TRAXON

Vista Plus

INSTALLATION GUIDE

V1.1

Cover:
Vista Plus 1x200W RGBW
Vista Plus 1x200W White
Vista Plus 2x200W RGBW
Vista Plus 2x200W White

CONTENT

SAFETY AND OPERATION

This installation guide uses the following special statement categories to alert you to key items:

1. *WARNING -* Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
2. *CAUTION -* Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.
3. *NOTICE -* Indicates information considered important for the proper operation of the product but not hazard related.
4. Please review this manual completely prior to beginning the installation process and take note of the following:

   • The Traxon luminaire and associated accessories must be installed by a qualified person in conjunction with all applicable electrical codes and standards.

   • The Traxon luminaire does not contain any user-serviceable parts. Opening of the luminaire will void the warranty.

   • Do not use the product if the cables are damaged.

   • Handle the luminaire carefully to prevent damage during installation. Rough handling may damage the internal electronics and void the warranty.

   • Do not attempt installation in wet or severe weather conditions.

   • Do not stare directly into the light beam while the unit is illuminated.

   • IP66 rated. The Traxon luminaire is not suitable for direct immersion in water.

   • Do not operate the Traxon luminaire without a connection to earth surface.

   • The Traxon luminaire is designed for operation at 120-277VAC. Voltages outside of this range may damage the fixture and will void the warranty.

   • The Traxon luminaire housing may become hot during normal operation and present a risk of burn injury and fire hazard. Exercise caution when working in proximity to the luminaire and make sure that combustible material does not contact the housing or lens.

   • Failure to keep the luminaire within the operating temperature range (-30°C to +55°C/-22°F to +131°F) will result in improper operation and will void the product warranty.

   • Do not use harsh chemicals, cleaning solvents or strong detergents when cleaning the luminaire.

   • Persons installing this product should make sure:

      i.   The installation complies with all applicable codes, state and local laws, ordinances, standards and safety regulations.

      ii.   The installation environment is carefully studied and suitable surge protection measure(s) is taken. Suggested surge protection measures for outdoor application should reach "Live to Neutral" 5kV, "Live/Neutral to Earth" 10kV.

      iii. All luminaires can pass over-voltage test up to "Live to Neutral" 1kV, "Live/Neutral to Earth" 2kV according to EN61547 standard.

      iv.   He or she is qualified for the handling of electrical equipment.

1. INTRODUCTION

1.1 Product Overview

The Vista Plus is an AC line powered, high brightness luminaire. Controllable with DMX512, the Vista Plus is available in 200W and 400W outputs, 12 beam angle options, standard & custom finishes which can meet the needs for most projects. The daisy chain topology, and direct-wire nature of the fixture via the two integral cable whips allow for simple installation into existing installations and new structures, and is ideal for high-rise and tower illumination.

This manual is intended for use with DMX/RDM versions of the Vista Plus.

1.2 Getting Assistance

Additional product information is available on the Traxon web site:

- www.traxon-ecue.com

For additional support, please contact Traxon Technical Support:

- TRXTechSupport2@osram.com

For Americas Regional Support:
- (978) 570-3189 – Business Hours Technical Support
- +1 (978) 267-5346 – After Hours Technical Support

For Asia Pacific Regional Support
- info@traxontechnologies.com

For Europe, Middle East and Africa Regional Support
- info@ecue.com
- support@ecue.com

1.3　Dimensions

FIG.1:　Vista Plus 1x200W

689mm
(27.1")

271.5mm
(10.7")

357.2mm
(14.1")

674.7mm
(26.6")

176.2mm
(6.9")

221mm
(8.7")

14mm Hex Key required to adjust
Fixture angle (Available from Traxon)

689mm
(27.1")

271.5mm
(10.7")

357.2mm
(14.1")

674.7mm
(26.6")

Data Cable, diameter:
Ø 8.1mm (Ø 0.3")

Power Cable, diameter:
Ø 7.8mm (Ø 0.3")

674.7mm
(26.6")

101.6mm (4")

81mm (3.2")

FIG.2: Vista Plus 2x200W

Dimensions (Front view, top):
- 576.3mm (22.7")
- 267.5mm (10.5")
- 657.2mm (25.9")
- 738mm (29.1")

Side view (top right):
- 17mm Hex Key required to adjust Fixture angle (Available from Traxon)
- 14mm Hex Key required to adjust Fixture angle (Available from Traxon)
- 176.2mm (6.9")
- 455.6mm (17.9")

Dimensions (Front view, middle):
- 576.3mm (22.7")
- 643mm (25.3")
- 738mm (29.1")

Mounting bracket (middle right):
- 763.6mm (30.1")
- 506.4mm (19.9")
- 304.8mm (12")
- 101.6mm (4")
- 101.6mm (4")

Rear view (bottom):
- Data Input/Output Cable diameter: ø8.1mm (Ø 0.3")
- Power Cable diameter: ø7.8mm (Ø 0.3")
- 576.3mm (22.7")
- 657.2mm (25.9")
- 738mm (29.1")

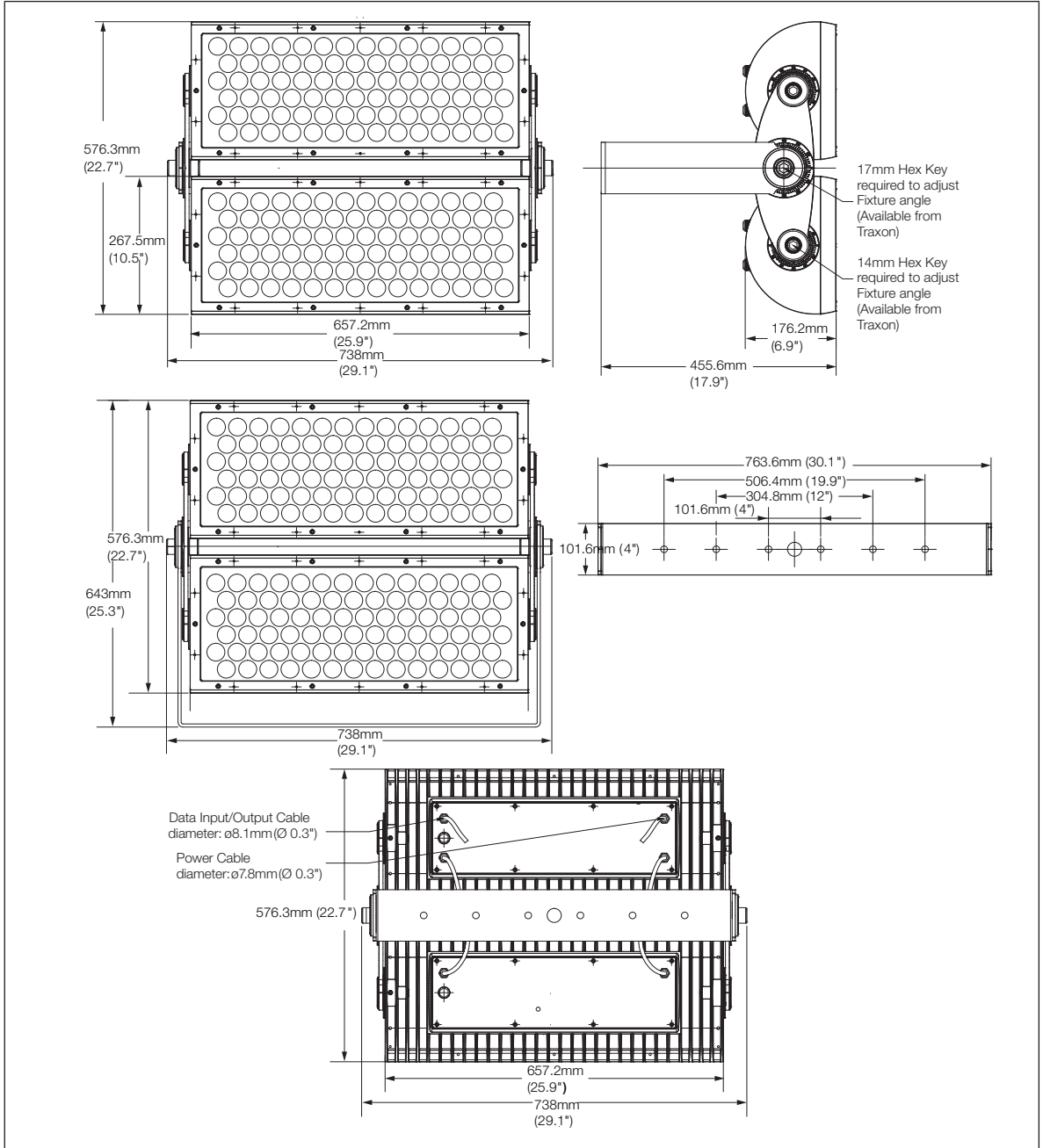## Additional Accessories (Optional accessory for 1x200W and 2x200W units)

A additional accessories kit may be ordered for the **1x200W** and **2x200W** luminaire models. This kit allows for mounting directly into a suitable angle. The kit can be installed onto the luminaires directly. Additional accessories include a Rock Guard to protect the lens, and an Angled Glare shield and Open Glare shield to help hide the light source.

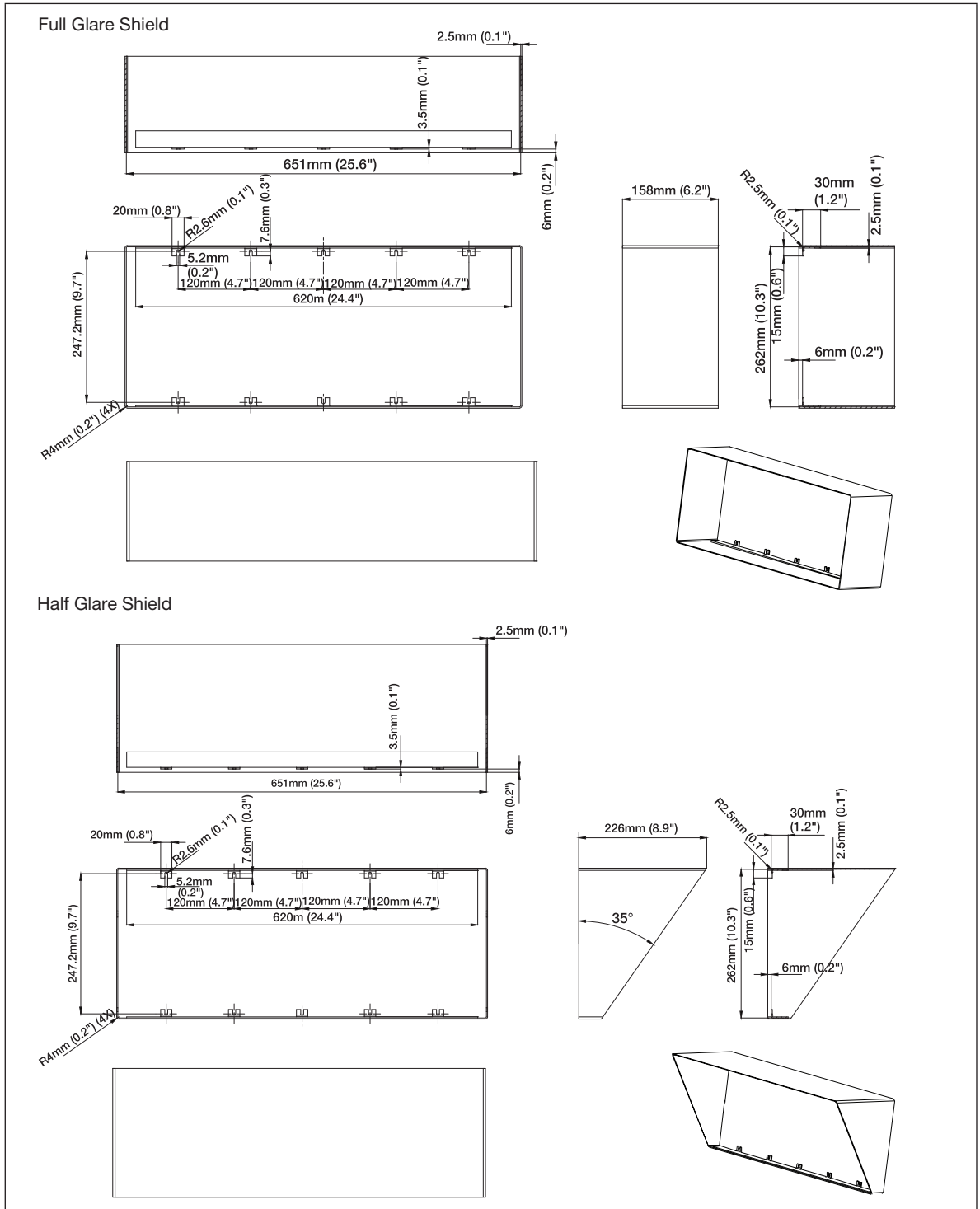## FIG.3: Vista Plus Accessories-Full/Half Glare Shield

Full Glare Shield

2.5mm (0.1")
3.5mm (0.1")
651mm (25.6")
6mm (0.2")
158mm (6.2")
R2.5mm (0.1")
30mm (1.2")
2.5mm (0.1")
262mm (10.3")
15mm (0.6")
6mm (0.2")
20mm (0.8")
R2.6mm (0.1")
7.6mm (0.3")
5.2mm (0.2")
120mm (4.7")   120mm (4.7")   120mm (4.7")   120mm (4.7")
620m (24.4")
247.2mm (9.7")
R4mm (0.2") (4X)

Half Glare Shield

2.5mm (0.1")
3.5mm (0.1")
651mm (25.6")
6mm (0.2")
226mm (8.9")
35°
R2.5mm (0.1")
30mm (1.2")
2.5mm (0.1")
262mm (10.3")
15mm (0.6")
6mm (0.2")
20mm (0.8")
R2.6mm (0.1")
7.6mm (0.3")
5.2mm (0.2")
120mm (4.7")   120mm (4.7")   120mm (4.7")   120mm (4.7")
620m (24.4")
247.2mm (9.7")
R4mm (0.2") (4X)

Pole-Mounting Supporter

Rock Guard
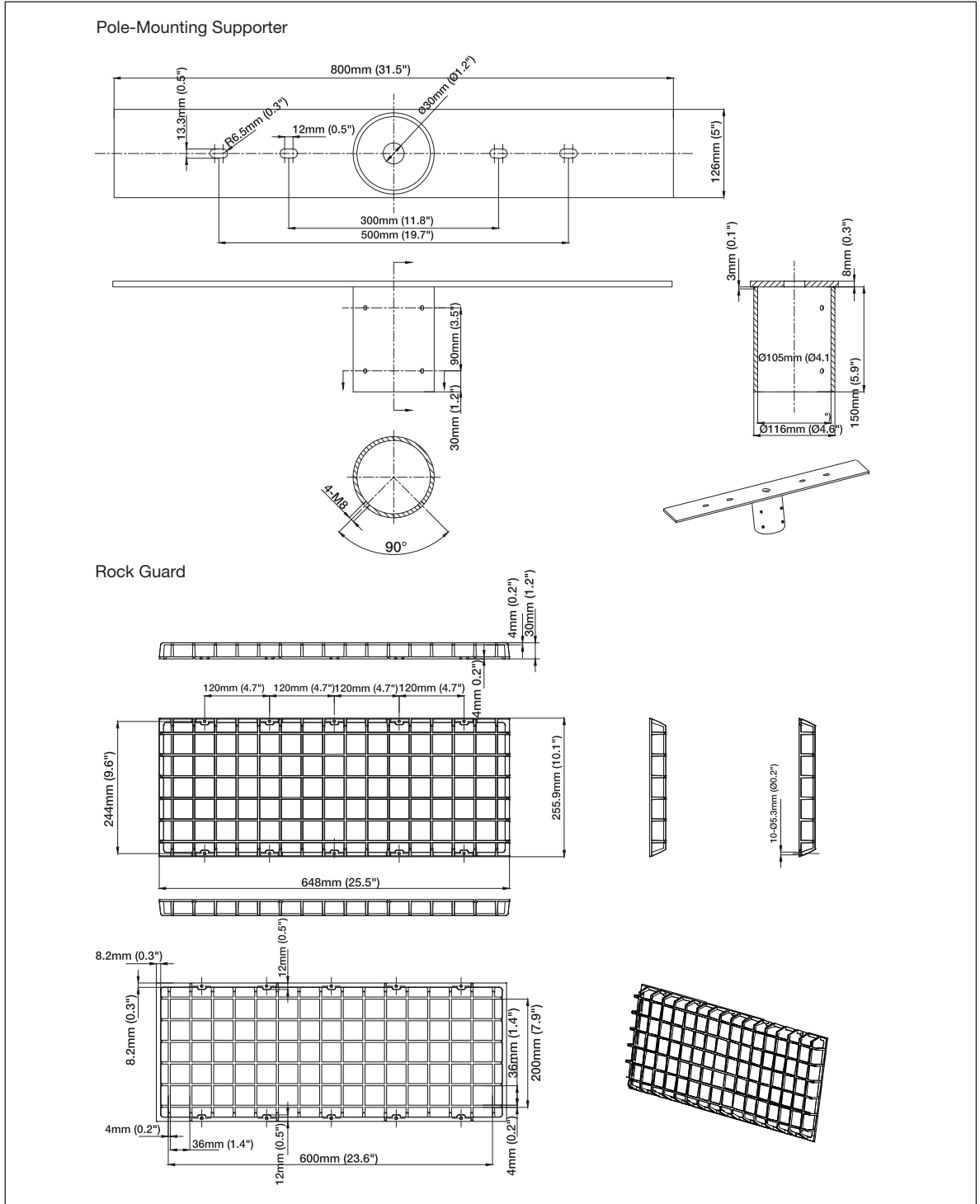
Spread Lens Frame
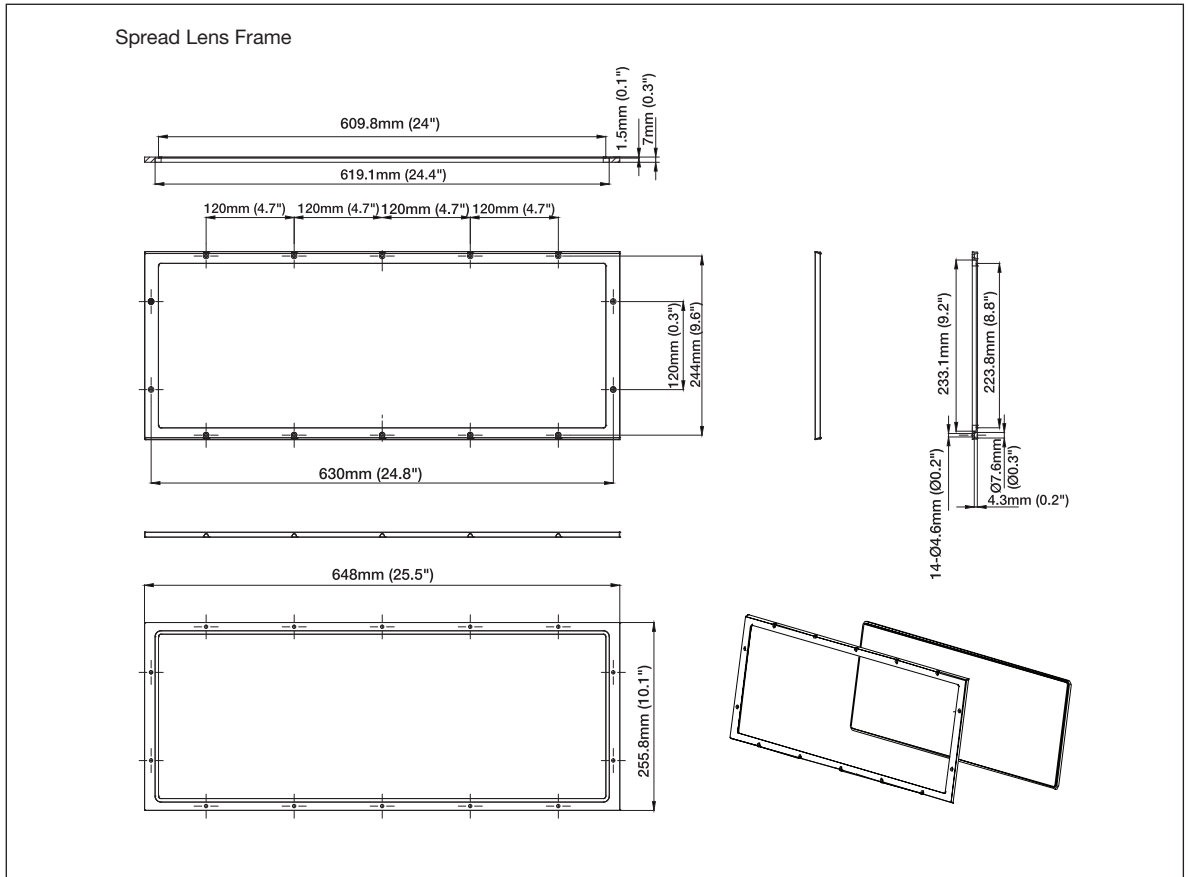
1.4   Packing Contents

FIG.6:   Packing Contents

1 x Vista Plus (size/model based on order)
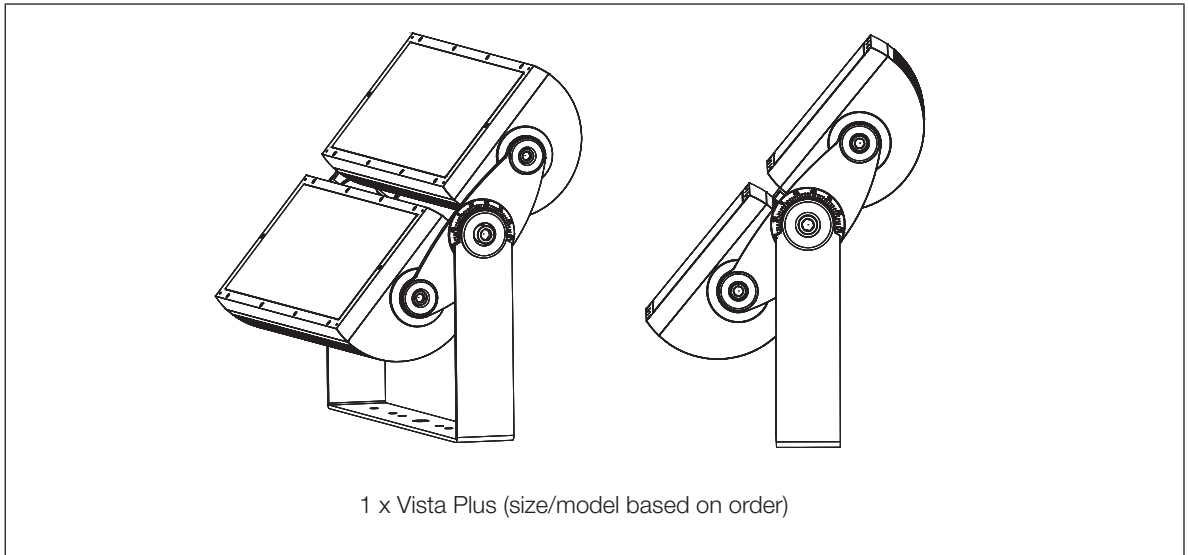
1.5   Component Overview

Luminaire Options

The Vista Plus luminaire is available in the following sizes:

Model	Weight	Power Consumption (Nominal)	Power Factor	Input Voltage Range	Operating Temperature	Minimum Starting Temperature
1x200W	22.3kg (49.2 lbs.)	200W	≥0.9	120-277VAC 50/60 Hz	-30°C to +55°C (-22°F to +131°F)	-20°C (-4°F)
2x200W	45.5kg (100.3 lbs.)	400W				

The Vista Plus luminaire is available with the following optical engines:

Model	Optical Engine	Lens Options	DMX Control Channels	Color Temperature
1x200W	**Color Changing (RGBW)**	3° native; 5°, 8°, 10°, 15°, 20°, 30°, 40°, 55°, 80°, 50°x10°, 50°x5° via accessory Internal Louver (Standard)	4	RGBW (White CCT: 4000K standard) Other White CCT and RGBA available
	White + Color		1	3000K / 4000K 2700K, 3500K, 5000K, 6500K, Red, Green, Blue, Amber available
2x200W	**Color Changing (RGBW)**		4	RGBW (White CCT: 4000K standard) Other White CCT and RGBA available
	White + Color		1	3000K / 4000K 2700K, 3500K, 5000K, 6500K, Red, Green, Blue, Amber available

1.6   Additional Accessories

Termination Kit

A ProPoint termination kit (part number AM243520054) may be purchased separately. This kit contains the following components:

- (6) Splicing wire connectors: For use in connecting data cable conductors.

NOTE   Wire nuts are not permissible for use with data connections and will void warranty.

- 120 Ohm resistor for use in terminating the DMX512 data line at the last luminaire.

FIG.7:   ProPoint Termination Kit

2.   INSTALLATION

Each Vista Plus luminaire is shipped with a mounting bracket suitable for Surface/Pole mount applications. This mounting plate is pre-installed at the mounting interface of the luminaire.
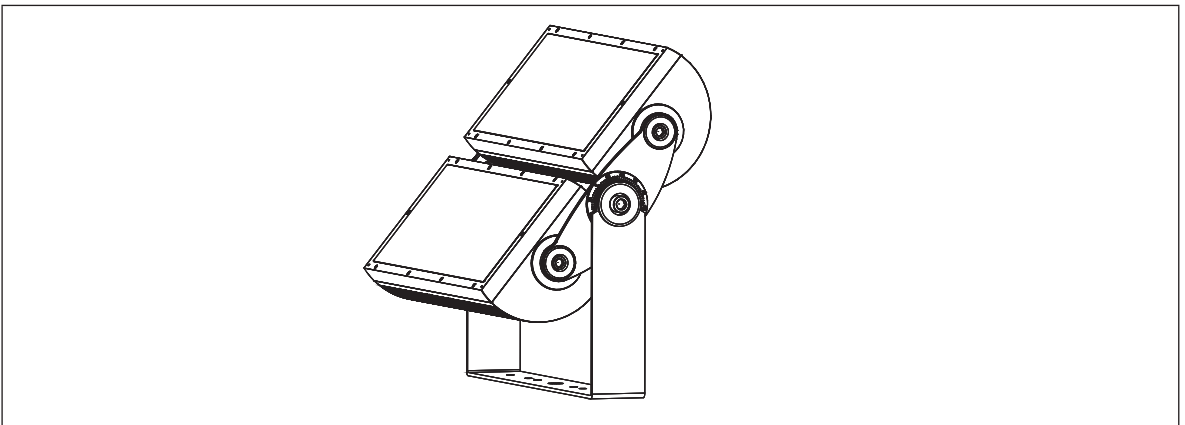
2.1   Surface Mount Installation

Required Tools

1x200W Model	14mm and 17mm Hex Key
2x200W Model	14mm and 17mm Hex Key

Surface Mount Installation

FIG.8:   Vista Plus Surface Mount Installation

Preparation
- Remove the Vista Plus luminaire from the packaging and place the unit on a level surface.

Bracket Preparation and Mounting

CAUTION   It is the installer's responsibility to ensure that the mounting surface can handle the static weight of the fixture as well as dynamic loading from environmental factors such as wind and snow/ice buildup. The use of Grade 5 or higher hardware is recommended.
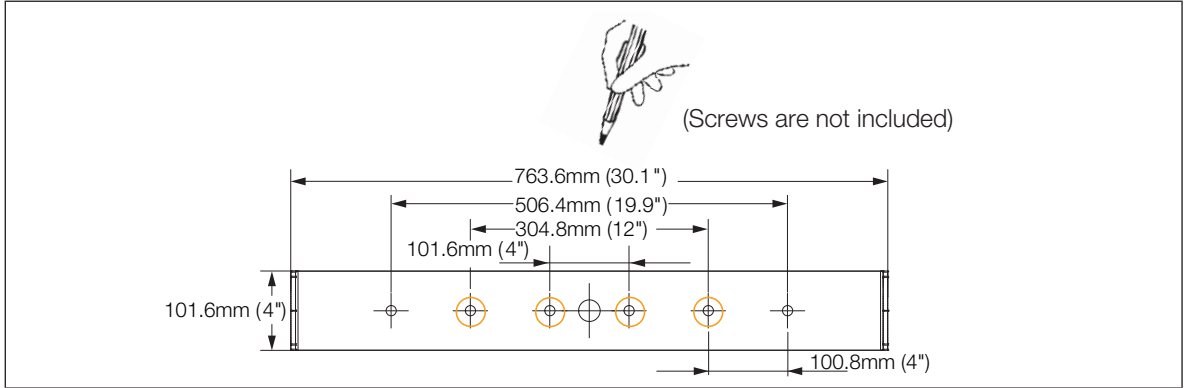
- Make sure that the bolts on the mounting surface align with the holes on the surface mount bracket
- Install the luminaire to the mounting surface and secure using appropriate hardware (by others).

NOTICE   The Traxon Luminaire should be installed with the power and data cables exiting the housing directly down when the luminaire is mounted on a vertical surface. For applications that require horizontal orientation of the power and data cables, the installer shall apply RTV silicone to the cable gland entry points. The luminaire shall not be installed with the power and data cabling oriented up.

Surface Mount Installation Steps

• After placing the stainless steel mounting bracket on the mounting surface, mark the positions of 4 mounting holes and drill 4 x M12 expanding anchors into the holes with the electric drill.

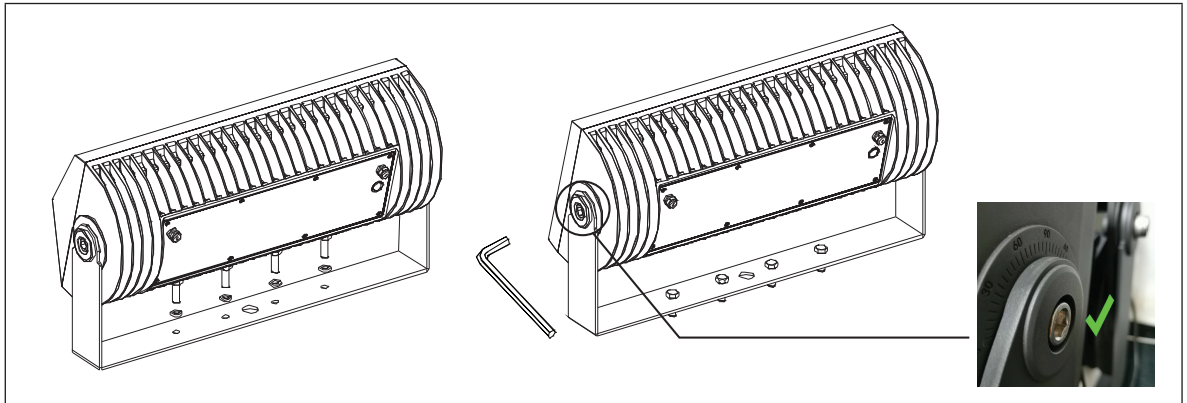FIG.9:   Surface Mounting Step 1

(Screws are not included)

763.6mm (30.1 ")
506.4mm (19.9")
304.8mm (12")
101.6mm (4")
101.6mm (4")
100.8mm (4")

Bracket Installation

• Mark the positions of mounting holes and drill M12 expanding anchors into the holes with the electric drill. Fix the M12*50 Outer hexagon bolt/ϕ12 flat washer/ϕ12 Spring washer as the following picture shows to install the bracket.

NOTICE   It is the responsibility of the installer to ensure that the mechanical fixings are appropriate for the task and if necessary, approved by a structural engineer as the installation scenario is unique for each luminaire

FIG.10:   Bracket Mounting

- After aligning 4 ϕ13mm holes and expansion screws on the floor of the stainless steel mounting bracket, lock the mounting bracket.
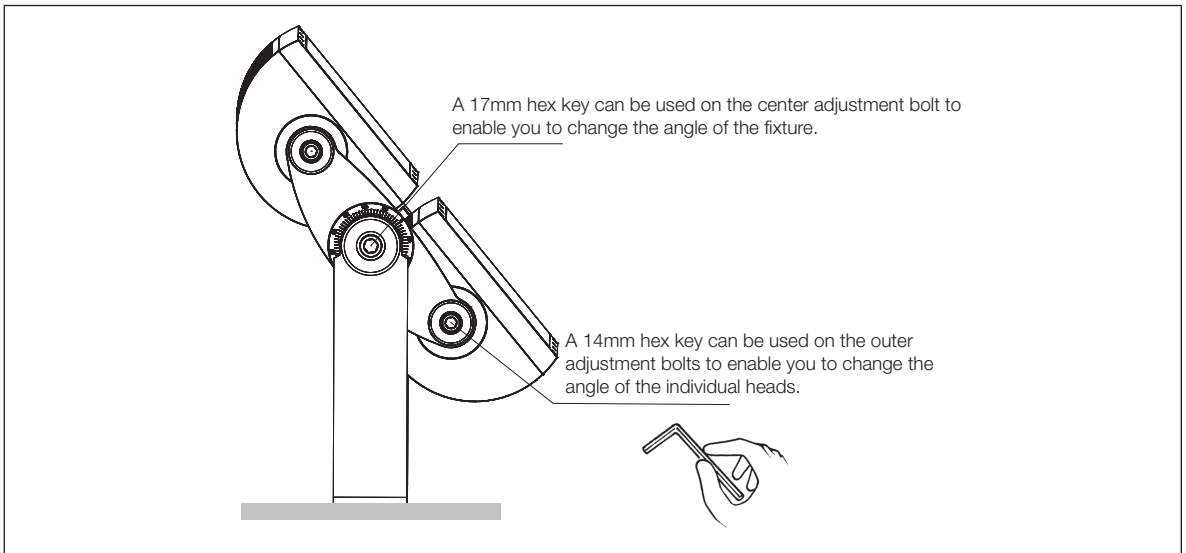
FIG.11: Surface Mounting Step 2
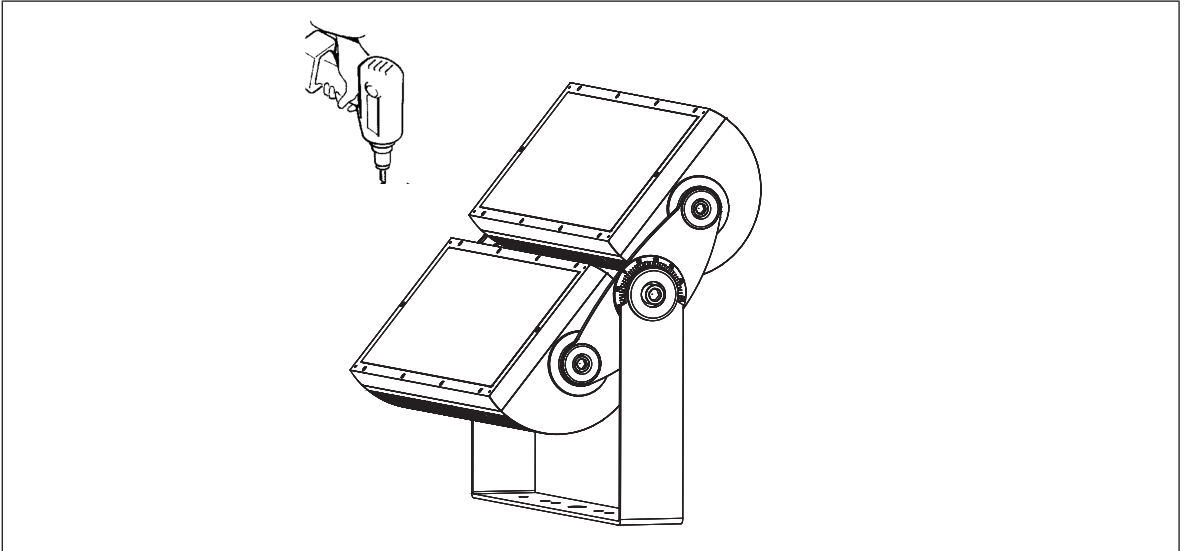
- Loosen the adjusting bolts with 17mm Hex Key, adjust the overall angle of the luminaire and tighten the adjusting bolts.
- Loosen the adjusting bolts with 14mm Hex Key, adjust the single-head exposure angle and tighten the adjusting bolts.

CAUTION   Do not rotate the luminaire more than 180 degrees. Rotating more than 180 degrees may cause the power and/or data cables to bind inside the unit resulting in damage.

FIG.12: Surface Mounting Step 3

A 17mm hex key can be used on the center adjustment bolt to enable you to change the angle of the fixture.

A 14mm hex key can be used on the outer adjustment bolts to enable you to change the angle of the individual heads.

2.2 Pole Mount Installation (Vertical Mounting only)

Required Tools

1x200W Model	14mm and 17mm Hex Key
2x200W Model	14mm and 17mm Hex Key

Pole Mount Installation

FIG.13: Vista Plus pole Mount Installation
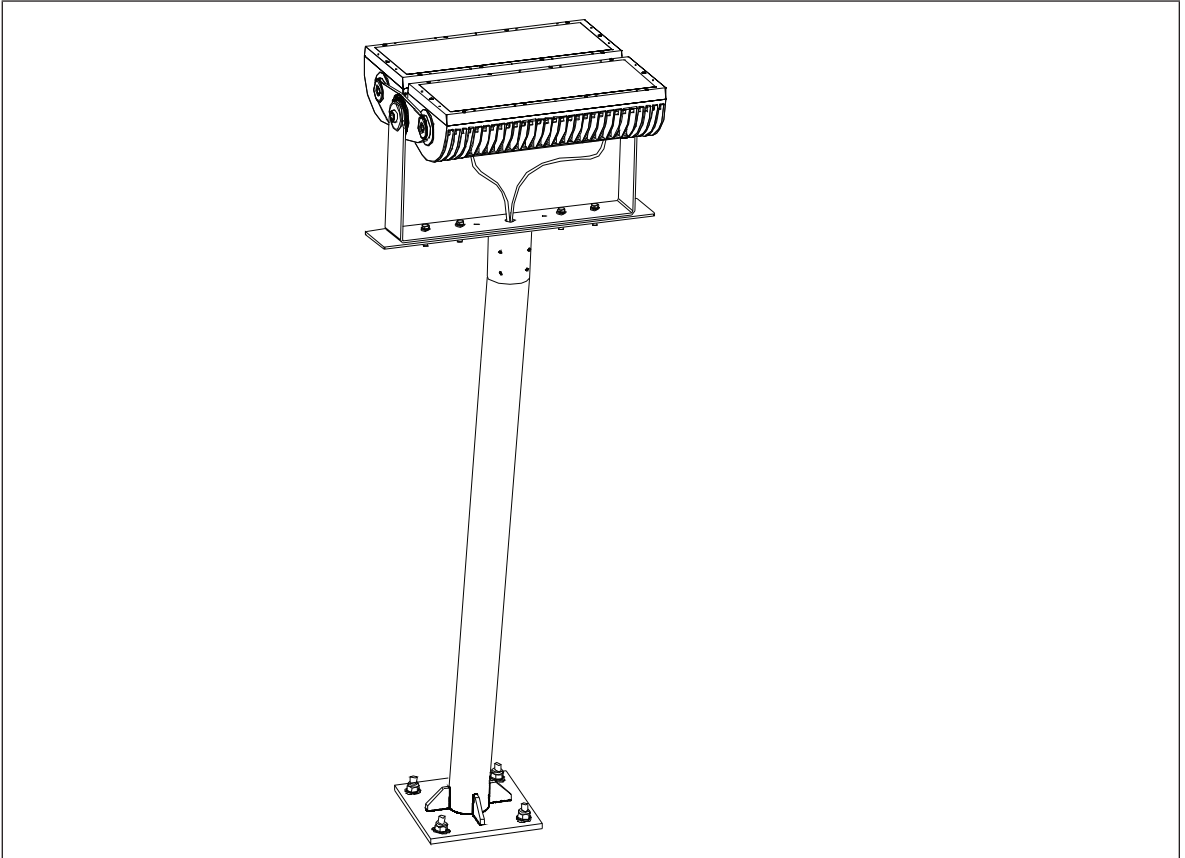
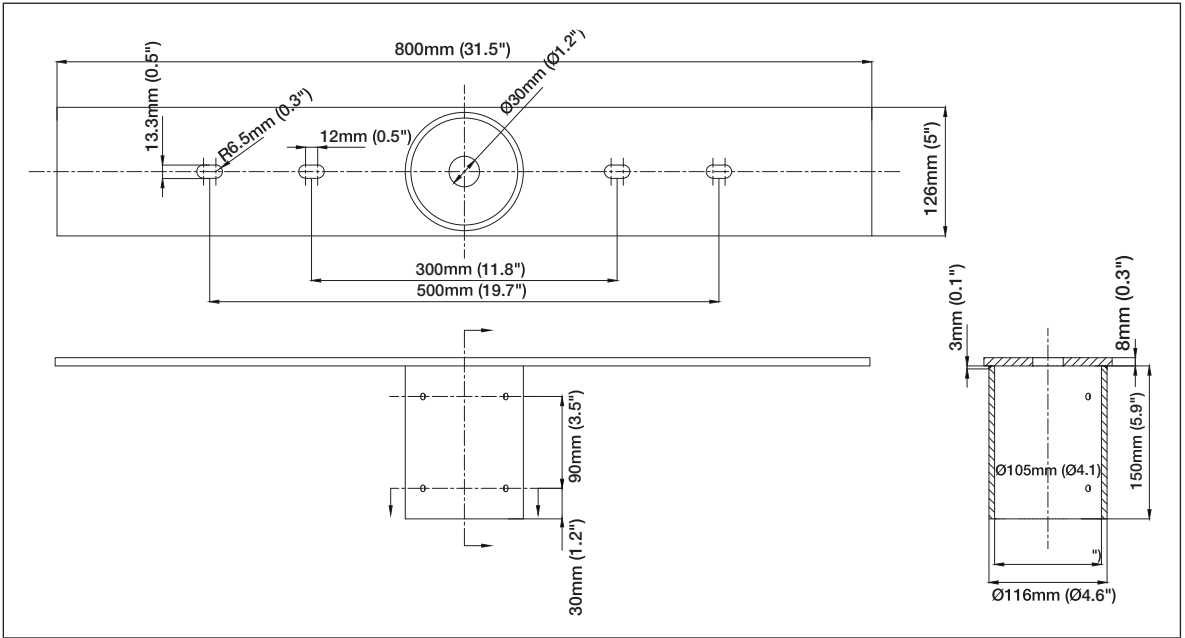**Preparation**

• Remove the Traxon luminaire from the packaging and place the unit on a level surface.
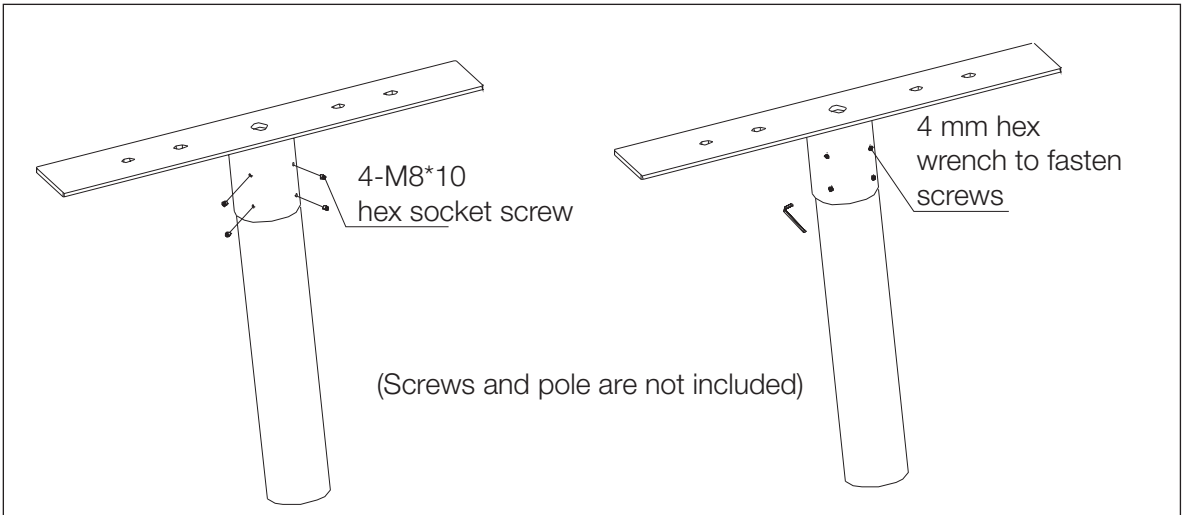
Pole Mounting Steps

• Mark the positions of the 4 mounting holes and then drill 4 x M12 holes with an electric drill. Mount the luminaire bracket to the post mount plate using suitable M12 fixings (e.g. M12 bolt, spring washer and locking M12 nut).

FIG.14:   Pole Mounting Step 1

• Fix the inner hexagon screw to fasten the pole mounting supporter onto the pole.
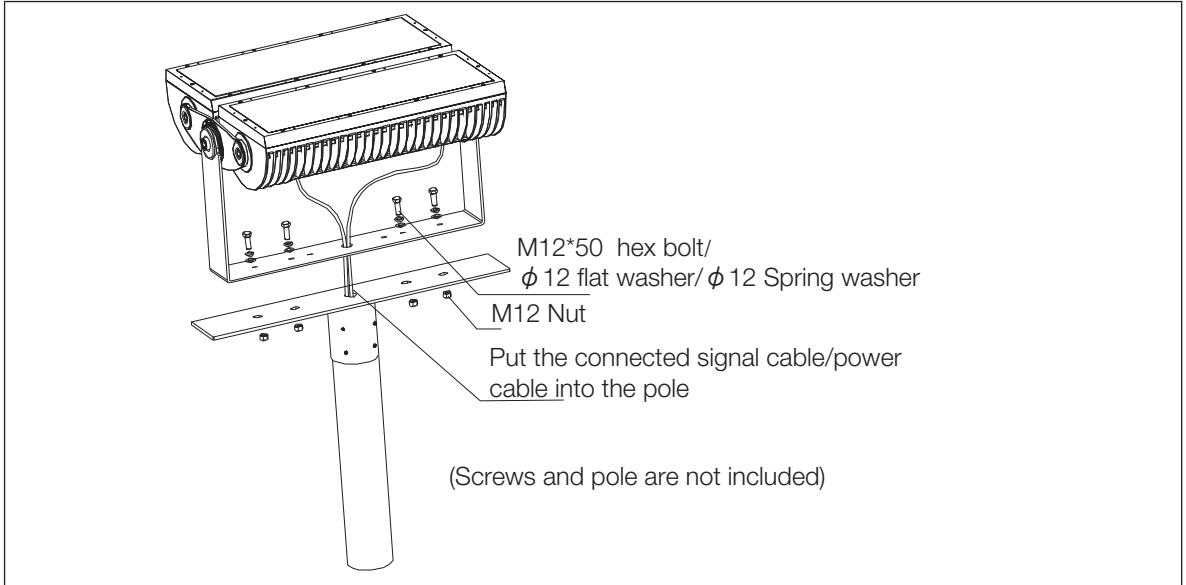
FIG.15:   Pole Mounting Step 2

- Pull the power and data cabling through the pole fitting (by others). Install the luminaire onto the pole fitting and secure mounting screws and lock nuts.

FIG.16:   Pole Mounting Step 3

M12*50 hex bolt/
ϕ 12 flat washer/ ϕ 12 Spring washer
M12 Nut

Put the connected signal cable/power cable into the pole

(Screws and pole are not included)

- Fix the luminaire and use a suitable inner Hex Key to adjust the luminaire to a target angle.

FIG.17:   Pole Mounting Step 4

14 mm hex key
to adjust the angle of single module

17 mm hex key
to adjust the angle of whole luminaire
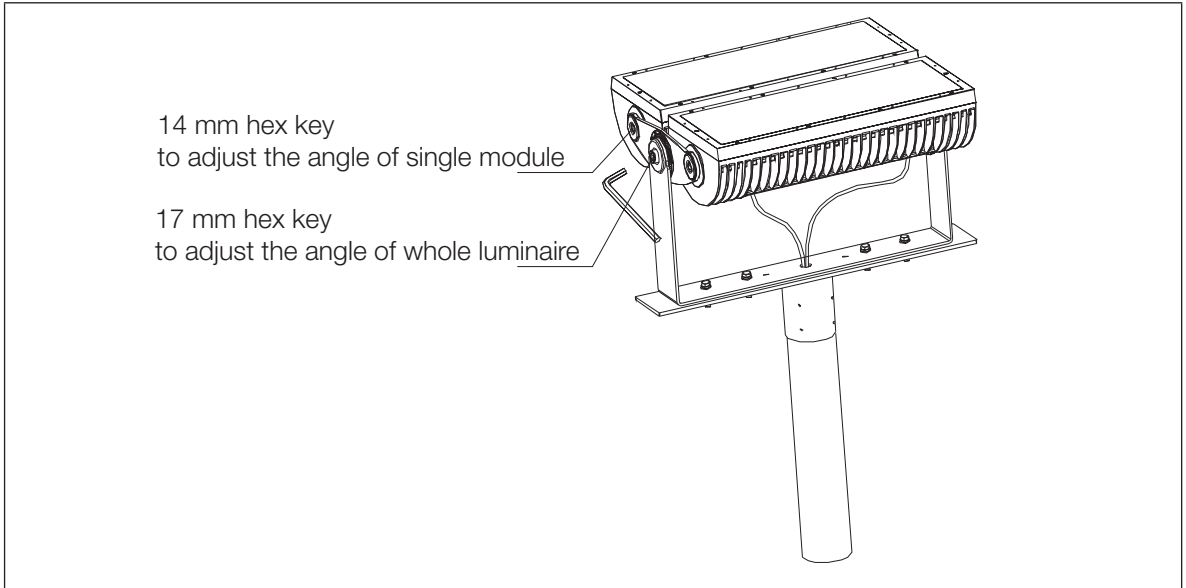
Recording the UID (DMX/RDM Model Only)

Each Vista Plus luminaire is marked with a Unique Identifier (UID) on the product label. This UID is used to address the luminaire for correct operation.

Example: 16DC:0834AA0B

AA0B represents the designation shown on the label.

Before completing installation, record each luminaire's UID in a manner similar to the table included at the end of this manual.

FIG.18:   UID Location

Record the UID code and physical location from the label located on the side of each luminaire.

UID: *0834
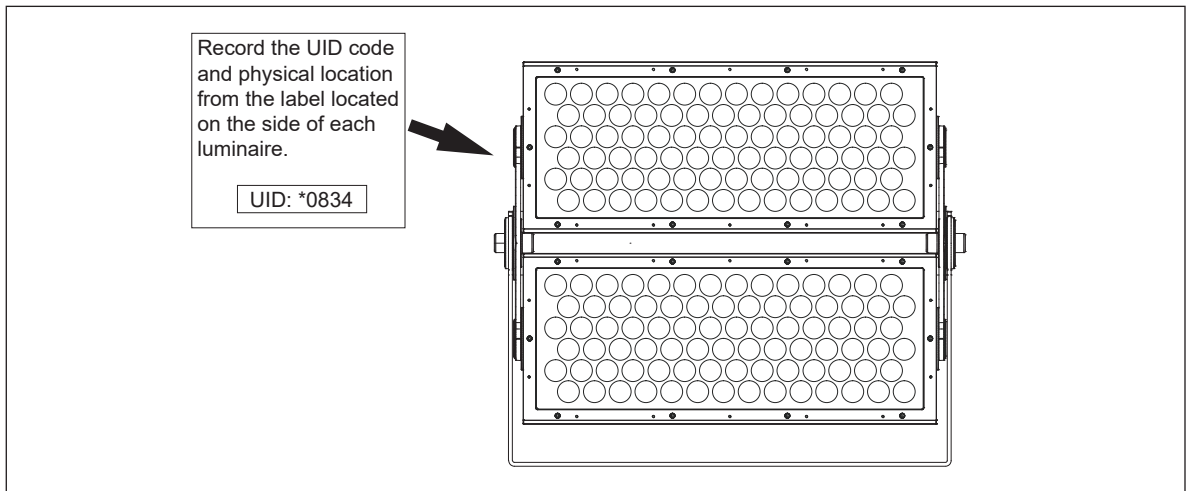
2.3   Power Wiring

The Vista Plus luminaire is supplied with a 1.8 meter (6 foot) long power feed cable. This cable may be field-cut to the required length by the installer.

WARNING	Risk of electrical shock. Make sure that the branch circuit is disconnected prior to installation or inspection..
CAUTION	Make sure that the cable is protected from cuts and abrasions that may result in damage to the outer jacket.
CAUTION	IP failure induced by stressed/damaged cable entry points during or after installation will void the product warranty.
NOTICE	A voltage divider is recommended (and may be required by local electrical code) when a single junction box is utilized for termination of the power supply and data cables.
NOTICE	Cable bend radius must NOT be less than the Minimum Bending Radius (4 X Cable Diameter) as specified by cable manufacturer and the Non-Bendable Length of 5cm (2in) near the cable gland MUST be adhered to. In addition to the Minimum Bending Radius, ensure that 5cm (2in) of cable at the connector junction is kept straight.

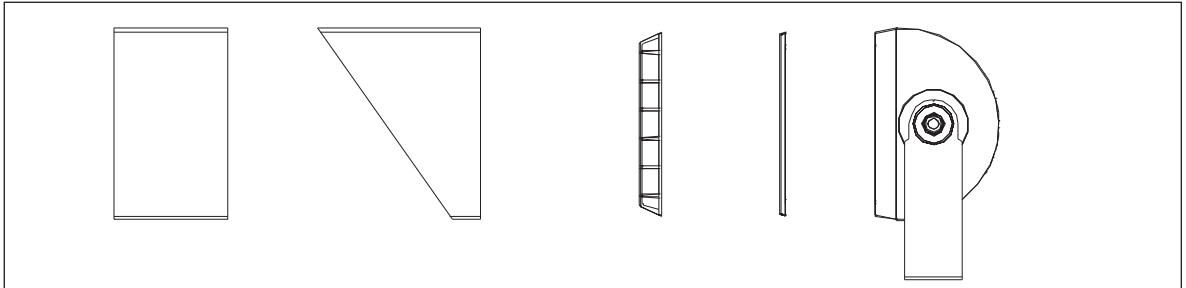## 2.4   Glare Shield Installation (Optional Accessory)

Required Tools

1x200W Model	5mm and 3mm Hex Keys
2x200W Model	6mm and 4mm Hex Keys

Preparation

• Remove the Traxon luminaire from the packaging and place the unit on a level surface.

FIG.19:   Accessories Structure

Accessories Installation

• Fix the screws as the following picture shows to install the additional accessories as your requirements.

FIG.20:   Accessories Mounting

Spread Lens Frame Mounting

Angled Glare Shield Mounting

Rock Guard Mounting

Open Glare Shield Mounting
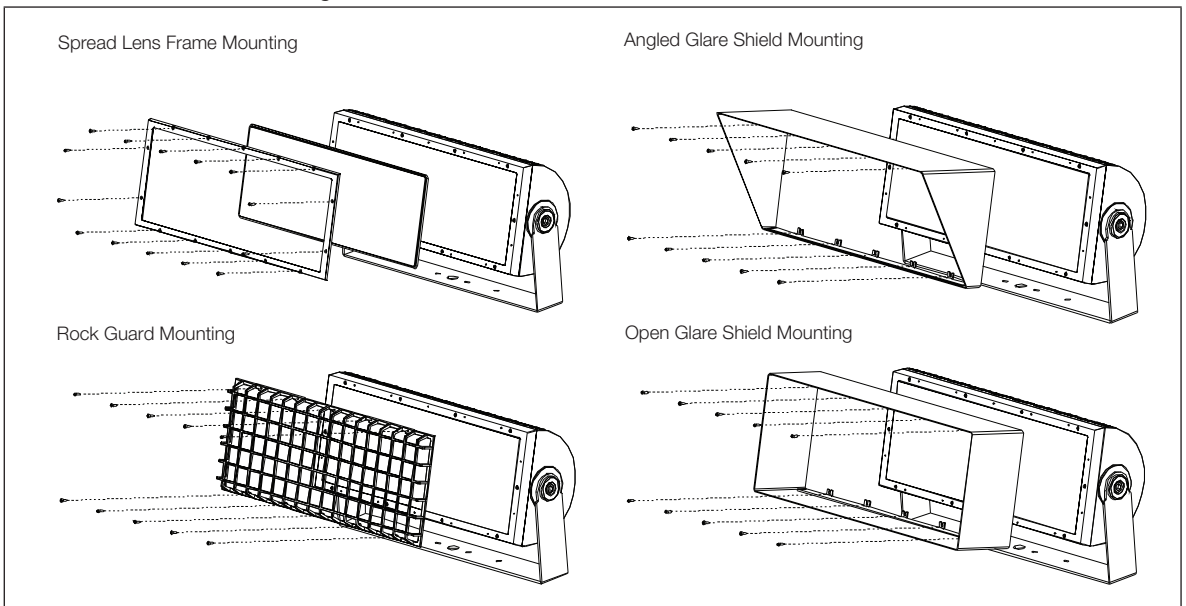
CAUTION   Ensure that the mounting surface and hardware are suitable for the luminaire weight.

Final Installation

NOTE   For ease of installation and Safety, the following step may require 2 people to perform. This is largely dependent on the location/orientation of the junction box and the size of the fixture being mounted. All installers should refer to their occupational safety and best practice guidelines when performing these tasks.

- Install the luminaire onto the mounting bracket and secure the set screws and lock nuts.

CAUTION   Ensure that the power and data cabling is routed so that the luminaire mounting interface does not crush the power and/or data cable jacketing.

- Tighten both set screws so that each screw engages securely in the surface mount bracket groove.

CAUTION   Both set screws must engage within the groove. Failure of the set screws to engage the groove could result in the luminaire separating from the surface mount bracket.

- Tighten both lock nuts over the set screws. Grasp the luminaire body and rotate it back and forth on the mounting bracket to ensure that the fixture is securely fastened.

CAUTION   Do not rotate the luminaire more than 180 degrees. Rotating more than 180 degrees may cause the power and/or data cables to bind inside the unit resulting in damage.

3. POWER AND DATA WIRING

3.1 Data Wiring

The Vista Plus luminaire is supplied with a 1.8 meter (6 foot) long data cable. This cable may be field-cut to the required length by the installer.

The Vista Plus luminaire utilizes a "daisy chain" wiring topology for DMX data communication. Data connections are made via the DMX input and output wiring pairs in the data cable. Utilization of a "star" wiring topology (via t-taps, y-cables, etc.) is not permitted.

Installed data cabling shall conform to the requirements outlined in ANSI E1.11 Entertainment Technology – USITT DMX512-A, Asynchronous Serial Digital Data Transmission Standard for Controlling Lighting Equipment and Accessories. All cabling shall utilize stranded conductors. **Solid core conductors shall not be used and can result in denial of warranty.**

A maximum of 32 Traxon luminaires may be connected to a DMX data line. The maximum overall data line length (from DMX controller to the last unit in the daisy chain) is 300m (984ft).

WARNING	Risk of electrical shock. Ensure that branch circuit power is disconnected prior to performing installation or inspection of data wiring.
CAUTION	Make sure that the cable is protected from cuts and abrasions that may result in damage to the outer jacket.
CAUTION	IP failure induced by stressed/damaged cable entry points during or after installation will void the product warranty.
NOTICE	A voltage divider is recommended and may be required by local electrical code) when a single junction box is utilized for both power supply and data cable termination.
NOTICE	Cable bend radius must NOT be less than the Minimum Bending Radius (4 x Cable Diameter) as specified by cable manufacturer and the Non-Bendable Length of 5cm (2in) near the cable gland MUST be adhered to. In addition to the Minimum Bending Radius, ensure that 5cm (2in) of cable at the connector junction is kept straight.

Installation Steps

1. Determine the required length of data cable. Make sure to account for cable management (routing, drip loops, etc.) prior to removal of unneeded cable.
2. Make sure that there is sufficient cable to account for thermal expansion and contraction.
3. Insert the data cable into the pole. The cable entry points shall be protected with fittings suitable for maintaining a water-tight installation.

|	
NOTICE	The use of RTV silicone is required at all terminal box penetration points.

4. Connect the luminaire DMX input and output conductors to the contractor installed DMX wiring.

NOTICE	All data wire connections shall be made using cage clamp style connectors included in the termination kit (ordered separately). Wire nut connections of the data conductors shall not be used and will void the warranty.

5. Install the termination resistor (included in the termination kit) between the Data - and Data + conductors on the last unit in the control. See Figure 23 for specific wire connections.

NOTICE   Termination is required for proper operation and shall be applied at the last unit of the daisy chain only. Failure to apply termination correctly will void the warranty.

FIG.21:   DMX Termination Detail

Orange	DMX- IN
Red	DMX+ IN
Grey	DMX- OUT
Purple	DMX+ OUT
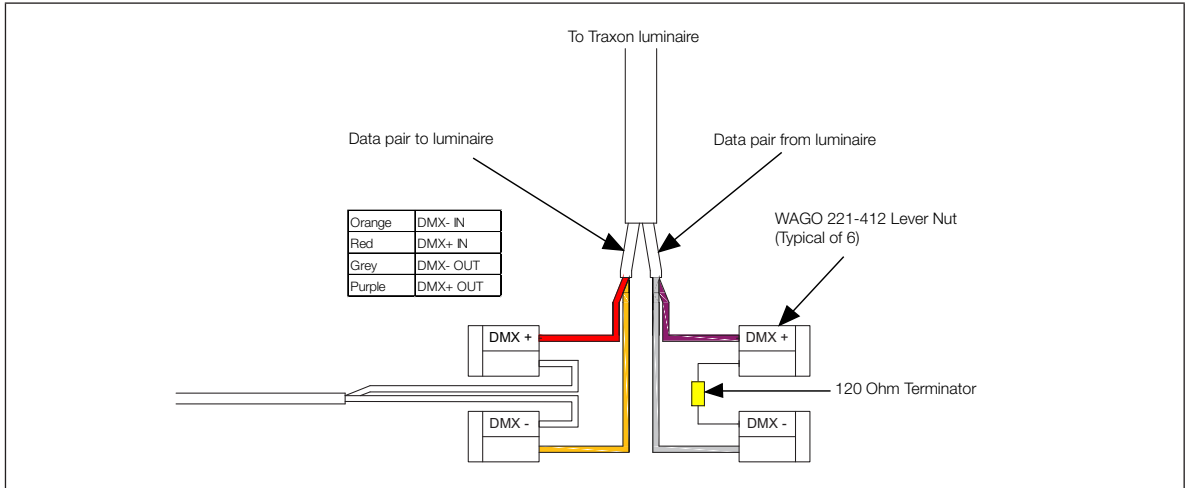
NOTE   • Maintain data pair wire twist at all connection points.

• To prevent short circuits, do not strip more conductor insulation than required for connection.

• The use of wire nuts is not acceptable and will void the warranty.

• Data termination shall be made in weatherproof enclosure by others. Use suitable cable glands and apply RTV silicone at all entry points.

NOTICE   Data shall enter each luminaire using the DMX In wire pair (Orange and Red conductors). A 120 Ohm termination resistor shall be installed on the DMX Out wire pair (between Grey and Purple conductors). Failure to terminate at the last luminaire will void the warranty and may result in control issues.
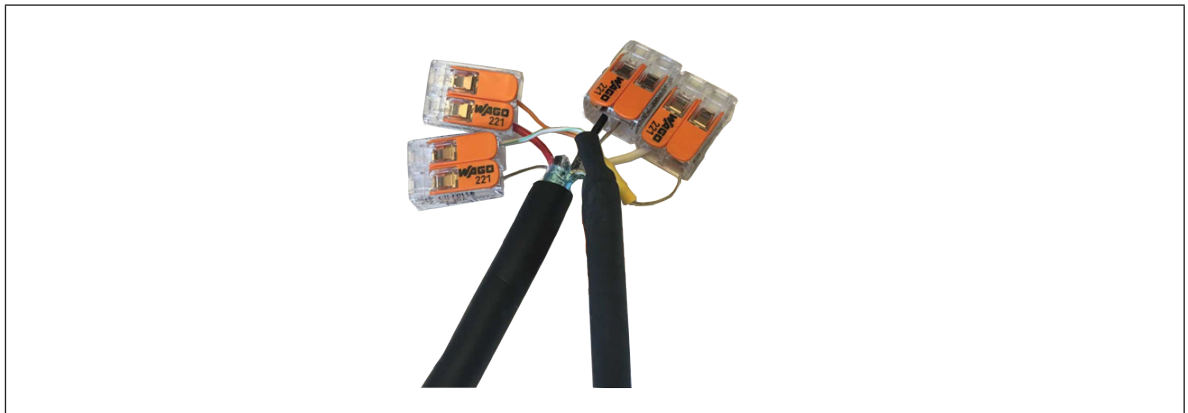
FIG.22:   DMX Termination Detail
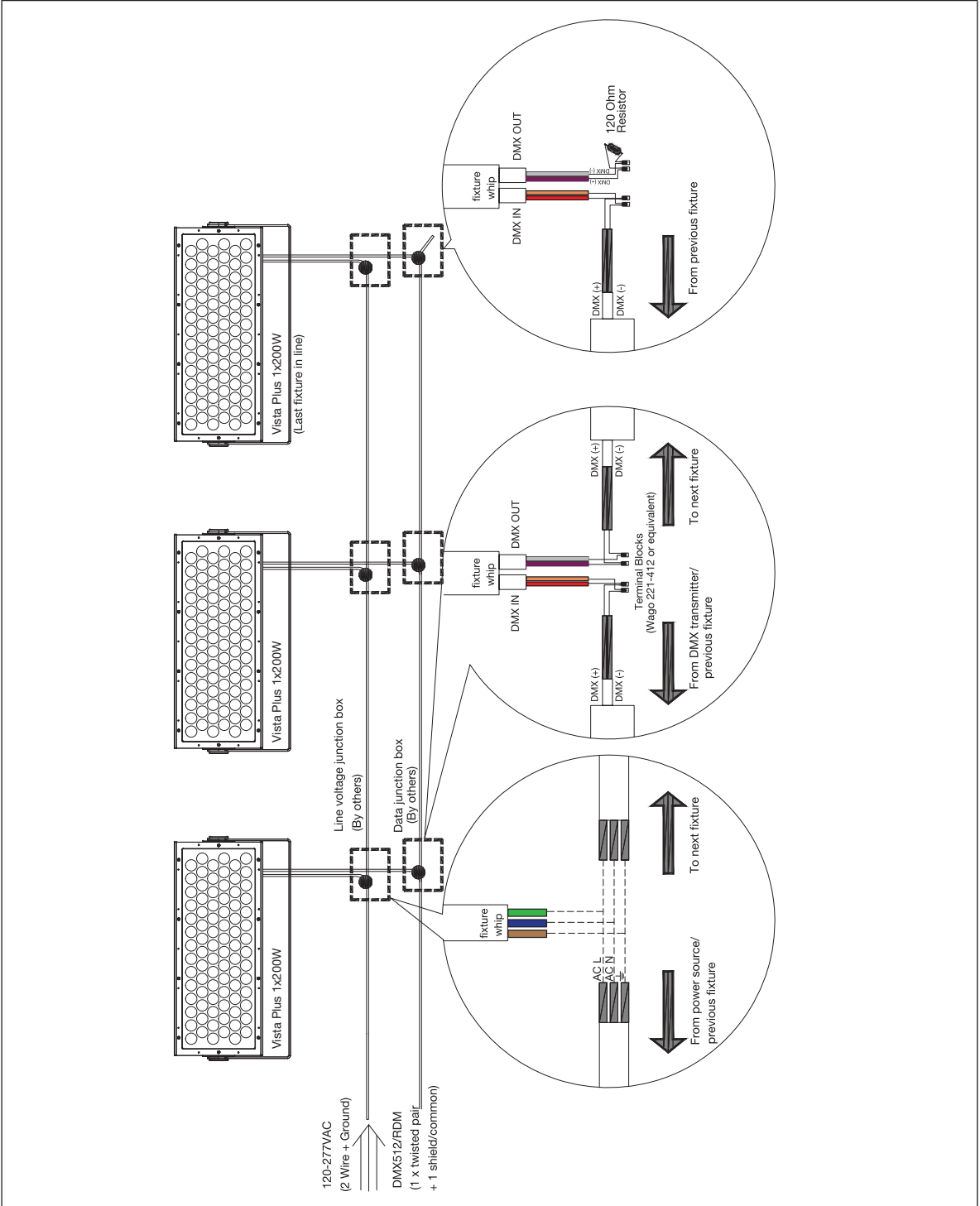
FIG.24: 2x200W Wiring Details

Vista Plus 2x200W
(Last fixture in line)

Vista Plus 2x200W

Vista Plus 2x200W

Line voltage junction box
(By others)

Data junction box
(By others)

120-277VAC
(2 Wire + Ground)

DMX512/RDM
(1 x twisted pair
+ 1 shield/common)

fixture whip

DMX OUT

DMX IN

DMX (+)
DMX (-)

120 Ohm Resistor

From previous fixture

DMX (+)
DMX (-)

Terminal Blocks
(Wago 221-412 or equivalent)

To next fixture

From DMX transmitter/
previous fixture

DMX (+)
DMX (-)

To next fixture

AC L
AC N

From power source/
previous fixture
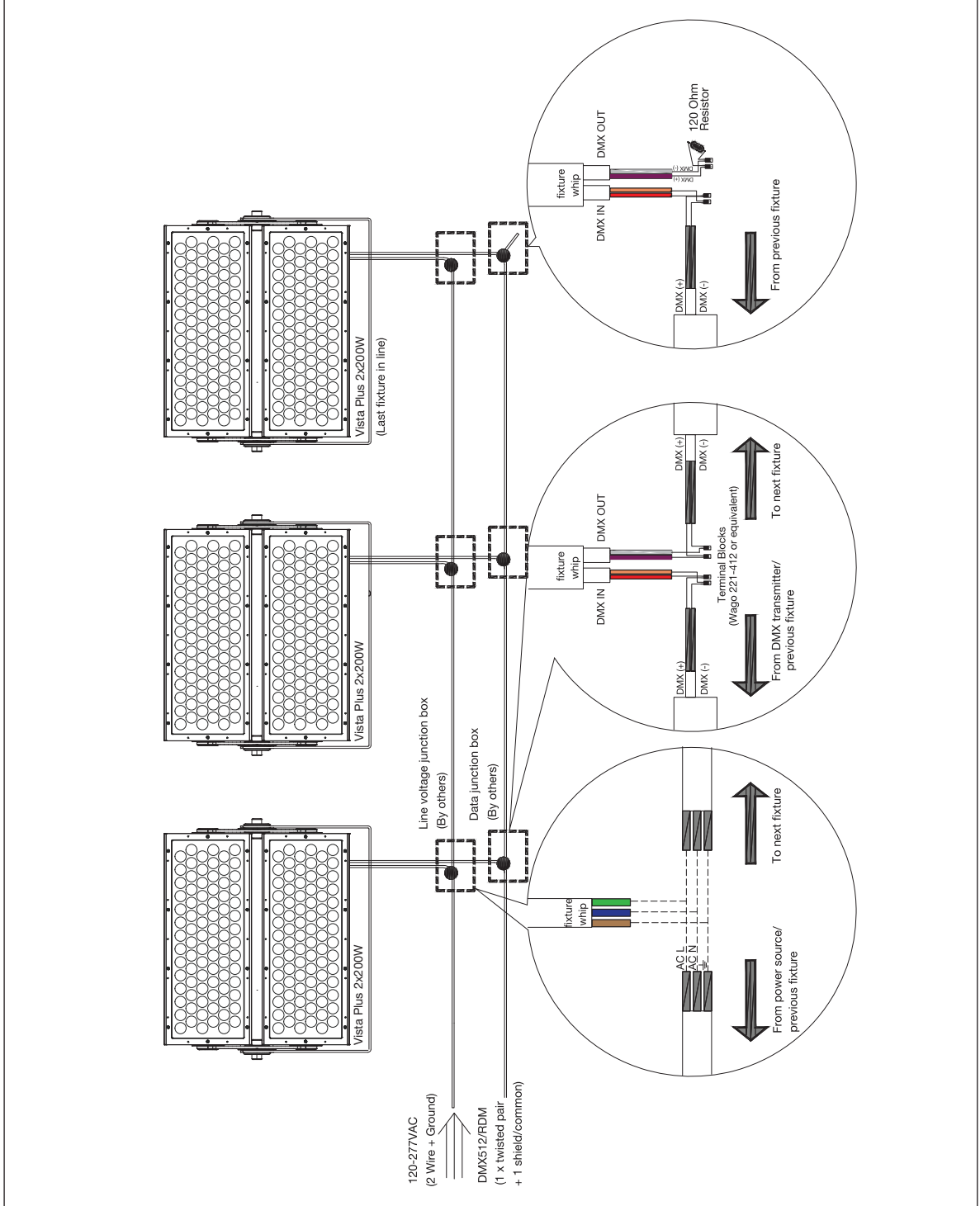
4.   CONFIGURATION

4.1   Luminaire Addressing and Control

The Vista Plus 1x200W luminaire utilizes 4 DMX channels for the RGBW unit, and 1 DMX channel for the White units and for the Vista Plus 2x200W, utilizes 8 DMX channels for the RGBW unit, and 2 DMX channel for the White units.

The Vista Plus luminaires are shipped with a default DMX address of 001. For installations where independent control of luminaires is required, the DMX address will need to be modified using a controller that supports Remote Device Management (RDM).

- Connect an RDM capable control device to the DMX line ahead of the first luminaire.
- Enable RDM discovery per the instructions of the controller manufacturer.
- The controller will discover available Traxon luminaires. These luminaires can be identified by the prefix 16DC in each unit's UID.
- Using the RDM identify function, locate a single unit in the installation. The associated luminaire will flash.
- Note the physical location of the flashing unit and then disable the identify function.
- Determine the desired address for the identified luminaire and enter it in the address field of the RDM controller.
- Continue the above process until all units have been addressed.
- Record the UID data and associated addresses at the end of this document.
- Test each luminaire to verify correct addressing prior to completing installation.

Traxon Power-Up and Loss of Data Behavior

The Vista Plus luminaire will exhibit the following behavior upon power-up and loss of DMX data:

Power-Up with no DMX data present	Luminaire will illuminate at full power
Power-Up with DMX data present	Luminaire will respond based on the DMX values being received
Loss of DMX data	Luminaire will hold the last valid DMX values received until a power cycle or until DMX is restored.

DMX Channel Functions

RGBW Unit

DMX Channel	Function
1	Red Intensity
2	Green Intensity
3	Blue Intensity
4	White Intensity

White Unit

DMX Channel	Function
1	White Intensity

Supported RDM Parameters

Parameter ID	Description	Default Value	Note
0x00F0	DMX Start Address	1	
0x1000	Identify Device	0	Changing value to 1 will cause fixture to flash
0x0081	Manufacturer Label	Traxon Technologies	Read Only Parameter
0x0082	Device Label	Traxon xx	
0x0200	Sensor Definiton	N/A	Read Only Parameter
0x0201	Sensor Value	N/A	Read Only Parameter

Supported RDM Sensors

Sensor Number	Sensor Description	Unit of Measure	Safe Operating Range
#0	Driver Temperature	Celsius	
#1	Drive Voltage	DC Volts	
#2	Driver Current	mA	
#3	On-Line Time	ks	

5.   TROUBLESHOOTING

Problem	Cause	Solution
Product does NOT light up after installation	Incorrect Power Connection	• Check Mains Power • Check power supply leads and wire connections • Ensure output wires are connected with proper polarity
Shadowing	Light source covered	• Check for cables, wires or unwanted debris covering LED light source
Flickering	Incorrect power input/ Excess products connected	• Ensure the input voltage is correct • Ensure the power supplies are not overloaded due to an excess of fixtures connected • Ensure that only 32 Devices are connected on single daisy chain, remove any excess devices and power cycle the fixture feed power. Check and see if issue still exists.
All fixtures respond the same to data input	Improper addressing	• Confirm the fixtures in the run do not share the same address(es) • Readdress fixtures

6.   WARRANTY INFORMATION

Traxon Technologies warrants this product against material and workmanship defects 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.

Please refer to www.traxon-ecue.com for all warranty terms and conditions.

7. APPENDIX

UID/Address Recording Table

Luminaire	UID	DMX Address	DMX Universe #	Fixture Mounting Location	Note
Unit 1					
Unit 2					
Unit 3					
Unit 4					
Unit 5					
Unit 6					
Unit 7					
Unit 8					
Unit 9					
Unit 10					
Unit 11					
Unit 12					
Unit 13					
Unit 14					
Unit 15					
Unit 16					
Unit 17					
Unit 18					
Unit 19					
Unit 20					
Unit 21					
Unit 22					
Unit 23					
Unit 24					
Unit 25					
Unit 26					
Unit 27					
Unit 28					
Unit 29					
Unit 30					
Unit 31					
Unit 32					

NOTE   Do not exceed 32 luminaires on a single DMX data line.
Termination resistor must be installed at the last luminaire only.

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