



TRAXON

Media Tube® Plus RGBW



TRAXON Plus⁺

Project: _____

Type: _____

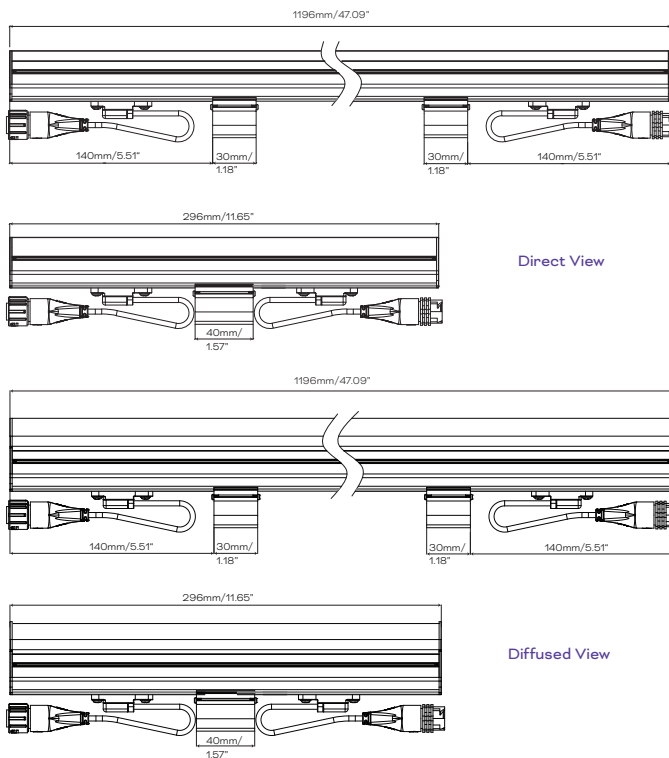


Media Tube® Plus is a slim, direct view luminaire designed to integrate into any wall, facade or media lighting application with tight installation requirements. Available with a Direct View or Diffused View lens and 9 pixels per 300mm / 1', Media Tube® Plus provides smooth effects to add life and motion to the installation. Featuring Auto-Addressing and simple quick-lock connections, Media Tube® Plus is perfect for building façades, media applications, and more.

Features

- Available lengths: 296mm / 1ft (9PXL), 1196mm / 4ft (36PXL)*
- Direct View and Diffused View
- e:pix / DMX512
- Daisy Chain System with quick lock connectors
- Auto-Addressing per daisy-chain or Manual-Addressing with TX Addresser
- IP66, Suitable for Coastal Environment, IK09 (Diffused View) and 3G Vibration Resistant

Dimensions



*: Length options differ by region. See your local Traxon representative for information.

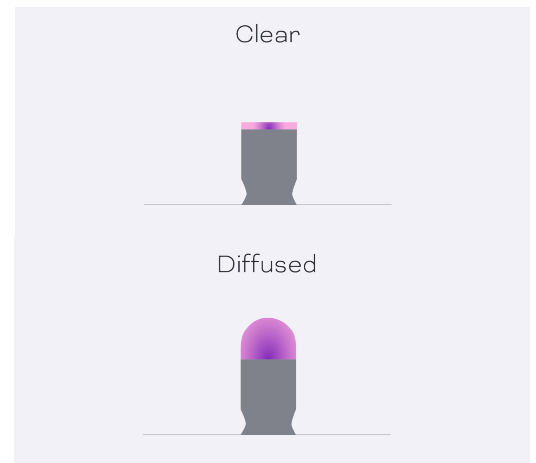
Technologies

- e:pix
- DynaMood®: BinOne · AddressOne
- White Balance

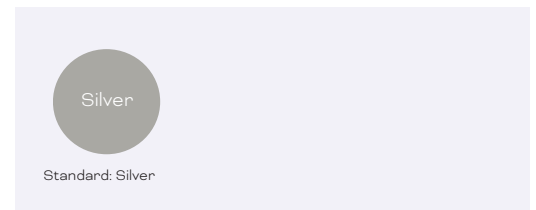
Color Options



Lens Options



Finishes



Product Specifications

	Direct View		Diffused View	
Length Option*	296mm/12"	1196mm/47"	296mm/12"	1196mm/47"
Pixels	9 pixels	36 pixels	9 pixels	36 pixels
Light Source	18 RGB + 9 White	72 RGB + 36 White	18 RGB + 18 White	72 RGB + 72 White
Color Range	16.7 Million additive RGB colors; White 6500K			
Beam Angle	110°		120° x 180°	
Luminous Flux (lm)	232	877	185	714
Efficacy (lm/W)	51	52	41	43
Luminance ¹ (cd/m ²)	4467		2067	
Pixel Pitch	33mm / 1.30", adjustable			
LED Pitch	33mm / 1.30"		16.7mm / 0.66"	
Pixel Configuration	1 Pixel = RGB W BGR		1 Pixel = RGB W RGB W	
Housing	Extruded Aluminum			
Cover Lens	Direct View Glass		UV resistant polycarbonate	
Mounting	Fixed, non-adjustable mounting bracket			
Dimensions (W x H)	24.5 x 35mm / 0.96" x 1.38" (Mounting bracket excluded)		24.5 x 50mm / 0.96" x 1.97" (Mounting bracket excluded)	
Dimensions (L)	296mm / 12"	1196mm / 47"	296mm / 12"	1196mm / 47"
Weight	0.37kg / 0.82lb	1.15kg / 2.54lb	0.35kg / 0.77lb	1.08kg / 2.38lb
Regulatory Listing & Safety Approval	UKCA, CE, cETLus, FCC, ANSI C136.31 - 3G			
Operating Temperature	-40°C to +60°C / -40°F to +140°F			
Storage Temperature	-40°C to +80°C / -40°F to +176°F			
Environment	Outdoor, IP66, IK09 (Diffused View), Suitable for Coastal Environment			
Humidity	10-90%, non-condensing			

Electrical Specifications

Operating Voltage	48V DC			
Power Consumption	4.5W	16.8W	4.5W	16.8W
Lumen Maintenance	L70B50 80,000 hours@ 25°C			

System Specifications

Control	DMX512, e:pix
Power Supply	LED Engine 48V Outdoor
Addressing Options	Auto-Addressing per daisy-chain (by default); Manual-Addressing by TX Addresser
Fixture Interconnection	See System Diagram
Pixel Control	Adjustment of Pixels from 33mm / 1.3" to full length of luminaire ²

- *. Length options differ by region. See your local Traxon representative for information.
- Diffused View luminance represents the average value of the Diffused View Media Tube[®] Plus from its lighting surface.
 - Direct View luminance represents the value of the composed screen which assumes the luminaire is installed with 50mm / 2" distance between Tubes.
 - See "Pixel Configurations" on page 8 for more information.

LED CHARACTERISTICS Because LEDs are semiconductor devices, their performances are subject to inherent variability commonly found in semiconductor industry. To improve consistency in performance across the same product, LED manufacturers "sort" LEDs into bins according to different preset parameters, such as forward driving voltage, illumination, etc. Whereas binning is a sorting function, it is not a correction process. Inherent variability in the manufacturing process results always in different binning distributions according to different production lots. Traxon uses automatically binned LEDs on its products, thereby minimizing output variations within the model range.

As with all electronic devices, LED output degrades over time - a term called lumen depreciation. This also explains why it is nearly impossible to expect photometric performances of two LED products with different service life spans to be the same. The rate of LED degrade is a complex function of many factors such as operating efficiency, duration of continuous operation, and more significantly, environmental conditions (ambient temperature for example). If allowed working under optimal operating temperature range and with good ventilation, LED devices enjoy long service lives over conventional light sources. When using/installing LED devices, care should be taken to ensure that the devices will operate within the operating conditions specified in respective product literature.

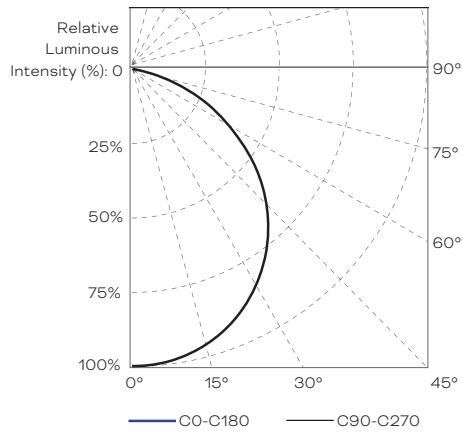
Lumen measurement complies with LM-79-09 standard.
Lumen maintenance is calculated based on LM-80 compliant measurement.

Media Tube[®] Plus RGBW

Source Specifications

Length Option*	296mm / 12"	1196mm / 47"
Source	18 RGB + 9 White	72 RGB + 36 White
Optics	110°	
Cover Lens	Direct View Glass	

Candela Distribution

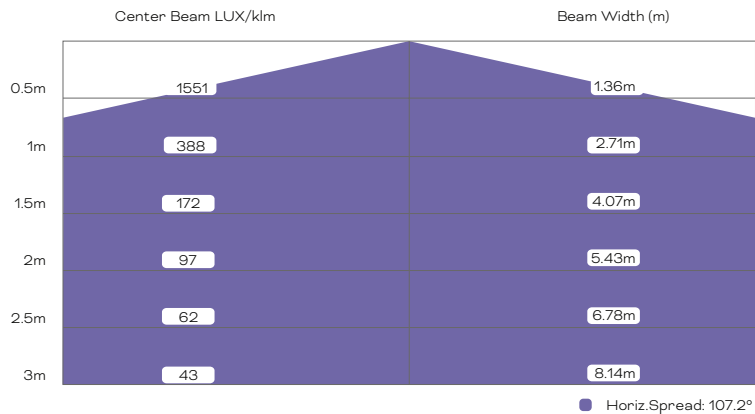


Light Output

Color	Luminous Flux (lm)	Center Intensity (cd)	Efficacy (lm/W)
296mm / 12"			
RGBW (RGB+W full-on)	231.8	82	51.5
RGB	125.3	45	38.1
Red	37.0	13	19.9
Green	79.6	28	66.1
Blue	10.5	4	11.2
White	107.8	38	70.8
1196mm / 47"			
RGBW (RGB+W full-on)	877.0	311	52.2
RGB	474.3	168	38.6
Red	140.2	50	20.1
Green	301.4	107	67.0
Blue	39.9	14	11.4
White	408.0	145	71.8

*: Length options differ by region.
See your local Traxon representative for information.

Illuminance at a Distance



For fc divide by 10.7

For feet multiply by 3.28

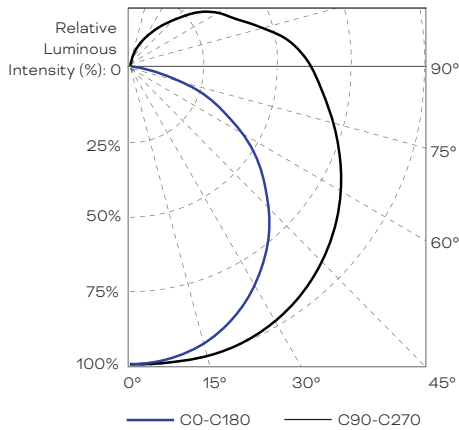
IES and LDT files are available for download from the Traxon website.

Media Tube[®] Plus RGBW

Source Specifications

Length Option*	296mm / 12"	1196mm / 47"
Source	18 RGB + 18 White	72 RGB + 72 White
Optics	120° x 180°	
Cover Lens	UV resistant polycarbonate	

Candela Distribution



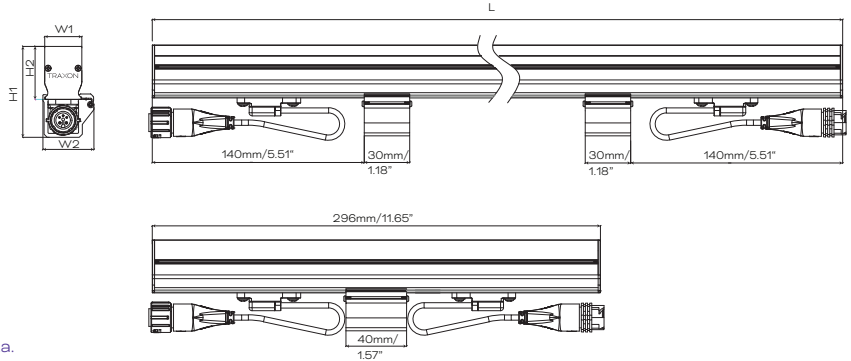
Light Output

Color	Luminous Flux (lm)	Center Intensity (cd)	Efficacy (lm/W)
296mm / 12"			
RGBW (RGB+W full-on)	184.5	33	41.0
RGB	99.8	18	30.4
Red	29.5	5	15.8
Green	63.4	11	52.6
Blue	8.4	2	8.9
White	85.8	15	56.4
1196mm / 47"			
RGBW (RGB+W full-on)	714.0	129	42.5
RGB	386.2	70	31.5
Red	114.1	21	16.4
Green	245.4	44	54.5
Blue	32.5	6	9.2
White	332.2	60	58.4

*: Length options differ by region.
See your local Traxon representative for information.

Fixture Dimensions (Direct View)

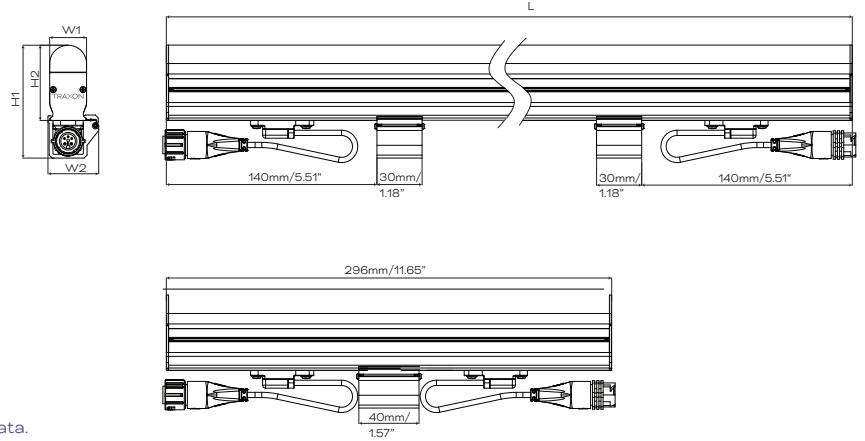
	W1	W2	H1	H2	L
1196mm 47"	24.5mm 0.96"	33.7mm 1.33"	63mm 2.48"	35mm 1.38"	1196mm 47.09"
296mm 12"	24.5mm 0.96"	33.7mm 1.33"	63mm 2.48"	35mm 1.38"	296mm 11.65"



NOTE: Please see CAD files for additional dimensional data.

Fixture Dimensions (Diffused View)

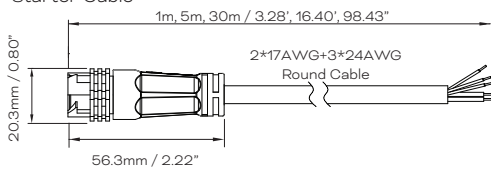
	W1	W2	H1	H2	L
1196mm 47"	24.5mm 0.96"	33.7mm 1.33"	78mm 3.07"	50mm 1.97"	1196mm 47.09"
296mm 12"	24.5mm 0.96"	33.7mm 1.33"	78mm 3.07"	50mm 1.97"	296mm 11.65"



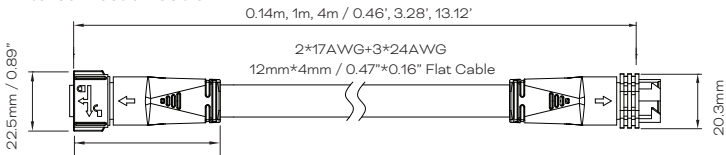
NOTE: Please see CAD files for additional dimensional data.

Connection Accessories Dimensions

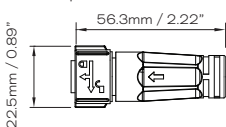
Starter Cable



Interconnection Cable

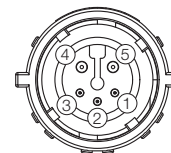


End Cap with 120 Ohm Terminator

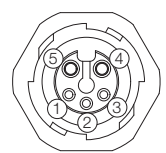


Connector Pin Assignment

Input



Output

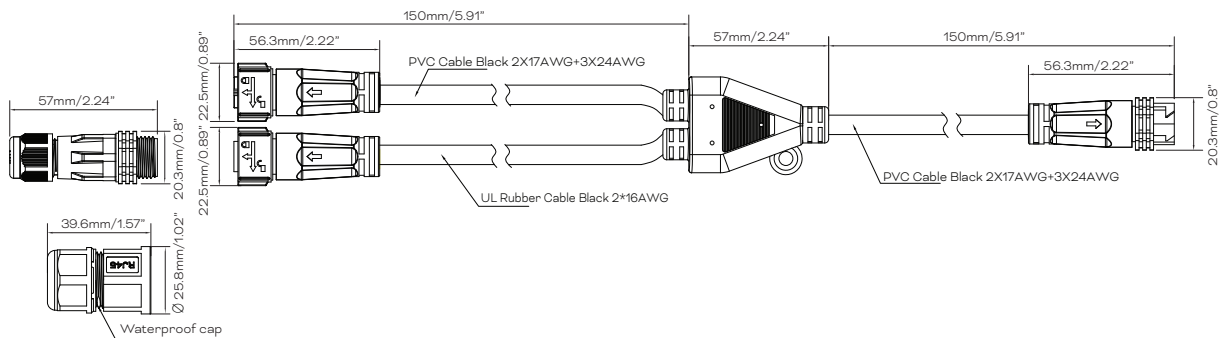


Wire#	Description	Color
1	Data+	Green
2	Address	Yellow
3	Data-	Blue
4	DC48V-	Black
5	DC48V+	Red

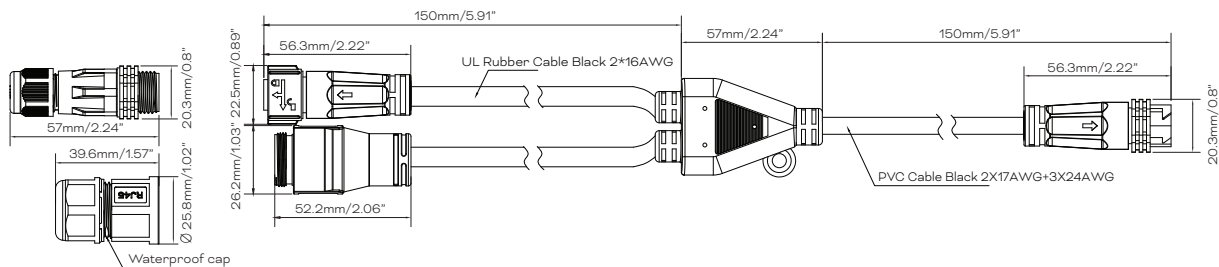
NOTE: Please see CAD files for additional dimensional data.

Connection Accessories Dimensions

Power Injector Cable Kit (Connector included)

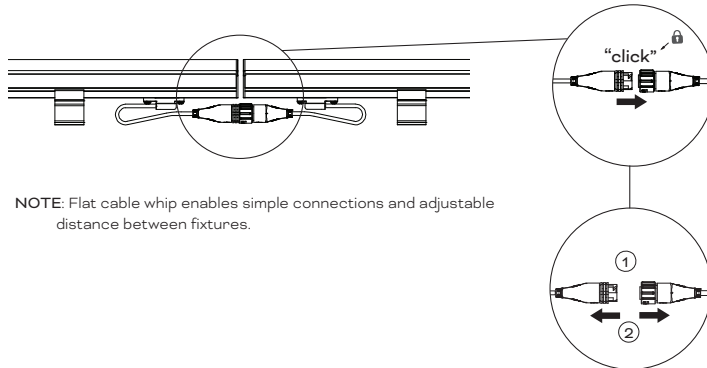


RJ45 Power Injector Cable Kit (Connector included)



NOTE: Please see CAD files for additional dimensional data.

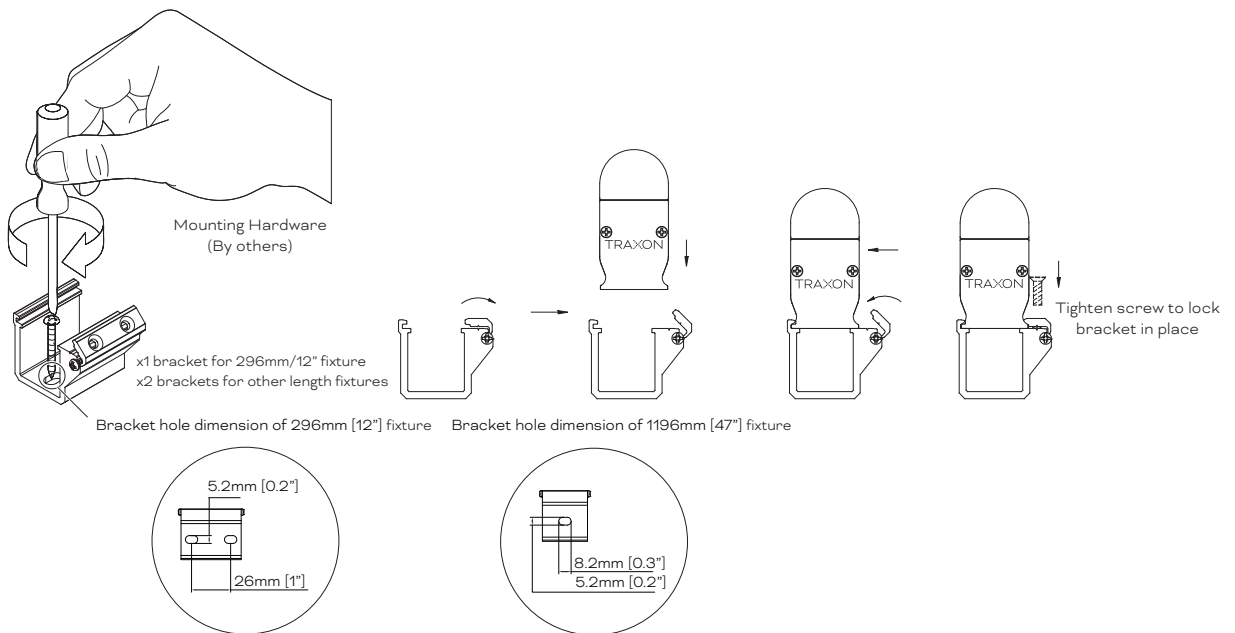
Cable Connection



NOTE: Flat cable whip enables simple connections and adjustable distance between fixtures.

If you do not hear the "click", rotate the spring loaded lock nut manually to lock the connectors and ensure that they are properly mated to protect from water ingress.

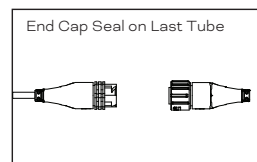
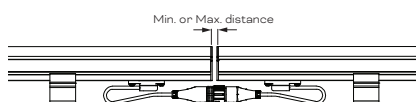
Bracket Mounting



Tube-to-Tube Clearance

To maintain consistent LED pitch and to allow for thermal expansion for Tubes:

Min. distance: 4mm/0.16"
Max. distance: 100mm/3.94"



Media Tube[®] Plus RGBW

Pixel Configurations

Media Tube[®] Plus can be ordered in different individually controlled segments.
The below list indicates the possible configurations for each length.

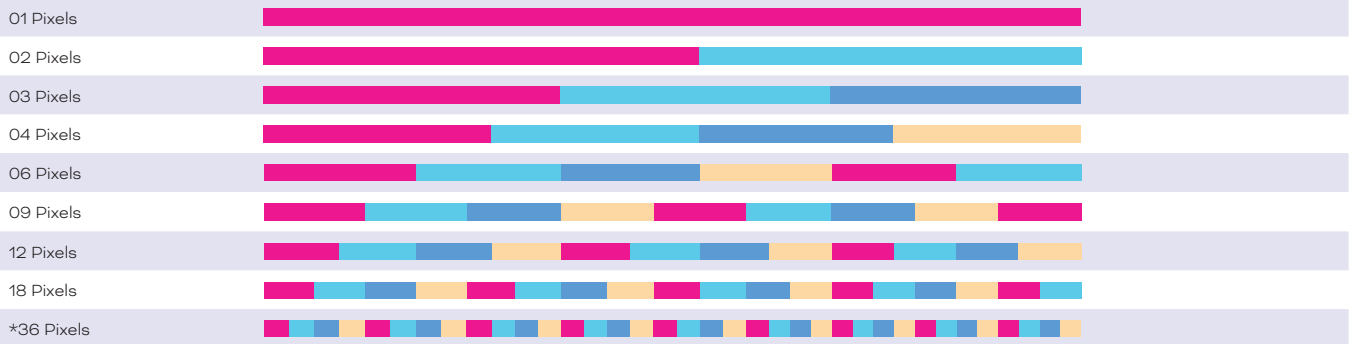
296mm / 12"

Pixel Configurations



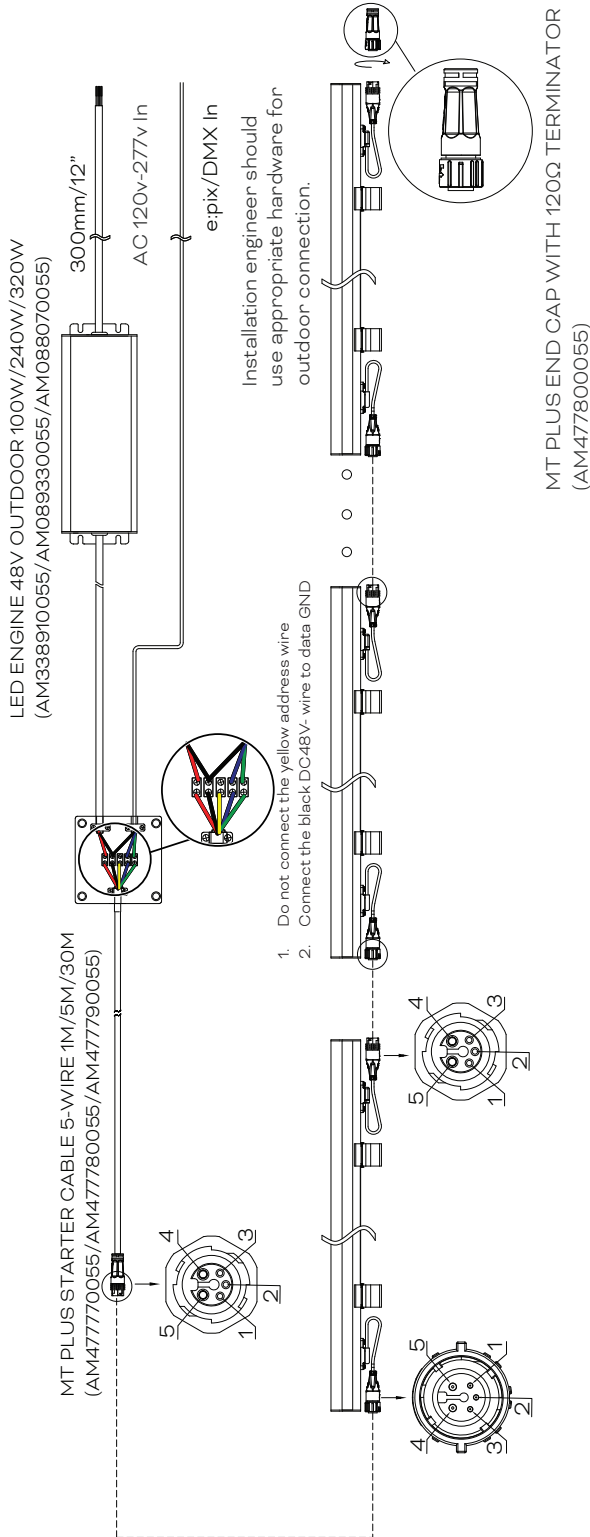
1196mm / 47"

Pixel Configurations



*: Length options differ by region.
See your local Traxon representative for information.

Starter Cable Installation



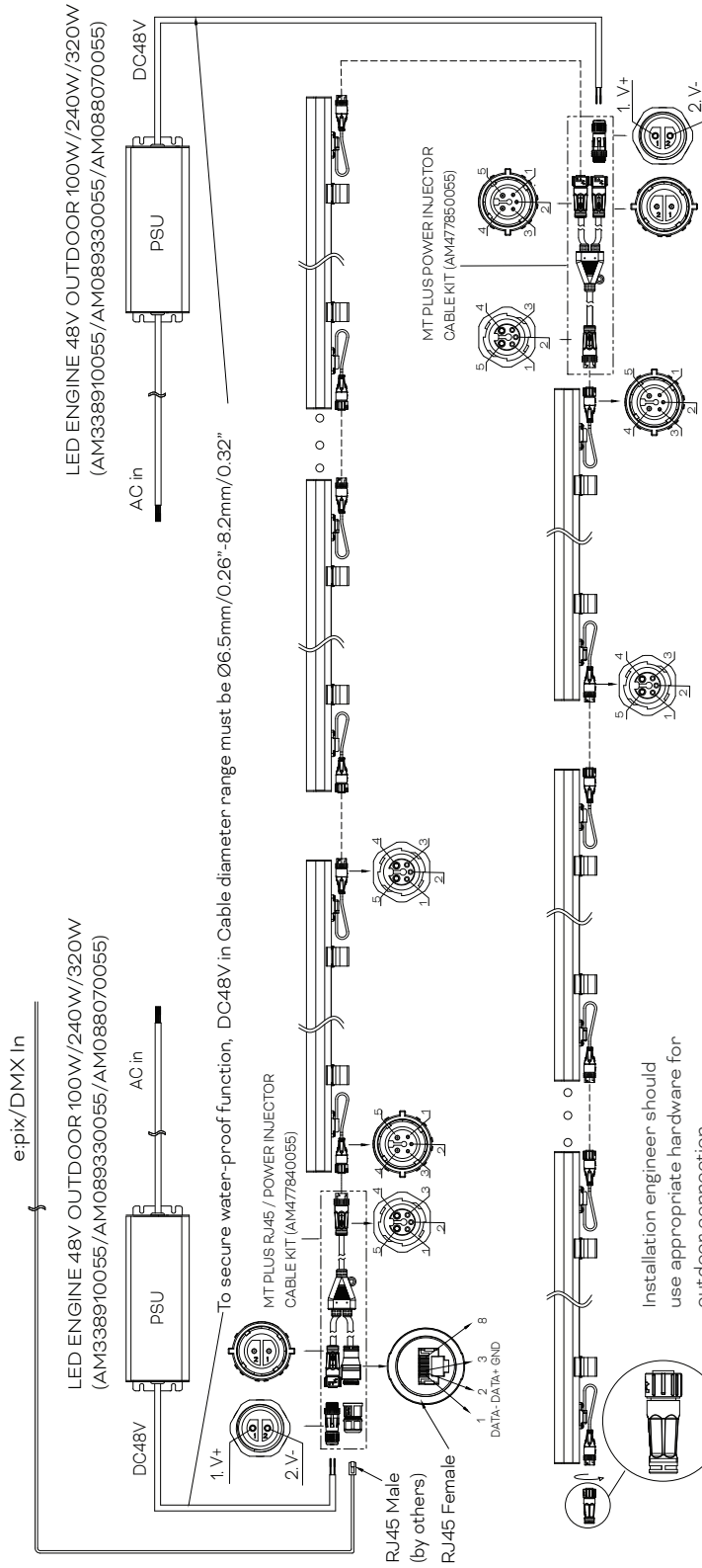
Pin#	Signal	Wire Size	Color
5	DC48V+	17AWG	Red
4	DC48V-	17AWG	Black
1	Data+	24AWG	Green
3	Data-	24AWG	Blue
2	Address	24AWG	Yellow

Color Type	Max. Daisy Chain*	PSU Power
RGBW	6m	100W
	12m	240W
	17m	320W
RGB	7.5m	100W
	16.5m	240W
	22.5m	320W

*Based on max resolution data consumption.

The Address wire is not needed between the controller and the first fixture. This wiring diagram shows only typical connections. Actual wiring depends on Tube configuration and installation. Actual no. varies according to cable lengths and signal source. Please consult your local Traxon office for aid.

RJ45/Power Injector Kit and Power Injector Kit Installation



Color Type	Max. Daisy Chain*	PSU Power
RGBW	6m	100W
	12m	240W
	17m	320W
RGB	7.5m	100W
	16.5m	240W
	22.5m	320W

*Based on max resolution data consumption.

Pin#	Signal	Wire Size	Color
5	DC48V+	17AWG	Red
4	DC48V-	17AWG	Black
1	Data+	24AWG	Green
3	Data-	24AWG	Blue
2	Address	24AWG	Yellow

MT PLUS END CAP WITH 120Ω TERMINATOR (AM477800055)

This wiring diagram shows only typical connections. Actual wiring depends on Tube configuration and installation. Actual no. varies according to cable lengths and signal source. Please consult your local Traxon office for aid.

Model Number

TU	MP	N	N	NN	N	0	0
		Length	Color	Pixels*	Optics		
		1: 296mm/11.65"	1: RGB+W (6500K)	09: 9Pixels with 296mm/11.65"	0: Flat clear cover		
		4: 1196mm/47.09"		36: 36Pixels with 1196mm/47.09"	2: Round diffused cover		

Desired Model Number:

TU	MP	N	N	NN	N	0	0
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*See "Pixel Configurations" on page 8 for more information.

Fixtures

Model No.	Description	Item Code
TU.MP.4136200	MEDIA TUBE PLUS RGBW 1196 36P DIFFUSED	AM477580055
TU.MP.1109200	MEDIA TUBE PLUS RGBW 296 9P DIFFUSED	AM477610055
TU.MP.4136000	MEDIA TUBE PLUS RGBW 1196 36P CLEAR	AM477630055
TU.MP.1109000	MEDIA TUBE PLUS RGBW 296 9P CLEAR	AM477660055

TX Connect

Model No.	Description	Item Code
TU.AC.1500100	MT PLUS STARTER CABLE 5-WIRE 1M ROUND	AM477770055
TU.AC.1500200	MT PLUS STARTER CABLE 5-WIRE 5M ROUND	AM477780055
TU.AC.1500300	MT PLUS STARTER CABLE 5-WIRE 30M ROUND	AM477790055
TU.AC.1500400	MT PLUS END CAP WITH 120Ω TERMINATOR	AM477800055
TU.AC.1500500	MT PLUS INTER CABLE 5-WIRE 0.14M FLAT	AM477810055
TU.AC.1500600	MT PLUS INTER CABLE 5-WIRE 1M FLAT	AM477820055
TU.AC.1500700	MT PLUS INTER CABLE 5-WIRE 4M FLAT	AM477830055
TU.AC.1500800	MT PLUS RJ45 / POWER INJECTOR CABLE KIT	AM477840055
TU.AC.1500900	MT PLUS POWER INJECTOR CABLE KIT	AM477850055
TU.AC.1501000	MT PLUS INTER CABLE 2-WIRE 30M ROUND	AM477860055

TX Control

Model No.	Description	Item Code
N/A	LED ENGINE 100W 48V OUTDOOR	AM338910055
N/A	LED ENGINE 240W 48V OUTDOOR	AM089330055
N/A	LED ENGINE 320W 48V OUTDOOR	AM088070055
N/A	e:cue SYMPL E:PIX NODE	AB443930035
N/A	e:cue SYMPL PRO NODE E:PIX	AM305690031
EN.BP.0000200	BUTLER PRO E:PIX	AA628610035
N/A	e:cue SYMPL PRO NODE DMX	AM255360031
EN.BP.0000100	BUTLER PRO DMX/RDM	AA628600035
EN.BX.0000001	BUTLER XT2	AA557270131
160174	BUTLER XT2 GARAGE (OPTIONAL)	AA556660031
EN.BU.0000001	BUTLER S2	AB436200031
AC.BG.0000001	BUTLER S2 GARAGE (OPTIONAL)	AA611800031
N/A	LCE3FX e:cue	AM368100135
N/A	LCE3 e:cue	AM368100035
N/A	SYMPL CORE S	AB447060035
N/A	SYMPL CORE SP	AM430280035
N/A	LIGHTING CONTROL ENGINE 2 MX WITH ETL	AM349340031
N/A	LIGHTING CONTROL ENGINE 2 MX	AM193980031
N/A	e:cue SYMPL DMX NODE	AB444180035



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