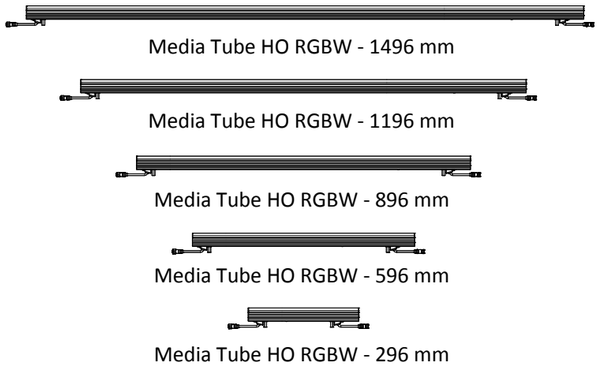

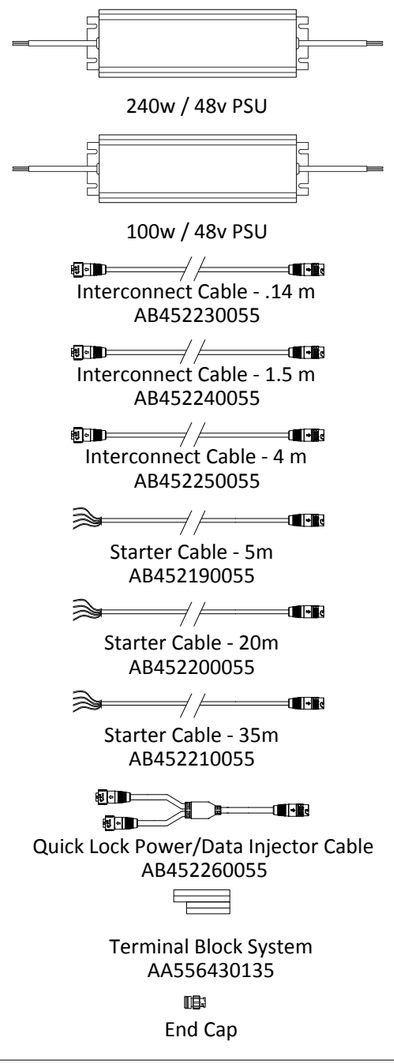

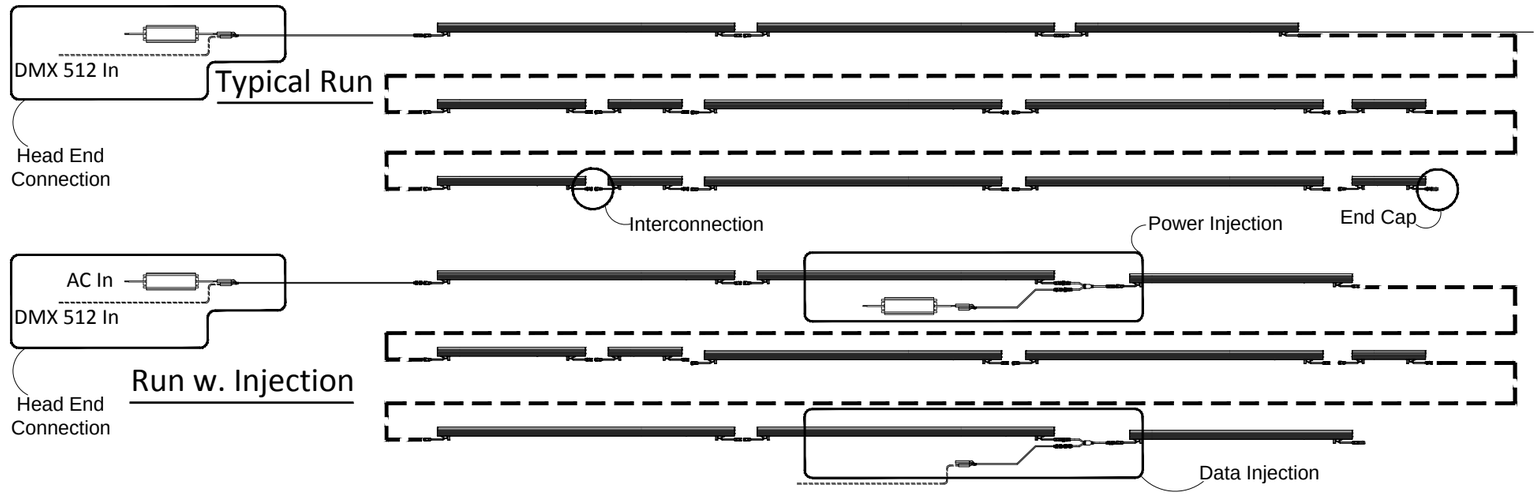

Maximum length of interconnected LED tubes on a 100w power supply is 20'.

Maximum length of interconnected LED tubes on a 240w power supply is 45'.

Distance limitations assume that fixtures are connected end to end and powered with a 5m starter cable. In cases where longer starters and interconnection cables are being used, the above limitations will differ. Please reach out to a Traxon representative for more information on distance limiations in these scenarios.

Tubes are natively designed to be controlled as R-G-B-W, meaning each pixel is controllable by 4 discrete DMX512 channels, one channel each for red, green, blue, and white. Tubes can also be configured to operate in "+White" mode. This mode allows control of a 4 channel RGBW pixel via 3 discrete channels. (One channel each for red, green, and blue.)
This mode uses one of two algorithms to incorporate the white LED chip into a 3 channel additive color mixing model. The two algorithms are "Ultra Brightness" and "High Efficacy". The former is best used in situations where a higher flux is desired. The latter is best used in color critical applications where color rendition is valued over output.

White operation mode, (R-G-B-W, Ultra-Brightness, and High Efficay), must be specified when the order is placed.

A pixel is defined as a single controllable section of RGBW clusters. There can be multiple RGBW clusters in a single pixel. For example, a 1495 mm media tube that is configured for full pixel operation, meaning there is a one to one relationship between RGBW clusters and pixels, will have 60 individually controllable sections. The same tube configured for 30 pixel operation would be controllable in increments of 2 RGBW LED clusters. The same tube cofigured for 20 pixel operation would be controllable in increments of 3 RGBW LED clusters.

There is a maximum of 128 pixels, (as defined above), on a single DMX512 universe.

Signal	Wire Size	Color
48v DC	AWG 17	Brown
DMX-	AWG24	White
DMX+	AWG24	Black
Ground	AWG17	Blue

ESTA E1.11 DMX		TIA/EIA	Conversion	Traxon/e:cue and Color Kinetics DMX	
Signal	RJ45 Pin Number	568B		RJ45 Pin Number	Signal
Data 1 +	1	W/Orange		1	DMX +
Data 1 -	2	Orange		2	DMX -
Data 2 +	3	W/Green		3	Data Common
No Connection	4	Blue		4	No Connection
No Connection	5	W/Blue		5	No Connection
Data 2 -	6	Green		6	No Connection
Data 1 Common	7	W/Brown		7	No Connection
Data 2 Common	8	Brown		8	No Connection

DMX512 Pin Out

1 Media Tube HO RGBW - Typical Wiring - Terminal Blocks

SCALE: N.T.S.

Traxon/e:cue is a solutions company. We are happy to provide whatever information and documentation is needed to clarify the system design and deepen understanding of our products, electrical wiring, structural engineering or construction methods. In our documents, we and our employees use language and terminology that reflect our specialist knowledge and experience in the field of lighting technology, but they are merely suggestions. They must be reviewed by qualified professionals and incorporated into the construction documents of each relevant discipline.
Traxon/e:cue products are designed to be used in professional lighting systems. Our products are not intended for use by consumers without professional support. Based on our quotations, as part of this service, a representative of Traxon/e:cue will ensure that our system is connected and configured correctly, and that all Traxon/e:cue components are functioning together properly. Traxon/e:cue is not responsible for the installation of its products, unless explicitly agreed upon and listed separately from standard system commissioning services in the project documentation. The installing contractor is responsible for ensuring that all relevant regulations, standards and guidelines are followed during the installation of our products. It is the responsibility of the installing contractor to install all fixtures and control equipment in its intended location and to make all wire terminations. The installing contractor is also responsible for ensuring that all relevant regulations, standards and guidelines are followed during the installation of our products. Traxon/e:cue is not responsible for any damage caused by improper installation or by Traxon/e:cue. Traxon/e:cue does not provide pre-rigging or pre-mounting of fixtures as part of its service, and cannot accurately quote third-party pre-wiring services for mounting to the customer's structure.
Traxon/e:cue is not responsible for content (e.g. videos or lighting cues) unless it is specifically agreed upon and listed separately from standard system commissioning services in the project documentation.
Traxon/e:cue is happy to support your team in every way we can, and we look forward to a beautiful and successful installation.
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REV.	DATE	BY	REMARKS

PROJECT:
LOCATION:
DATE:
FILE NAME:
JOB NO:
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SCALE: N.T.S.
DRAWN BY: RDE
CHECKED BY:
SHEET NUMBER:
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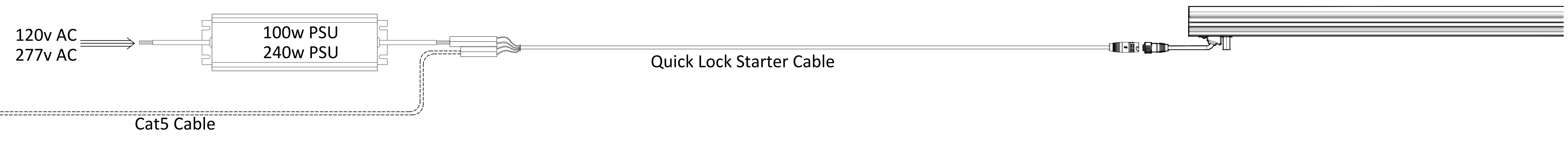
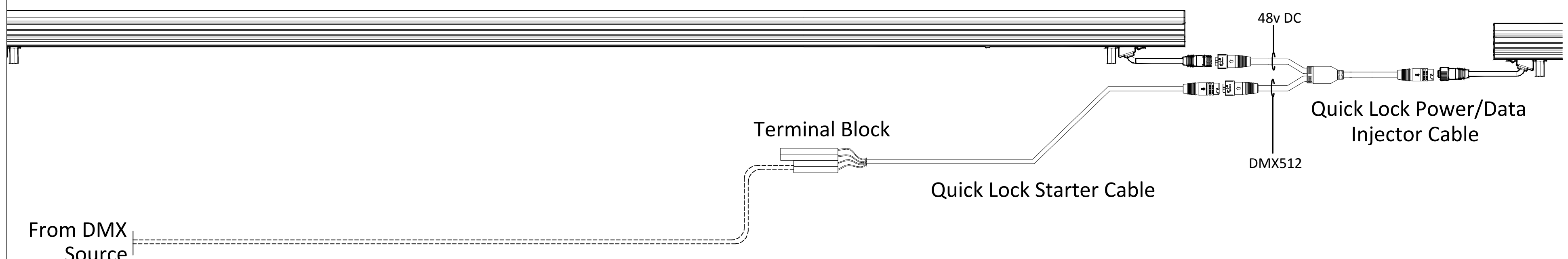
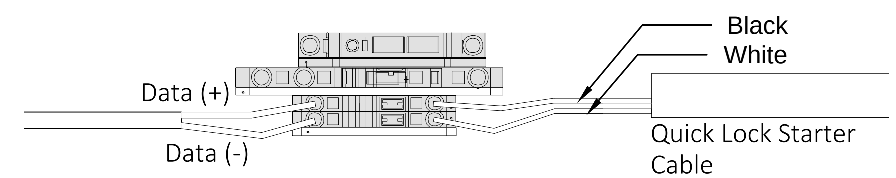
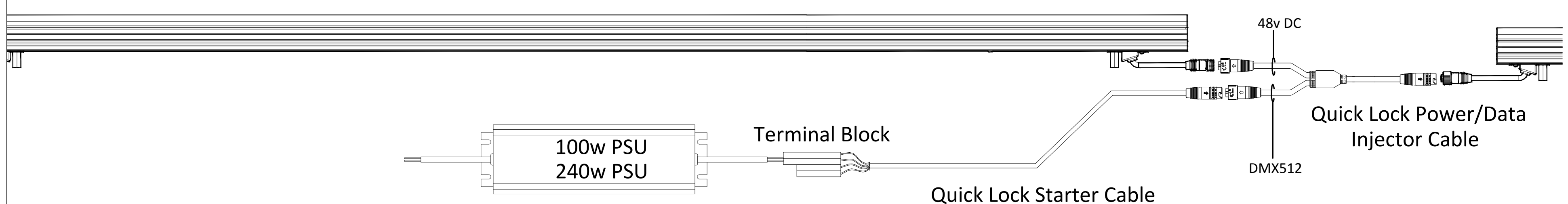


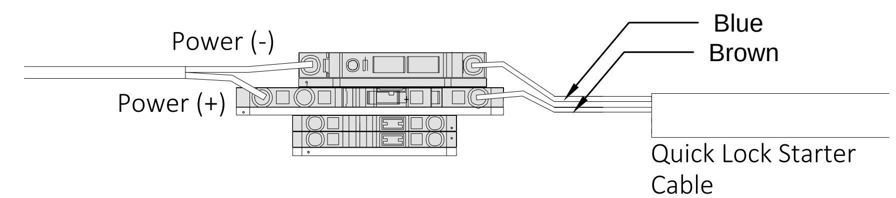
Head End Connection



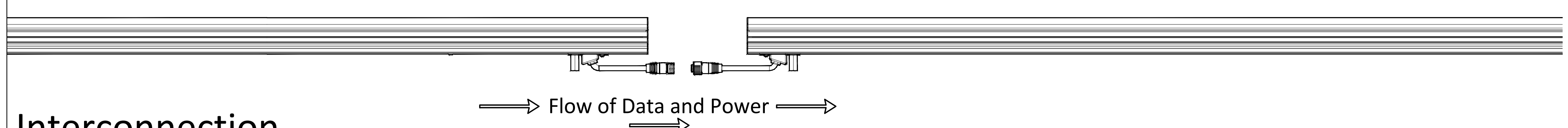


Data Injection

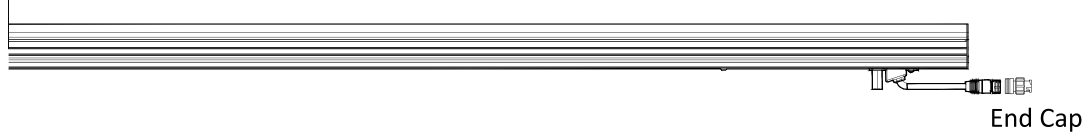




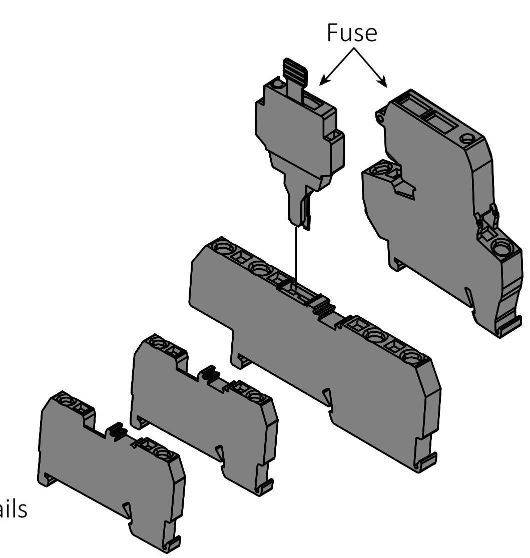
Power Injection



Interconnection



End Cap



For TS 35 Din Rails

1 Media Tube HO RGBW - Typical Wiring - Terminal Blocks

SCALE: N.T.S.

Traxon|e:cue is a solutions company. We are happy to provide whatever information and documentation is needed to clarify the system design and deepen understanding of our products. Please know, however, that our expertise is limited to our products only. Traxon|e:cue and its employees cannot be held responsible for decisions relating to fixture layout, lighting design, electrical wiring, structural engineering, or construction methods. In our documents, we may sometimes make suggestions or recommendations relating to the aforementioned disciplines, but they are merely suggestions. They must be reviewed by qualified professionals and incorporated into the construction documents of each relevant discipline.
On that same note, we will make every effort to ensure that a system is installed and working properly. To that end, a system commissioning service may be listed on our quotations. As part of this service, a representative of Traxon|e:cue will ensure that our system is connected and configured correctly, and that all Traxon|e:cue components are functioning together properly.
Declining the system commissioning service absolves Traxon|e:cue of any and all responsibility for the functioning of the finished system beyond the standard product warranty. It is the responsibility of the installing contractor to install all fixtures and control equipment in its intended location and to make all wire terminations. The installing contractor is also responsible for making any necessary adjustments to mounting and/or wiring as determined by the client or by Traxon|e:cue. Traxon|e:cue does not provide pre-rigging or pre-mounting of fixtures as part of its services, and cannot accurately quote third-party materials required for mounting/installation.
Traxon|e:cue is not responsible for content (e.g. videos or lighting cues) unless it is specifically agreed upon and listed separately from standard system commissioning services in the project quotation.
Traxon|e:cue is happy to support your team in every way we can, and we look forward to a beautiful and successful installation.
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REV.	DATE	BY	REMARKS

PROJECT:
LOCATION:
DATE:
FILE NAME:
JOB NO:
SHEET SIZE: ANSI B
SCALE: N.T.S.
DRAWN BY: RDE
CHECKED BY:
SHEET NUMBER:
SHEET TITLE: Wiring Diagram