

3D VERTICAL TUBE RGBW SERIES

User's Manual & Installation Guide

Index

V.1.0

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Congratulations on choosing a HERA product!
We thank you for your custom.

Please note that this product, as all the others in the rich HERA range, has been designed and made with total quality to ensure excellent performance and best meet your expectations and requirements. Carefully read this instruction manual in its entirety and keep it safe for future reference. It is essential to know the information and comply with the instructions given in this manual to ensure the fitting is installed, used and serviced correctly and safely. HERA disclaims all liability for damage to the fitting or to other property or persons deriving from installation, use and maintenance that have not been carried out in conformity with this instruction manual, which must always accompany the fitting. HERA reserves the right to modify the characteristics stated in this instruction manual at any time and without prior notice.

3D VERTICAL TUBE RGBW SERIES

Safety Information

Caution – unplug the power supply from the main power before connecting any cables as this can damage the products.

Caution – avoid looking directly into the led light source at close range for your own safety.

Any people installing this product should comply with local standards and regulations and must be qualified for the handling of electrical equipment.

- Do not attempt to install or use the product until installation instructions and safety labels are fully understood. This product is designed for indoor and outdoor usage.
- Ensure product operates within the specified temperature range.
- Do not attempt to open the product.
- Do not use the product if the power cables are damaged.
- Only use product for specified voltage.
- Always maintain connection to ensure waterproofing.
- If the product has been subjected to drastic temperature variances, for example, following transportation, do not connect the fixture until it has reached room temperature, as moisture condensation may cause electric shock and product damages.
- When installing the products and system power supplies, please ensure they will not be exposed to moisture and extreme heat (and direct sunlight for outdoor products). Besides, keep a clean operating environment for the fixtures and system power supplies.
- Please study this Installation Guide thoroughly and check the latest Technical Specification Sheets available from the our website www.heraled.com before setup.
- Any non-compliance of the Installation Guide will void the Hera warranty.

Warning



Risk of Electric Shock



Warning! Refer to User Manual.



Do Not Open Products



Not Suitable for Household Room Illumination



DIRECTIVE 2012/19/EU Waste Electrical and Electronic Equipment

Warranty

Hera warrants the products for a period of five (5) years from date of purchase, provided that the purchased items are used under the conditions stated in this user manual.

Marking



RoHS
compliant

IP65



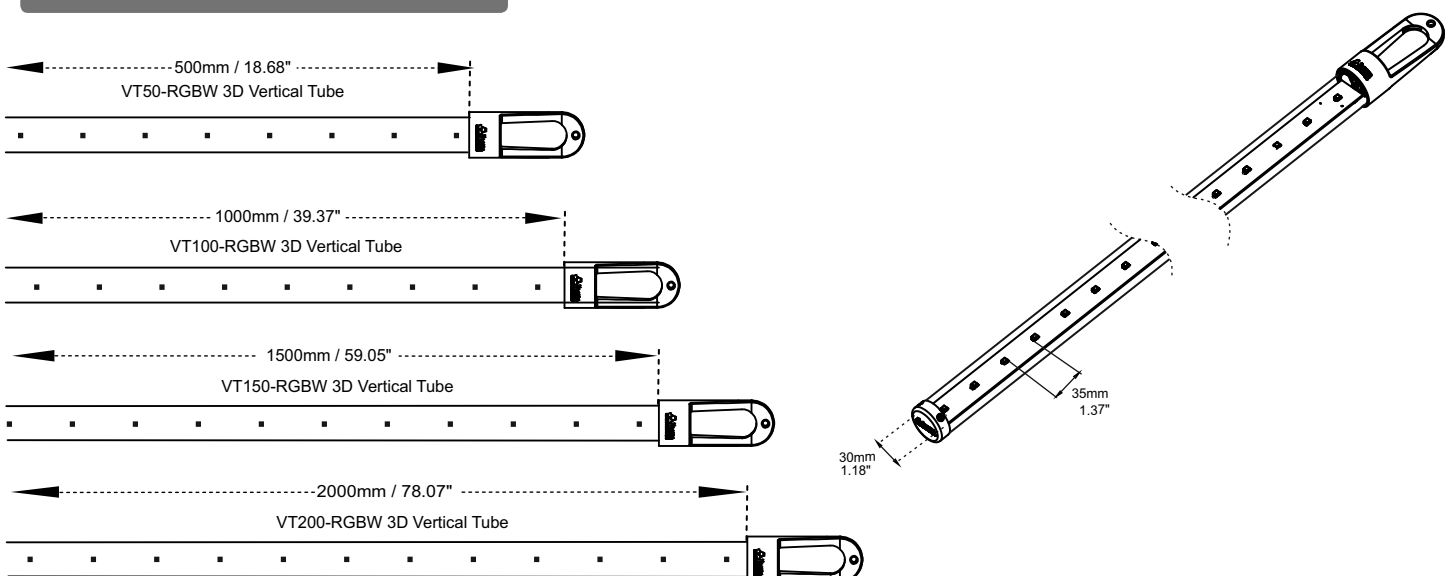
3D VERTICAL TUBE RGBW SERIES

Explanation

3D Vertical Tube RGBW Series are designed 3D visual lighting for night club, atrium shopping center, high ceilinged hotel lobbies atriums and rental companies where high brightness, large color scale and customization are needed. It can be seen with large outlook angle (130°x2) and very lightweight body. 2D objects are converted into 3D objects and effects by pixel mapping and advanced programming technology. 4 colors RGBW per pixel offer vivid color and white content in a single system and intelligent "+White" algorithms allow systems using 3 channels signal to control 4 colors per pixel, this enhances the display quality and improved efficiency. It gives dynamic lighting solutions with its unlimited pixel options, advanced accessories and easy assembly.

- It communicates with other fixtures by standard DMX 512 and RDM protocols without requirements of any special communication protocols or production identity. It can be addressed remotely as a group. By courtesy of this feature pixel mapping and addressing are easier.
- It can be used with very long starting cables and jumper cables for flexible and easy application due to its 12-48 VDC working voltage range.
- Fixtures' working characteristics may be changed with DMX Personality. By this means pixel number can be changed. Number of pixels may change in order to optimize for appearances and scenarios. For example it is possible that 1 LED can be chosen for 1 pixel for each 35mm, also 2 LEDs can be chosen for 1 pixel, 4 LEDs can be chosen 1 pixel, 8 LEDs can be chosen 1 pixel and so on.
- Working status of fixtures, local temperature values, voltage input and output, serial number and DMX address can be monitored. User is informed by mail and system can response automatically according to data.
- Fixtures work compatibly with Madrix® software and hardware. You can choose fixtures in library in order to have easy pixel mapping.
- Profiles are resistant to UV light and impact. Due to its PMMA and PC materials, it will not go yellow.
- Fixtures are installed very easily by push lock thanks to special top cover and mounting device.
- Fixtures are produced in 500mm / 1000mm / 1500mm / 2000mm length for different and long formed application.
- Power and data are transmitted via T cables in 60 cm and 120 cm length as standard. IP68 connectors can be installed easily by rotating. Interspaces between fixtures are enough. Therefore additional junction boxes are not needed.
- It has clear body as standard but opaque and translucent bodies can be produced as well.

Dimension



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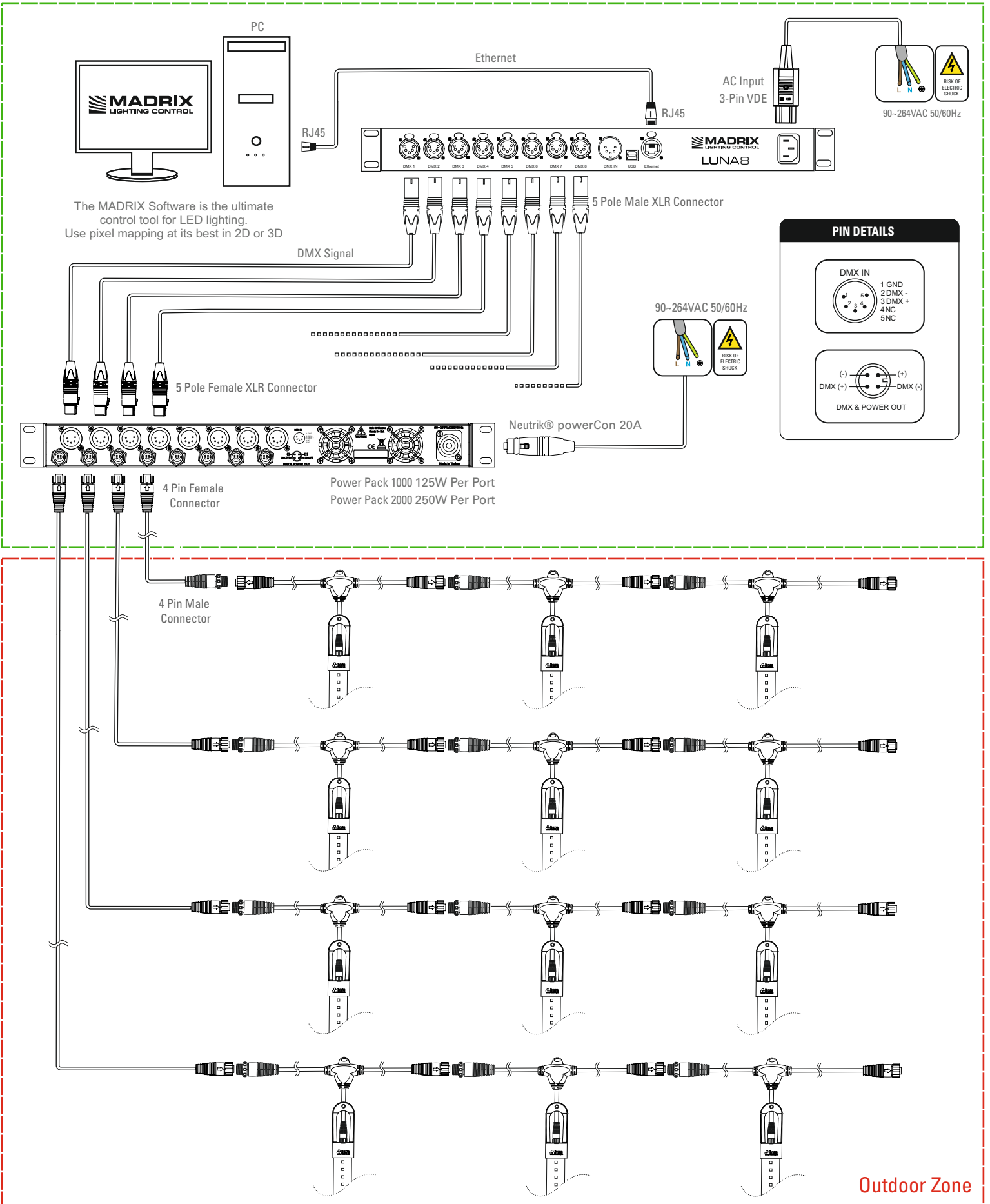
Product Specifications

Model	VT 50RGBW	VT 100RGBW	VT 150RGBW	VT 200RGBW
Light Source:	56pcs/m High intensity 4 in 1 Chip RGBW LEDs (Double Sided)			
Lumen Maintenance:	60.000+ hours L70 @ 25° C (full output)			
Color Range:	16.7 Million additive RGB colors, white CCT 6500K			
Color Resolution:	4 x 14-bit (Gamma correction)			
Auto White:	Algorithms enable auto control of white LED by 3-channel RGB values			
PWM Frequency:	1,600Hz flicker free dimming to 0.1%			
Viewing Angle:	130°x2			
Luminous Intensity:	Please check IES and LTD files out			
Efficacy (lm/W):	Please check IES and LTD files out			
LED Pitch:	35mm			
Pixel Pitch:	Pixel pitch is configurable via RDM, max 28pixel/m			
Maximum in Chain:	Max 20 meters or 32 pieces (varies by selected dmx personality)			
Operating Voltage:	12VDC ~ 48VDC			
Power Consumption:	10,5W	21W	31.5W	42W
Control Interface:	USITT DMX 512 A			
Addressing:	RDM (Group of Remote Addressable Systems)			
Monitoring:	Voltage Monitoring, Temperature Monitoring, Status Monitoring, Power Cycle Monitoring, Lumen-Maintenance Life Monitoring			
Housing:	Plastic Extrusion Polycarbonate Body			
Environment:	IP65, IK07			
Operating Temperature:	-40°C - 50°C - (-40° - 122° F)			
Storage Temperature:	-40°C - 85°C - (-40°C - 185° F)			
Dimensions (H x W x D):	Ø30x500 mm (Ø1.18x19.7 in)	Ø30x1000 mm (Ø1.18x39.4 in)	Ø30x1500 mm (Ø1.18x59 in)	Ø30x2000 mm (Ø1.18x78.7 in)
Weight:	0.444kg (0.98lb)	0.479kg (1.05lb)	0.521kg (1.14lb)	0.487kg (1.07lb)
Certification:	EU Safety: EN 60950-22:2006 + AC: 2008, EN 60950-1:2006+A2:2013, EN 62262:2002			
	EU EMC: EN 55024:2010/A1:2015, EN 55032:2015/AC:2016-07, -EN 61000-4-3, EN 61000-4-4, EN 61000-4-6, EN 61000-4-8			
	US Safety: UL 60950-22, UL 60950-1			
	US EMC: FCC Part 15 Class A			

3D VERTICAL TUBE RGBW SERIES

Standart DMX Wiring Diagram

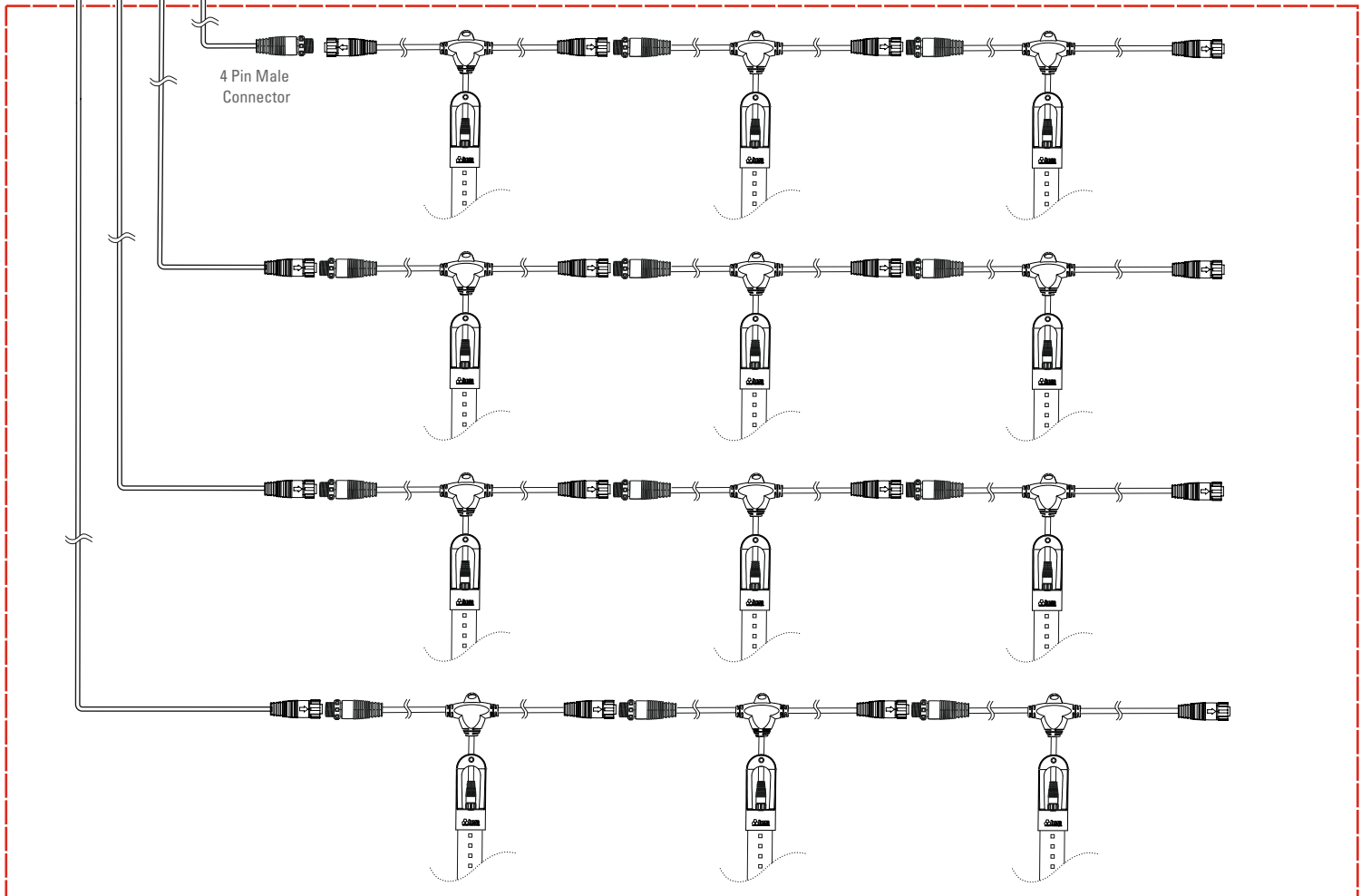
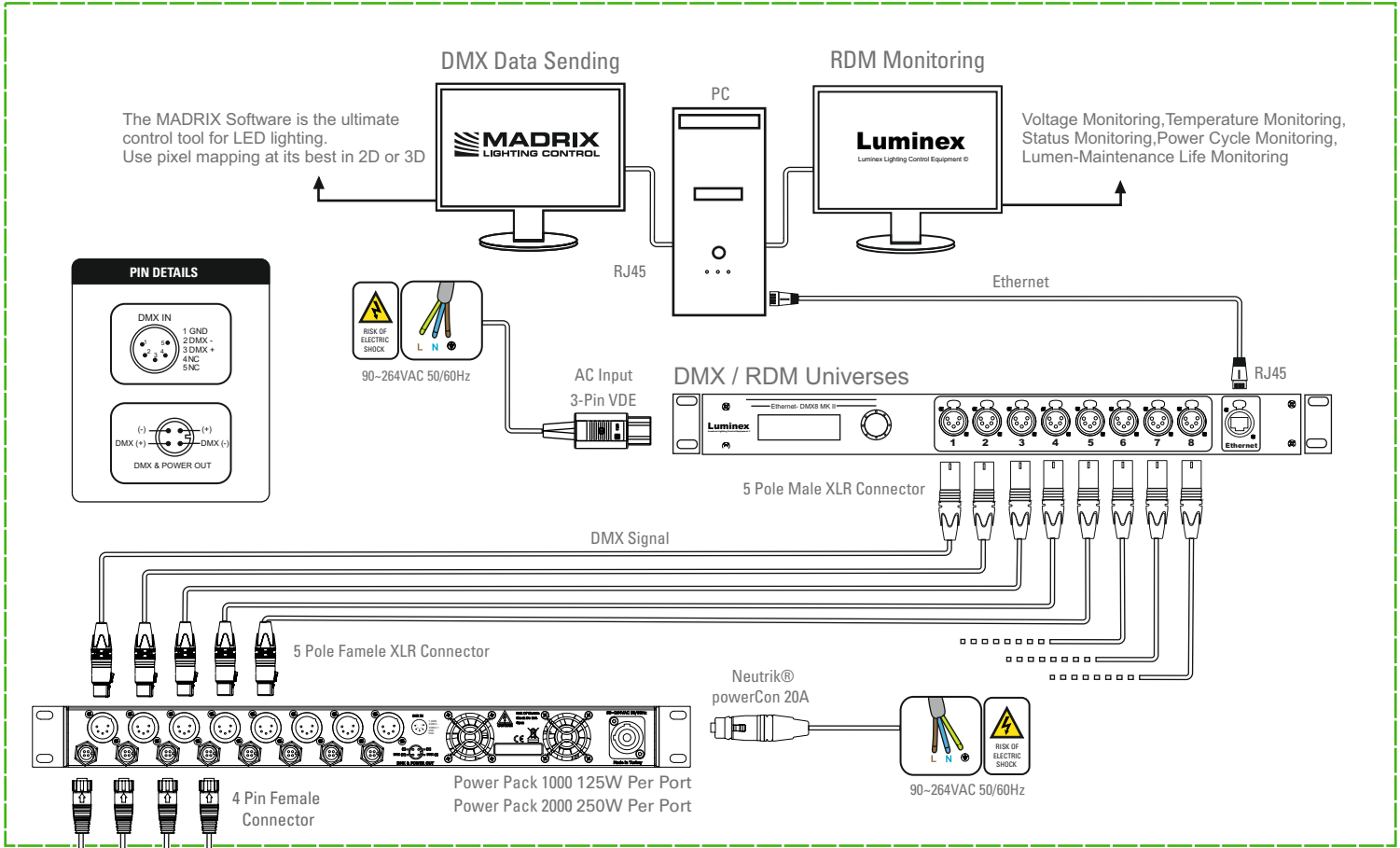
Indoor Zone



3D VERTICAL TUBE RGBW SERIES

RDM Monitoring Wiring Diagram

Indoor Zone



Outdoor Zone

3D VERTICAL TUBE RGBW SERIES

3D Vertical Tube DMX Personality

VT50 RGBW (RAW Mode)

No	Fixture Personality	Channel	Value	Function	Description	
1	RGBW Raw Mode 1 LED:1px	(56Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	
2	RGBW Raw Mode 2 LEDs:1px	(28Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	
3	RGBW Raw Mode 7 LEDs:1px	(8Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	
4	RGBW Raw Mode 14 LEDs:1px	(4Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	

VT50 RGBW (RGB+Auto White Mode)

No	Fixture Personality	Channel	Value	Function	Description	
1	RGB+Auto White Mode 1 LED:1px	(42Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
2	RGB+Auto White Mode 2 LEDs:1px	(21Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
3	RGB+Auto White Mode 7 LEDs:1px	(6Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
4	RGB+Auto White Mode 14 LEDs:1px	(3Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	

VT50 RGBW (RGB Raw Mode)

No	Fixture Personality	Channel	Value	Function	Description	
1	RGB Raw Mode 1 LED:1px	(42Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
2	RGB Raw Mode 2 LEDs:1px	(21Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
3	RGB Raw Mode 7 LEDs:1px	(6Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
4	RGB Raw Mode 14 LEDs:1px	(3Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	

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3D Vertical Tube DMX Personality

VT100 RGBW (RAW Mode)

No	Fixture Personality	Channel	Value	Function	Description	
1	RGBW Raw Mode 1 LED:1px	(112Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	
2	RGBW Raw Mode 2 LEDs:1px	(56Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	
3	RGBW Raw Mode 7 LEDs:1px	(16Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	
4	RGBW Raw Mode 14 LEDs:1px	(8Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	

VT100 RGBW (RGB+Auto White Mode)

No	Fixture Personality	Channel	Value	Function	Description	
1	RGB+Auto White Mode 1 LED:1px	(84Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
2	RGB+Auto White Mode 2 LEDs:1px	(42Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
3	RGB+Auto White Mode 7 LEDs:1px	(12Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
4	RGB+Auto White Mode 14 LEDs:1px	(6Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	

VT100 RGBW (RGB Raw Mode)

No	Fixture Personality	Channel	Value	Function	Description	
1	RGB Raw Mode 1 LED:1px	(84Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
2	RGB Raw Mode 2 LEDs:1px	(42Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
3	RGB Raw Mode 7 LEDs:1px	(12Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
4	RGB Raw Mode 14 LEDs:1px	(6Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	

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3D Vertical Tube DMX Personality

VT150 RGBW (RAW Mode)

No	Fixture Personality	Channel	Value	Function	Description	
1	RGBW Raw Mode 1 LED:1px	(168Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	
2	RGBW Raw Mode 2 LEDs:1px	(84Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	
3	RGBW Raw Mode 7 LEDs:1px	(24Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	
4	RGBW Raw Mode 14 LEDs:1px	(12Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	

VT150 RGBW (RGB+Auto White Mode)

No	Fixture Personality	Channel	Value	Function	Description	
1	RGB+Auto White Mode 1 LED:1px	(126Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
2	RGB+Auto White Mode 2 LEDs:1px	(63Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
3	RGB+Auto White Mode 7 LEDs:1px	(18Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
4	RGB+Auto White Mode 14 LEDs:1px	(9Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	

VT150 RGBW (RGB Raw Mode)

No	Fixture Personality	Channel	Value	Function	Description	
1	RGB Raw Mode 1 LED:1px	(126Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
2	RGB Raw Mode 2 LEDs:1px	(63Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
3	RGB Raw Mode 7 LEDs:1px	(18Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
4	RGB Raw Mode 14 LEDs:1px	(9Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	

3D VERTICAL TUBE RGBW SERIES

3D Vertical Tube DMX Personality

VT200 RGBW (RAW Mode)

No	Fixture Personality	Channel	Value	Function	Description	
1	RGBW Raw Mode 1 LED:1px	(216Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	
2	RGBW Raw Mode 2 LEDs:1px	(112Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	
3	RGBW Raw Mode 7 LEDs:1px	(32Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	
4	RGBW Raw Mode 14 LEDs:1px	(16Ch.)	1	0-255	Red: 0-100%	Each colour (RGBW) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
			4	0-255	White: 0-100%	

VT200 RGBW (RGB+Auto White Mode)

No	Fixture Personality	Channel	Value	Function	Description	
1	RGB+Auto White Mode 1 LED:1px	(168Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
2	RGB+Auto White Mode 2 LEDs:1px	(84Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
3	RGB+Auto White Mode 7 LEDs:1px	(24Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
4	RGB+Auto White Mode 14 LEDs:1px	(12Ch.)	1	0-255	Red: 0-100%	Algorithms enable auto control of white LED by 3-channel RGB values
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	

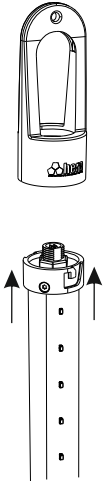
VT200 RGBW (RGB Raw Mode)

No	Fixture Personality	Channel	Value	Function	Description	
1	RGB Raw Mode 1 LED:1px	(168Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
2	RGB Raw Mode 2 LEDs:1px	(84Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
3	RGB Raw Mode 7 LEDs:1px	(24Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	
4	RGB Raw Mode 14 LEDs:1px	(12Ch.)	1	0-255	Red: 0-100%	Each colour (RGB) can be controlled individually
			2	0-255	Green: 0-100%	
			3	0-255	Blue: 0-100%	

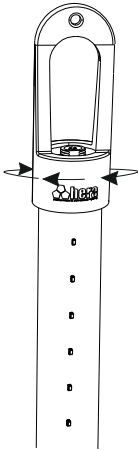
3D VERTICAL TUBE RGBW SERIES

Installation Instruction

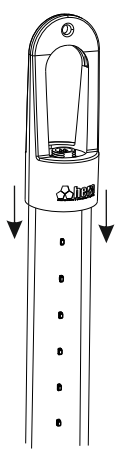
1 Assemble bracket and body of product



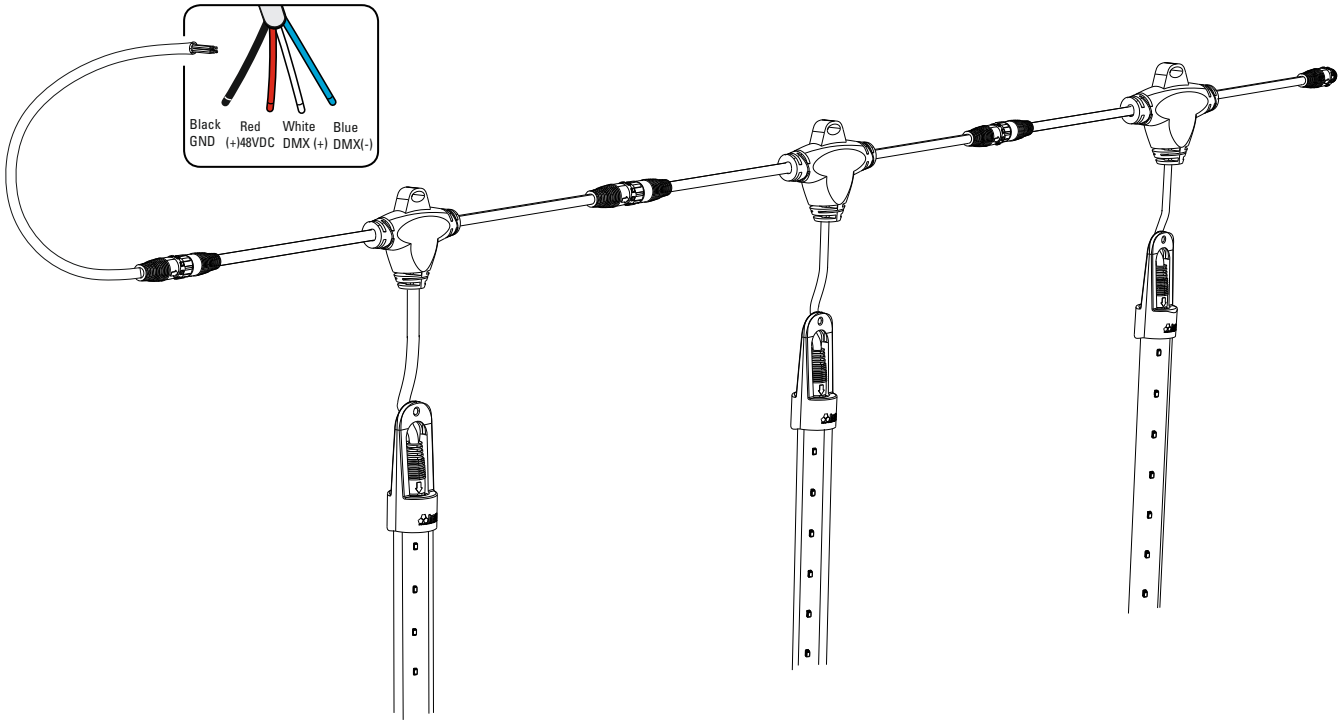
2 Turn right body of product



3 Keep constant bracket and pull body of product



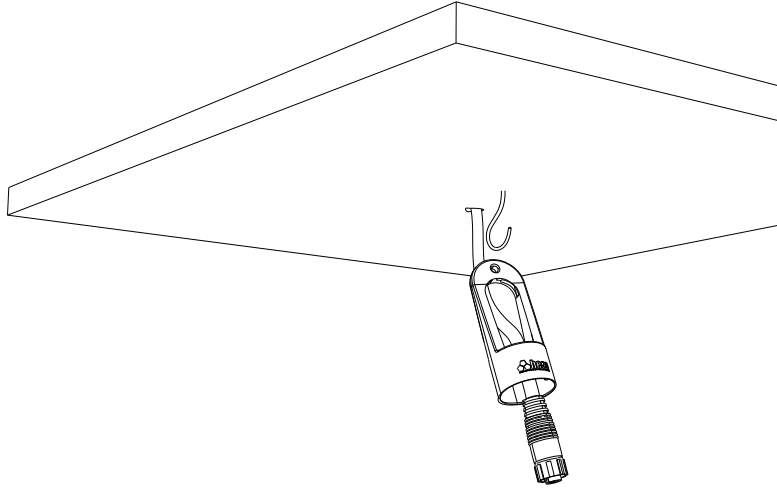
4 Connection diagram



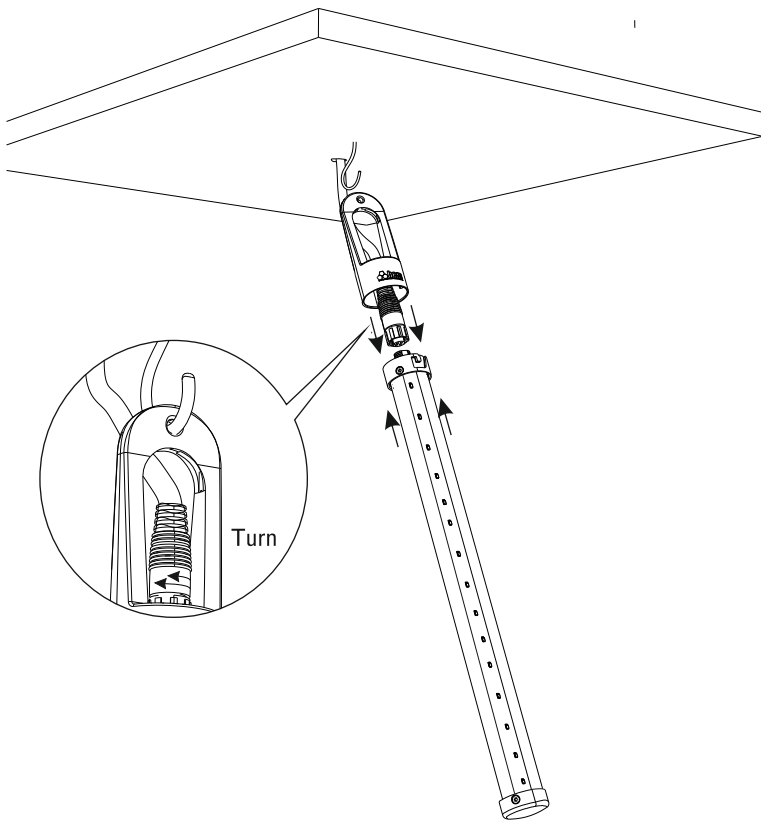
3D VERTICAL TUBE RGBW SERIES

Installation Instruction

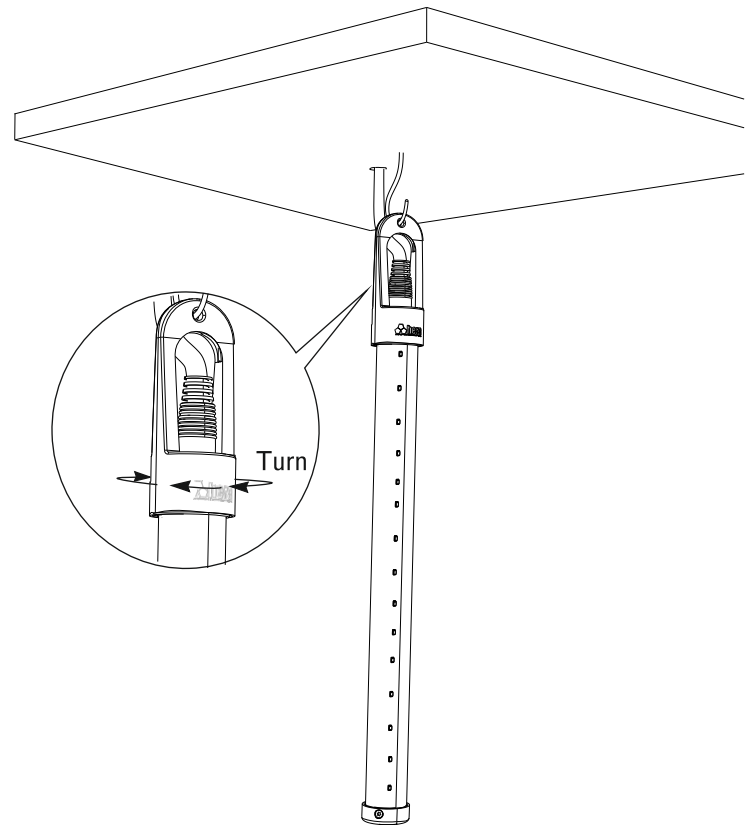
- 1 Pass connector through the bracket



- 2 Assemble connector and body of product

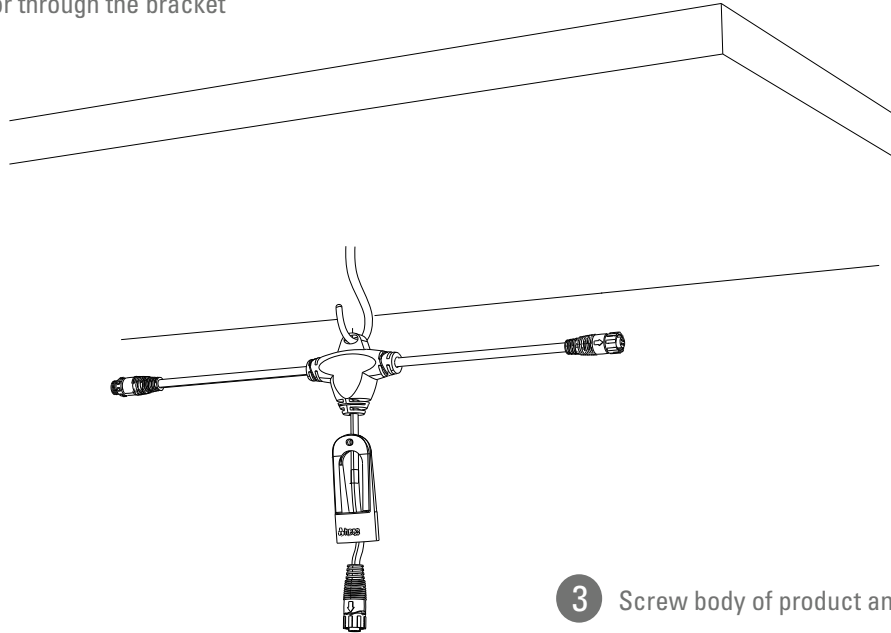


- 3 Screw body of product and finished installation

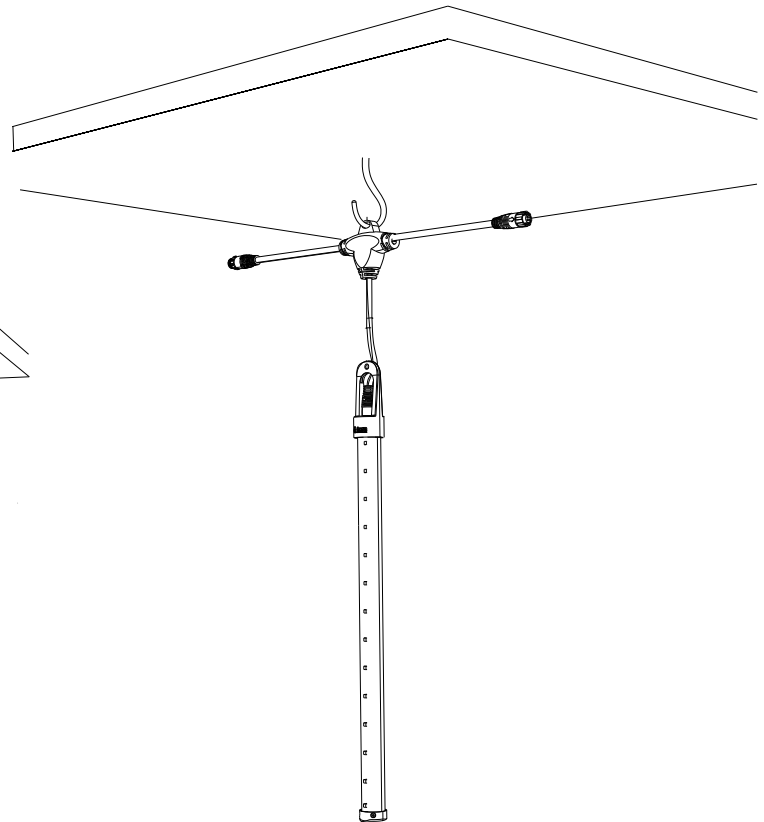


Installation Instruction

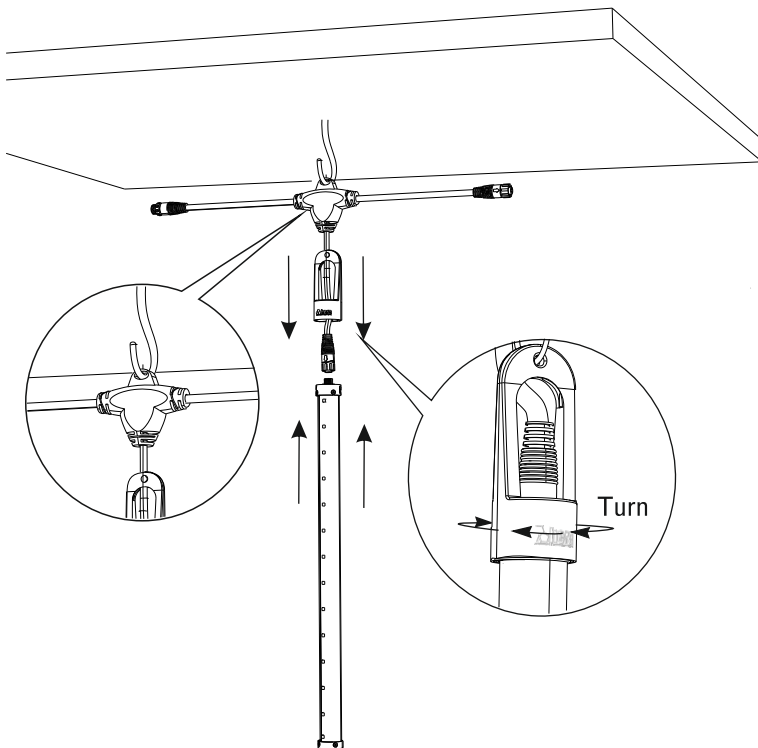
- 1 Pass connector through the bracket



- 3 Screw body of product and finished installation

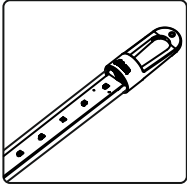


- 2 Assemble connector and body of product



3D VERTICAL TUBE RGBW SERIES

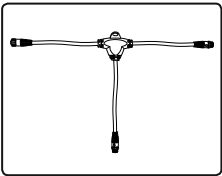
Accessories



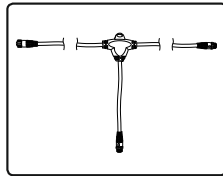
- P01040105 VT50-RGBW 3D Vertical Tube
- P01041105 VT100-RGBW 3D Vertical Tube
- P01042105 VT150-RGBW 3D Vertical Tube
- P01043105 VT200-RGBW 3D Vertical Tube

* Standart product that we provided is above. Please contact us for special orders

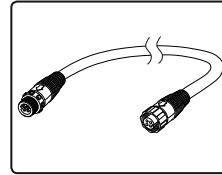
Accessories & Recommended Products



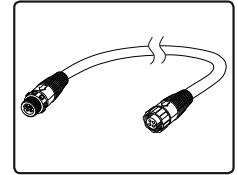
P20020
60cm 4 Pin T Cable



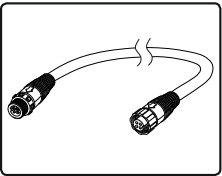
P20021
120cm 4 Pin T Cable



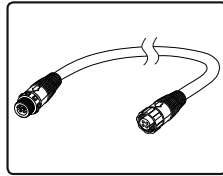
P20022
4 Pin Leader Cable 2 Meter



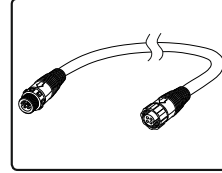
P20023
4 Pin Leader Cable 5 Meter



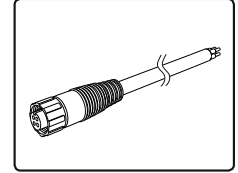
P20024
4 Pin Leader Cable 10 Meter



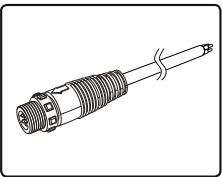
P20025
4 Pin Leader Cable 15 Meter



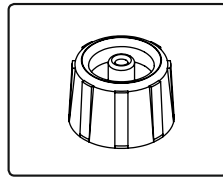
P20026
4 Pin Leader Cable 20 Meter



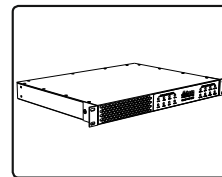
P20027
4 Pin Female IP67
Cable & Connector 30cm



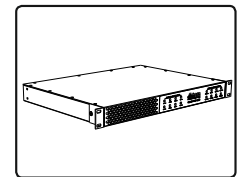
P20028
4 Pin Male IP67
Cable & Connector 30cm



P20039
Waterproof Cap For 4 Pin



P08004 Power Pack
1000-48 1000W 8 Outputs
Power Supply



P08013 Power Pack
2000-48 2000W 8 Outputs
Power Supply

