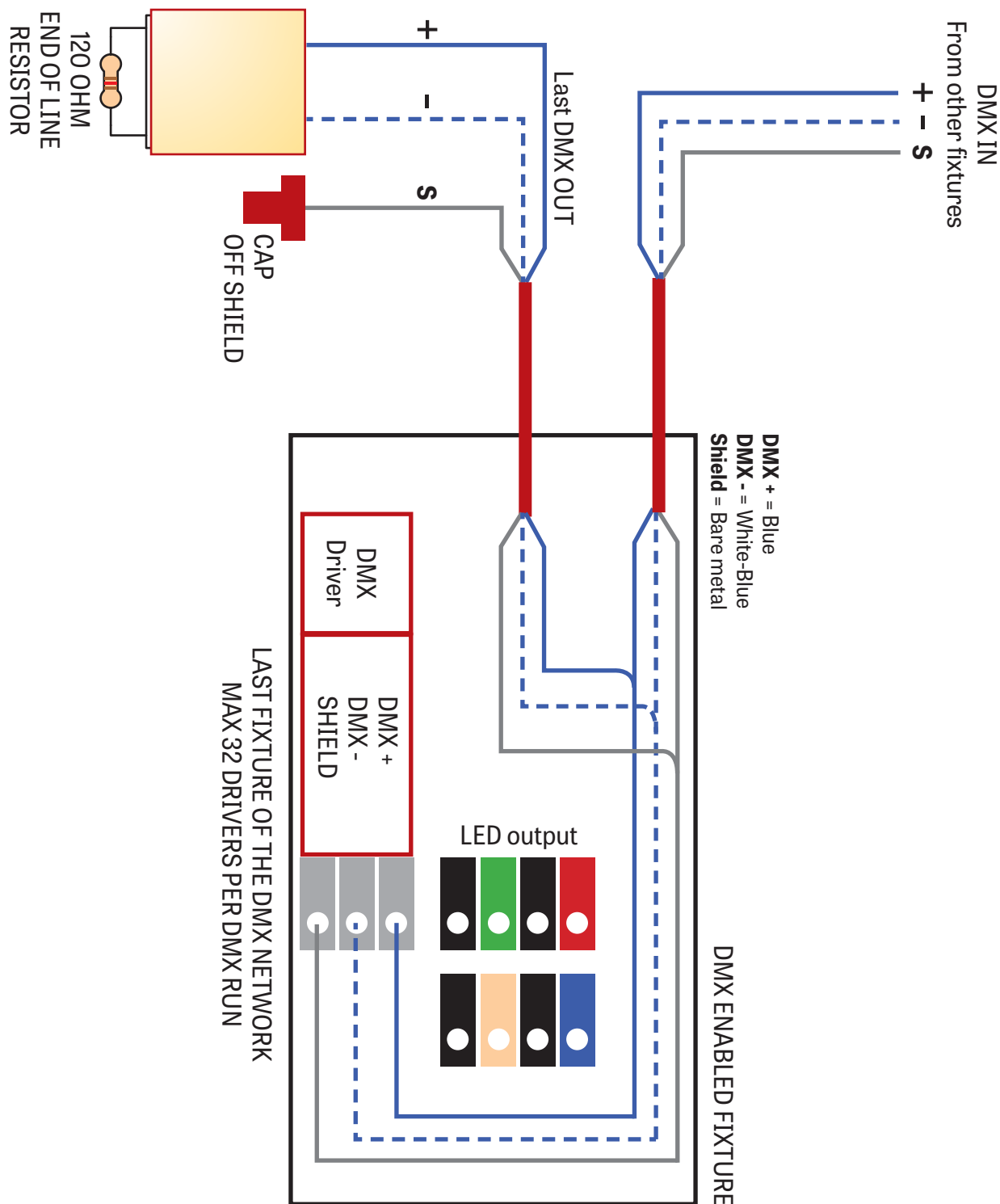
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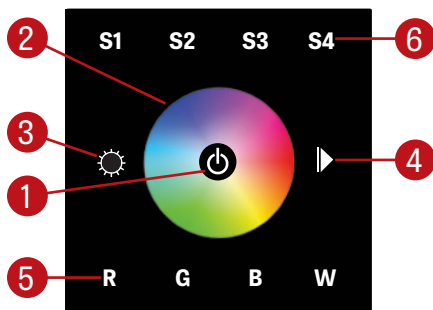
## CHROMAWERX QUADRO - RGBW

### 4 DMX LAST FIXTURE DETAIL

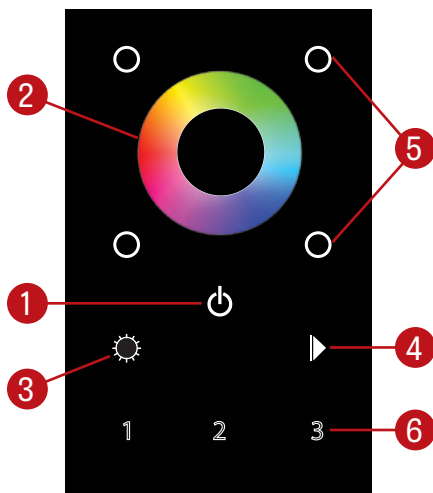


## CHROMAWERX QUADRO - RGBW

## 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
- (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 allows 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 it's 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
- (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 allows 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 button, a zone can be selected and control

**Default DMX Addresses:**

- 1 Red  
2 Green  
3 Blue  
4 White