QUAD WIDE
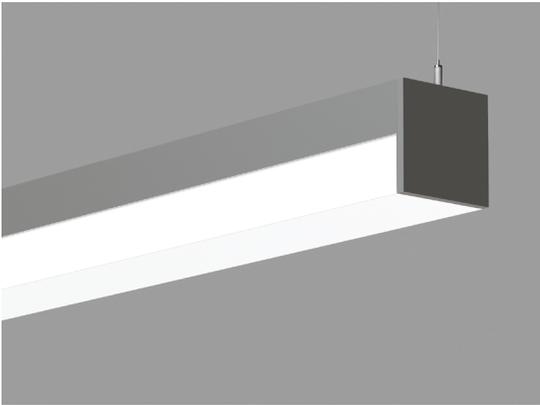
PENDANT DIRECT

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

Quad wide HLO optics

DESCRIPTION

Quad is the simply designed and crisply executed linear luminaire for circulation, general, and utility applications. The High-efficiency Lambertian Optic provides excellent luminous efficacy and uniform luminosity across the diffuser. Quad is available in either a wide 3.5" or narrow 2.5" profile, along with surface and wall models, and can be installed in continuous runs. Not with standing the compact form, a full range of electrical and integrated control options is available. Quad is an ideal vehicle for Chromawerx color tuning in education, office, and healthcare applications where modular recessed luminaires are used.

PROJECT: _____

TYPE: _____

NOTES: _____

5 YEAR WARRANTY

ORDER GUIDE

| QUAWP	HLO	LED		
LUMINAIRE ID	**OPTICS**	**LIGHT SOURCE**	**CHROMAWERX**	**OUTPUT WATTAGE**
QUAWP - quad wide pendant	**HLO** - High-Efficiency Lambertian Optic	**LED** - high performance LED	**QUADRO** - four-channel RGB with 3500K white **RS** - red solid **GS** - green solid **BS** - blue solid	**8WF** - 8 W/ft output (for solid colors only) **8WF** - 8 W/ft output (quadro only) **10WF** - 10 W/ft output (quadro only)

			1	5WAC36
LUMINAIRE LENGTH	**VOLTAGE**	**DRIVER**	**ELECTRICAL**	**MOUNTING**
Available sections - 4' 8' & 12' **#FT** - nominal length in feet **(2' increments only)** Continuous Run - for luminaires over 8'	**120** - 120V **277** - 277V	**DMX** - to specify see pages 4 to 9 **DA** - DALI (solid colors only) local on-site commissioning is required **0-10** - 0-10 (solid colors only)	**1** - 1 circuit	**53WAC36** - power 5" + non power 3" white canopy (36" aircraft cable) For all other options refer to our Pendant Mounting Guide

See page 2 for ordering code detailed information

FINISH	OPTIONS
W - matte white **AL** - aluminum **CF#** - custom finish specify RAL#	**FU** - fuse **TB#** - T-bar caddy clip specify grid size **TG#** - Tegular caddy clip specify grid size **ST** - Screw Slots caddy clip **CU** - custom

DMX WALL CONTROLS

To specify see pages 4 to 9

CHROMAWERX

CROSS SECTION

1 11/16"
3 1/2"
3 1/2"
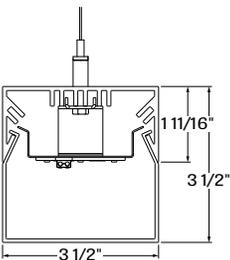
QUAWP - aircraft cable - wide

OPTICS

HLO - High-efficiency Lambertian Optic

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Intertek
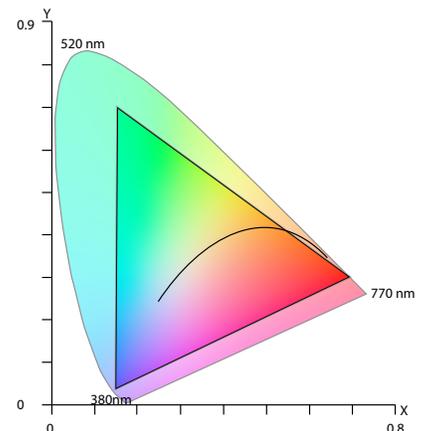
CHROMAWERX QUADRO - RGBW

OPTICS

HIGH EFFICIENCY LAMBERTIAN OPTIC (HLO) - matte white side reflectors combined with High-Efficiency Lambertian Optic (HLO) shielding of diffusing 0.075" thick acrylic with up to 88% transmission and good source obscuration. Luminaire brightness is controlled by the flux-to-shielding area ratio.

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.

LUMINAIRE LENGTH

Quad is made up of standard 4, 8 and 12 foot sections that may be joined together to create longer continuous run lengths. Exact run length must be noted in the product code.

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.
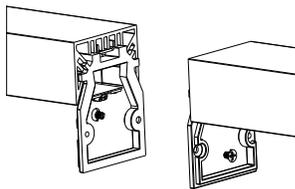
joining system Quad

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.
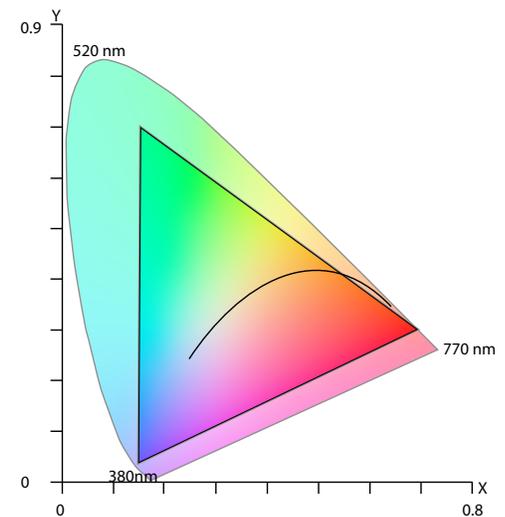
CIE 1931 Chromaticity space

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

Fixtures can be pendant-mounted, using aircraft cables.

Unless otherwise specified, Lumenwerx provides the following hardware:

For cable-mounted fixtures - 53WAC36 (5" white canopy for all power mounting point, 3" white canopy for non power mounting point, and a 36" cable)

Caddy clips, if required specify under **OPTIONS**

For all other options, see our website for a detailed Pendant Mounting Guide

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 (0.085" nominal) up to 90% recycled content

Interior brackets - Die formed cold rolled sheet steel 20 gauge thick

Joining system - Die cast aluminum (0.85" nominal)

Reflectors - Flat rolled aluminum sheet 0.040" thick precisely die formed, 95% reflective matte white painted

End caps - Die cast aluminum (0.85" nominal)

Hanger - Chromed griplock securely attached with spring steel hardware in end caps and/or joiners

Aircraft cable suspension - 7x7 braids aluminum aircraft cable 0.06" thick

WEIGHT

Quad wide 4ft - 9.25lbs - 4.2kg

Quad wide 8ft - 18.7lbs - 8.5kg

Quad wide 12ft - 27.9lbs - 12.7kg

CERTIFICATIONS

ETL - Rated for Indoor Dry/Damp locations. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0.

WARRANTY

For all Chromawerx products, 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.

ETL LISTED
c   us
Intertek

QUAD WIDE

PENDANT DIRECT

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.
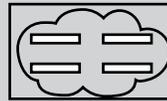
1 Zone   **2 Zones**

How to calculate the required number of drivers:

per 4' fixture	per 4' fixture
Driver	Driver Driver
1x driver	2x driver
Less than 12.5W/ft, direct only	Above 12.5W/ft or for all direct/indirect fixture

1 Zone   **2 to 3 Zones**   **4 or more Zones**

To Calculate # of drivers ← **Do you have more than 32 drivers in total?**

NO   YES

Order a standard Lumenwerx wall controller <u>type 1</u>.

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
Additional cost and equipment will be required. ✓

NO   YES

Order a standard Lumenwerx wall controller <u>type 2</u>.

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
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. ✓

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 Ω resistor

Lumenwerx supplied DMX controller

Network & control by others

First DMX enabled fixture supplied by Lumenwerx

Controls J-Box

DMX IN
DMX OUT

DMX
Driver   Driver
120/277V

Electrical J-Box

2 Wire + Shield LOW CAP CABLE

Next DMX enabled fixture supplied by Lumenwerx

Controls J-Box

DMX IN
DMX OUT

DMX
Driver   Driver
120/277V

Electrical J-Box

2 Wire + Shield LOW CAP CABLE

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

Controls J-Box

DMX IN
DMX OUT

DMX
Driver   Driver
120/277V

Electrical J-Box

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

Front Panel

V-
12-24
Vdc
BLACK

V+
12-24
Vdc
RED

DMX-
WHT-
BLUE

DMX+
BLUE

SHIELD
BARE

Controller image may differ

S1 S2 S3

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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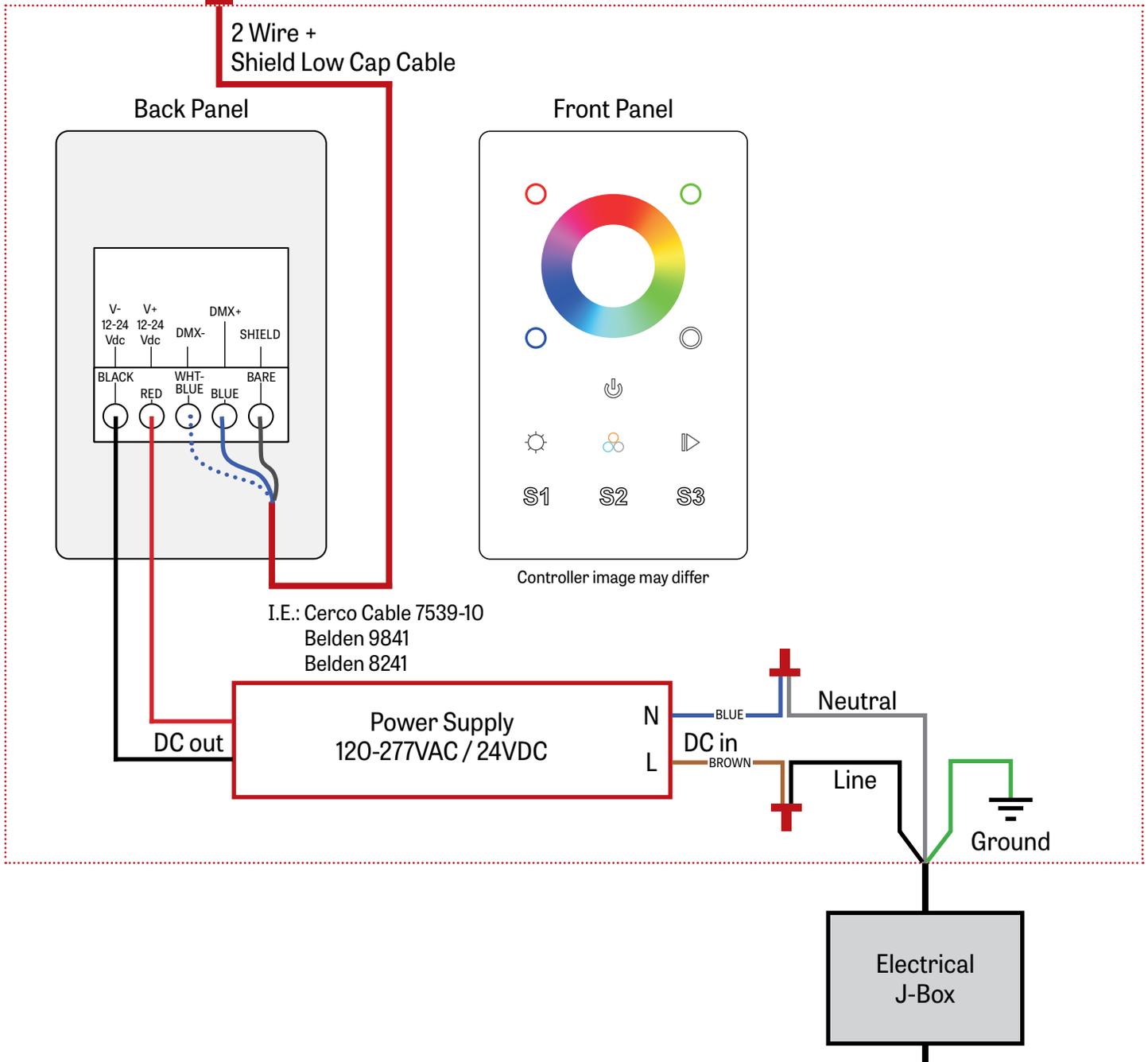
CHROMAWERX QUADRO - RGBW

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
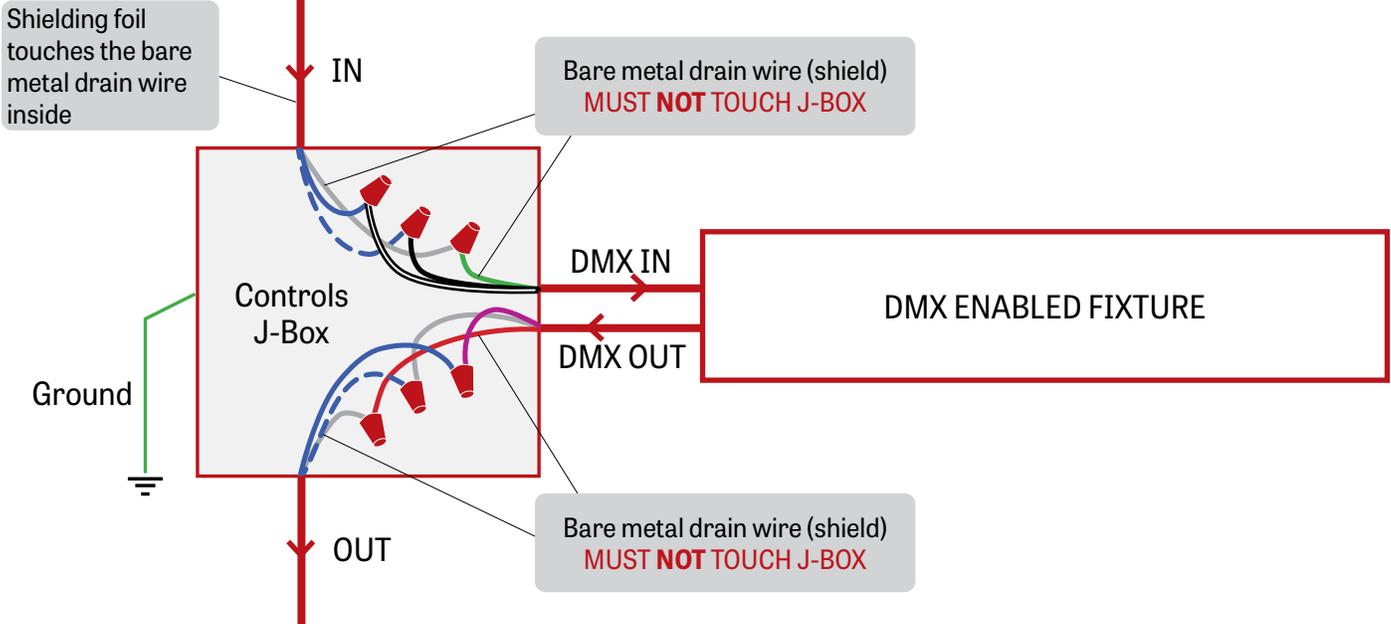
Low capacitance DMX cable to next fixture

3 DMX CONNECTION PENDANT & WALL

DMX

IN OUT
+ - s + - s

white
black
green
purple
grey
red

POWER

LINE VOLTAGE

white
black
green

N L G

DMX

DMX ENABLED FIXTURE

PWR

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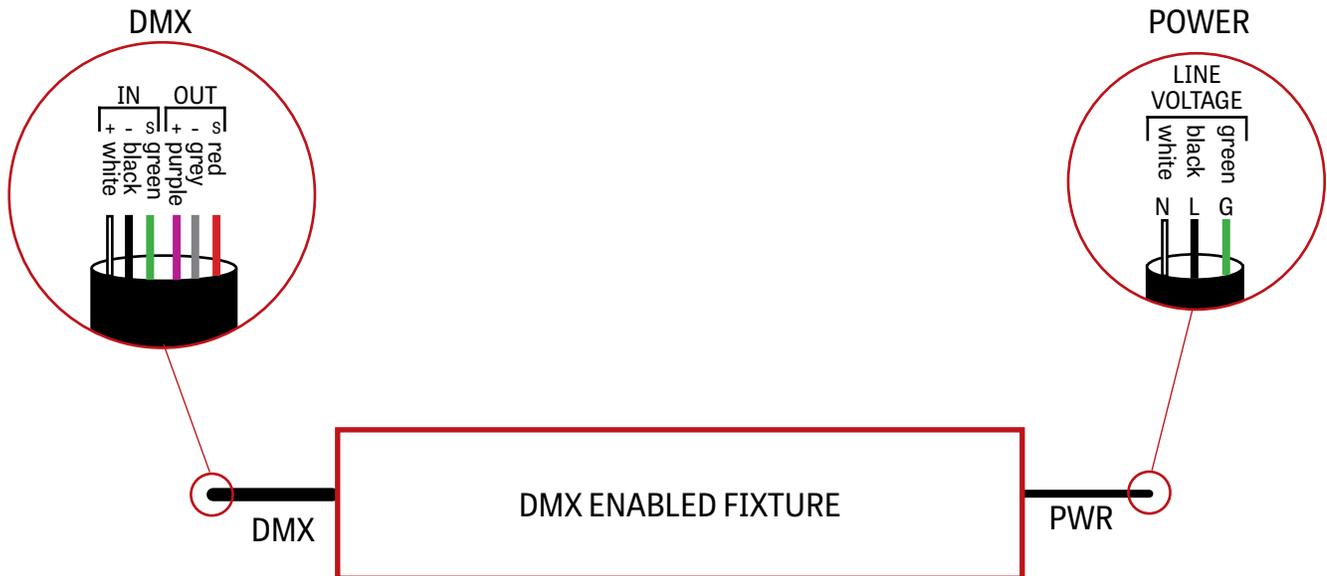
4 DMX LAST FIXTURE DETAIL

120 OHM
END OF LINE
RESISTOR

+

−

Last DMX OUT

S

CAP
OFF SHIELD

DMX IN
From other fixtures

+ − S

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

cULus
ETL LISTED
Intertek
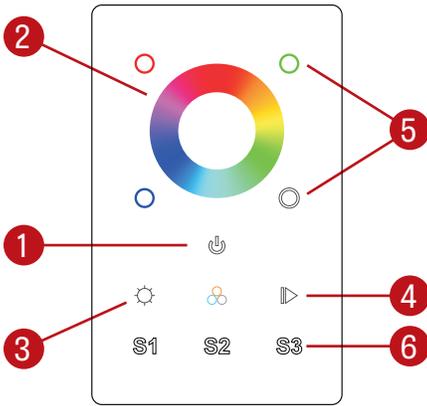
QUAD WIDE

PENDANT DIRECT

LUMENWERX
W W W . L U M E N W E R X . C O M
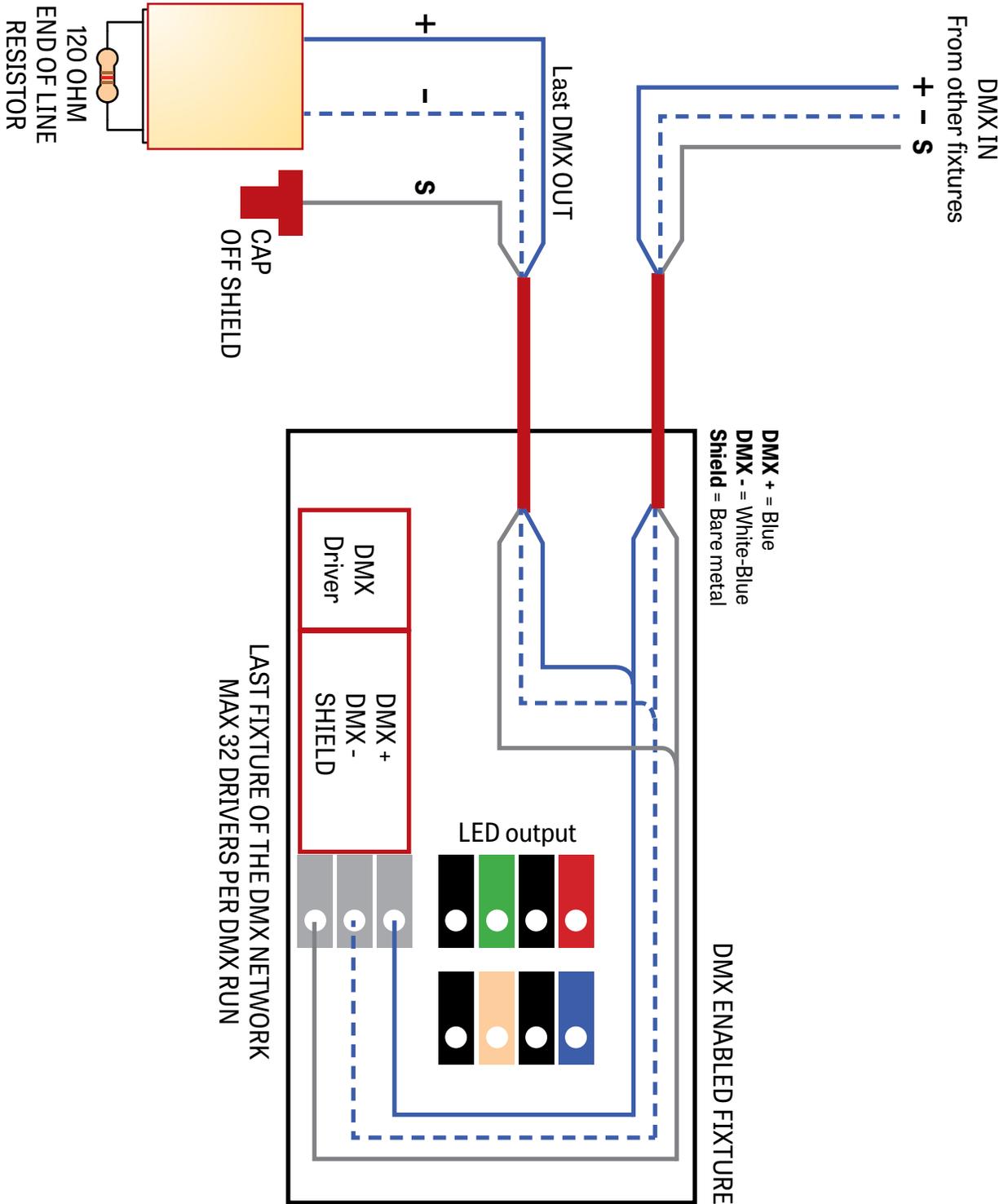
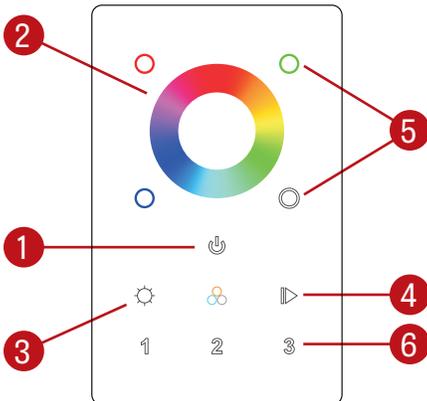## CHROMAWERX QUADRO - RGBW

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

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