



TRAXON

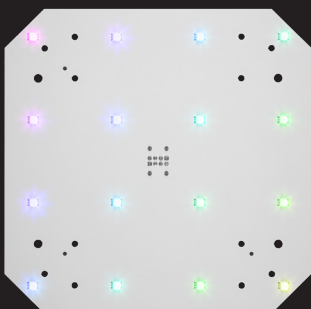
TRAXON | e:cue

64PXL Board RGB 2.0

16PXL Board RGB 2.0

16PXL Strip RGB 2.0

INSTALLATION GUIDE V1.0



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For your own safety and that of the product, please read this installation guide carefully before beginning setup and installation.

1. Introduction

1.1 General

The Traxon **64PXL Board RGB 2.0** features 64 ultra bright RGB SMD LEDs on a 8 x 8 matrix with a 31.25mm/1.23" pitch. Although the LEDs provide ultra brightness, high resolution videos and graphic replays can be created by combining multiple boards. The 64PXL Board 2.0 is DMX compatible which allows daisy chaining with the Traxon TX Connect™ system. On-board SMART CHIP™ technology with the powerful feature of auto-addressing enables easy setup and installation. Example use cases include architecture (highlights on walls, floors, counters, decoration elements) in backlighting for light boxes or stretch ceilings and in light panels and to create impact on trade fairs. The Board can be used alongside the 16PXL Strip RGB 2.0 and the 16PXL Board RGB 2.0.

The Traxon **16PXL Board RGB 2.0** features 16 individually calibrated, controllable ultra bright SMT LEDs on a 4 x 4 matrix with a 62.5mm pitch. Example use cases include architecture (highlights on walls, floors, counters, decoration elements) in backlighting for light boxes or stretch ceilings and in light panels and to create impact on trade fairs. The Board can be used alongside the 16PXL Strip RGB 2.0 and the 64PXL Board RGB 2.0.

The Traxon **16PXL Strip RGB 2.0** features 16 individually calibrated, controllable ultra bright SMT LEDs on a 16 x 1 array with a 31.25mm pitch. Example use cases include architecture (highlights on walls, floors, counters, decoration elements) in backlighting for light boxes or stretch ceilings and in light panels and to create impact on trade fairs. The Strip can be used alongside the 16PXL Board RGB 2.0 and the 64PXL Board RGB 2.0. The Strip has a default length of 499mm and can be ordered in intervals of 31.25mm down to 240mm.

Features:

- 64 Ultra Bright RGB SMD LEDs or 16 Ultra Bright RGB SMD LEDs
- TX Connect™ System
- DMX512 / e:pix / DVI capable
- Auto-Addressing
- SMART CHIP™ Technology
- Indoor Applications

1.2 Dimensions

FIG.1: 64PXL Board RGB 2.0

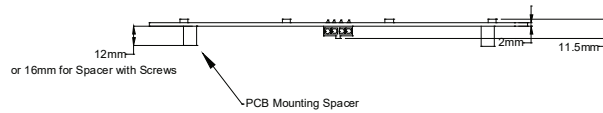
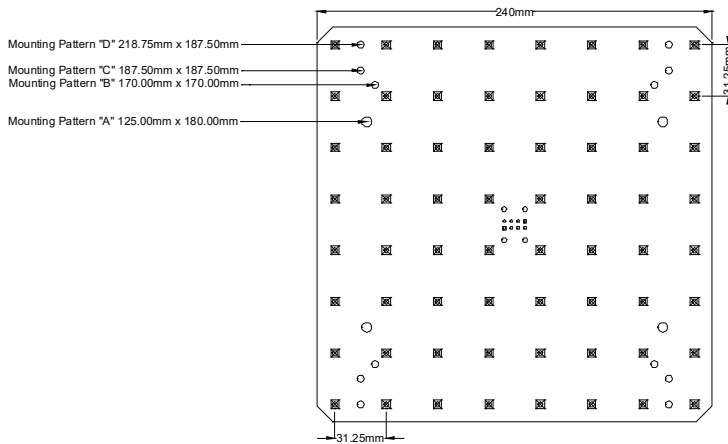
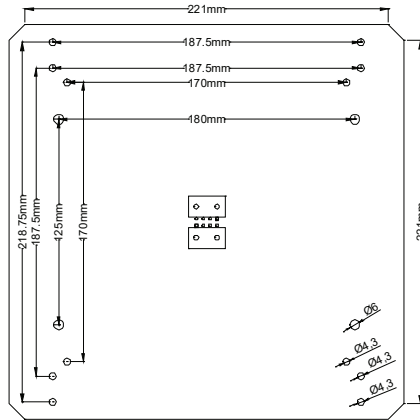
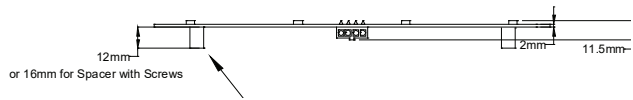
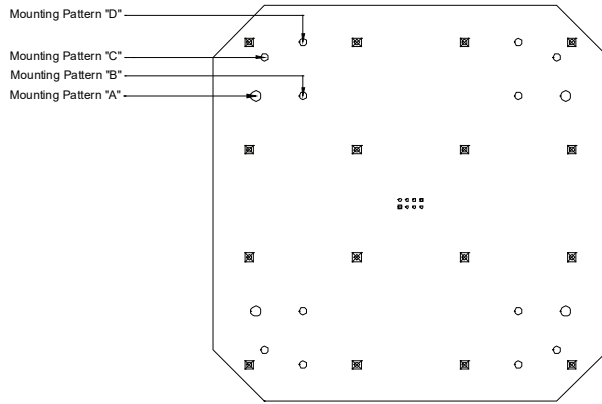
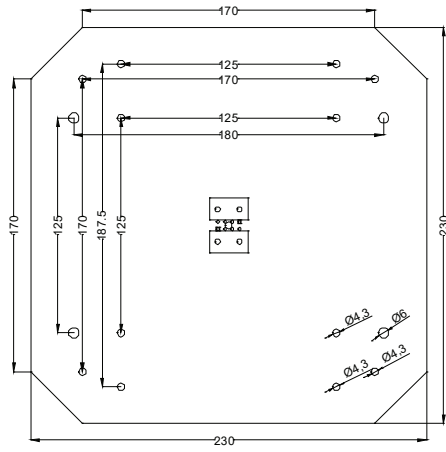


FIG.2: 16PXL Board RGB 2.0



1.3 Accessories

FIG.4: Srew-Spacer, for 64PXL Board 2.0 and 16PXL Board RGB 2.0

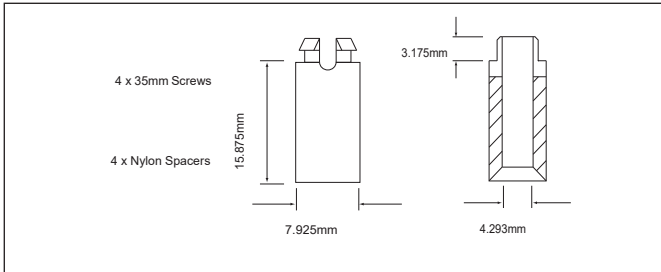


FIG.5: Board holder, punch version (\varnothing 4.3mm), sheet metal, for 64PXL Board 2.0, 16PXL Board 2.0 and 16PXL Strip 2.0

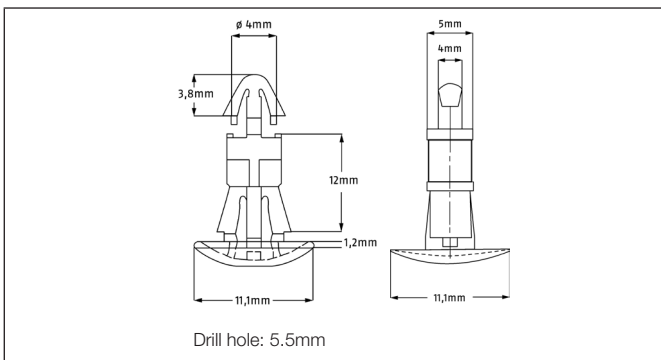
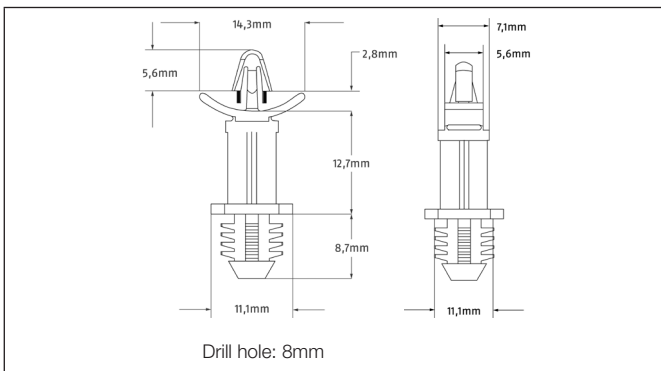


FIG.6: Board holder, drill version, wood, for 64PXL Board 2.0, 16PXL Board 2.0 and 16PXL Strip 2.0



2. Installation

2.1 Points To Consider

Plan your installation before mounting any luminaires. The following should be considered for a successful installation.

- Installation distances and appropriate cable lengths. Please consult your local Traxon™ office or authorized agent for necessary aid.
- The number of 64PXL Boards, 16PXL Boards, 16PXL Strips and appropriate LED Engines.
- Any DMX512 and/or e:pix controllers to be used with the products.

2.2 On-Site Installation

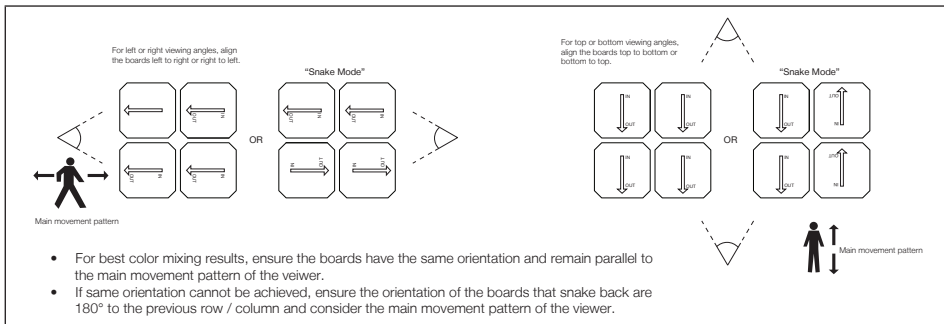


- ALWAYS keep the cables protected from sharp objects and ensure no damage is generated on the cable.
- Failure to keep the product within the operating temperature range of +5°C to +40°C (+41°F to +104°F), and storage temperature range of +5°C to +60°C (+41°F to 140°F) will void the product's warranty.

2.2.1 Mounting

1. Connect all TX Connect Smart Cables to the luminaires (TX Connect Smart Power Injector Cables, TX Connect Interconnection Cables, TX Connect Smart Extension Cables).
2. Consider the orientation and color mixing when mounting multiple luminaires.

FIG.7: Orientation and Color Mixing



3. To mount the product, using mounting spacers: first fit the mounting spacers into the mounting holes from the rear of the board. Then use the screws to firmly fasten the product to a flat surface. Careful not to over-tighten the screws. Using board holders: first attach the board holders to a flat surface. Then clip the luminaire onto the board holders. See below diagrams.

FIG.8: 64PXL Board RGB 2.0 Board Mounting

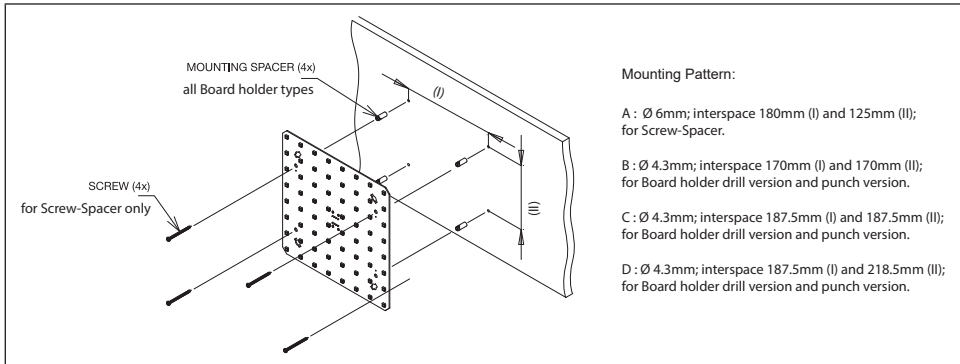


FIG.9: 16PXL Board RGB 2.0 Mounting

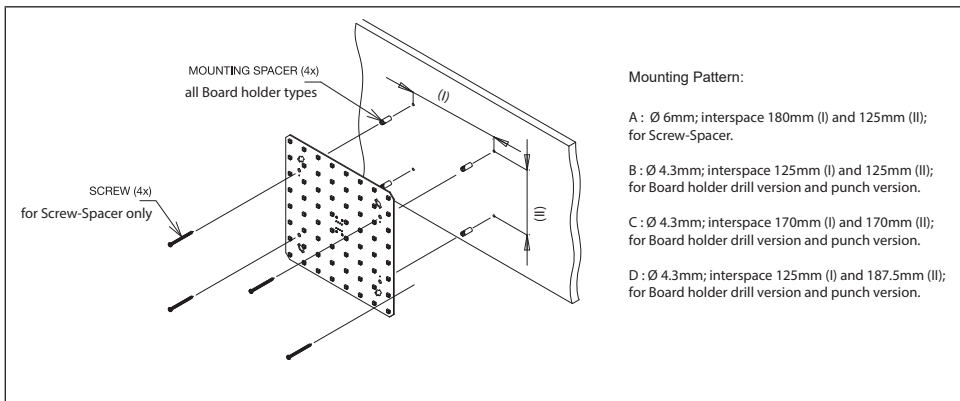
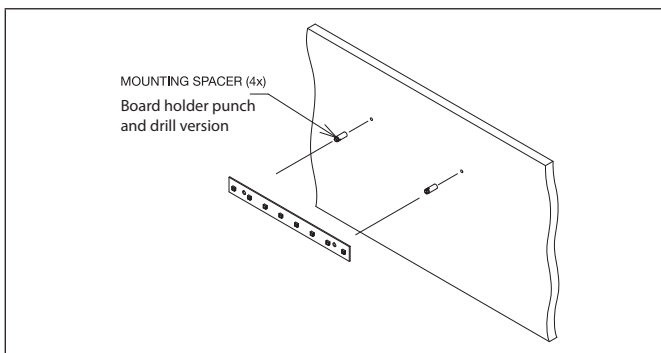


FIG.10: 16PXL Strip RGB 2.0 Mounting



- To keep a consistent LED pitch when mounting multiple luminaires, use the dimensions shown in the diagrams below.

FIG.11: Mounting Multiple 64PXL Boards

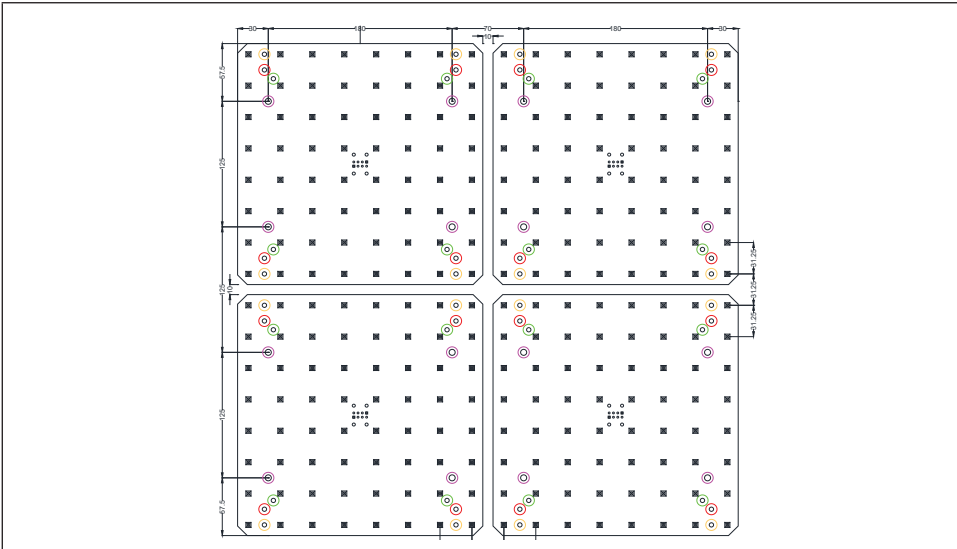


FIG.12: Mounting Multiple 16PXL Boards

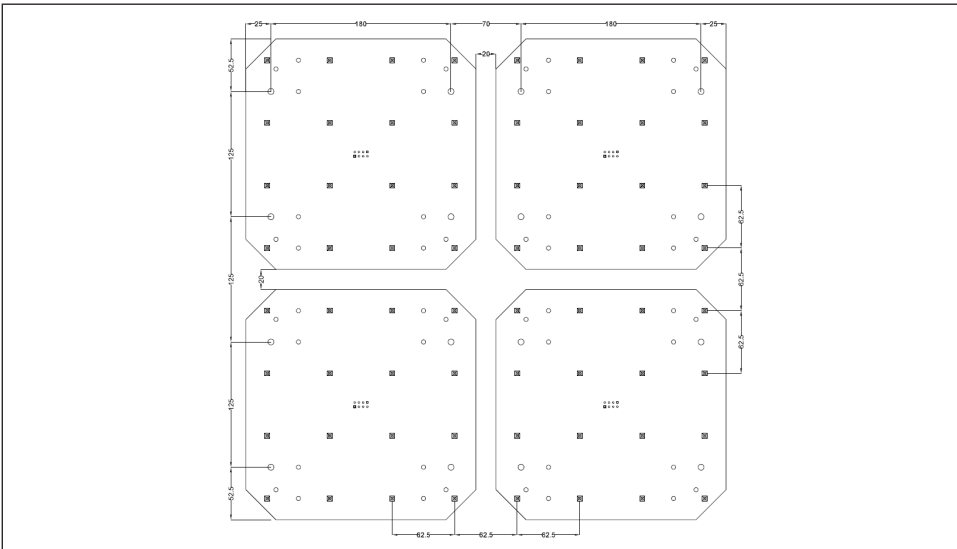
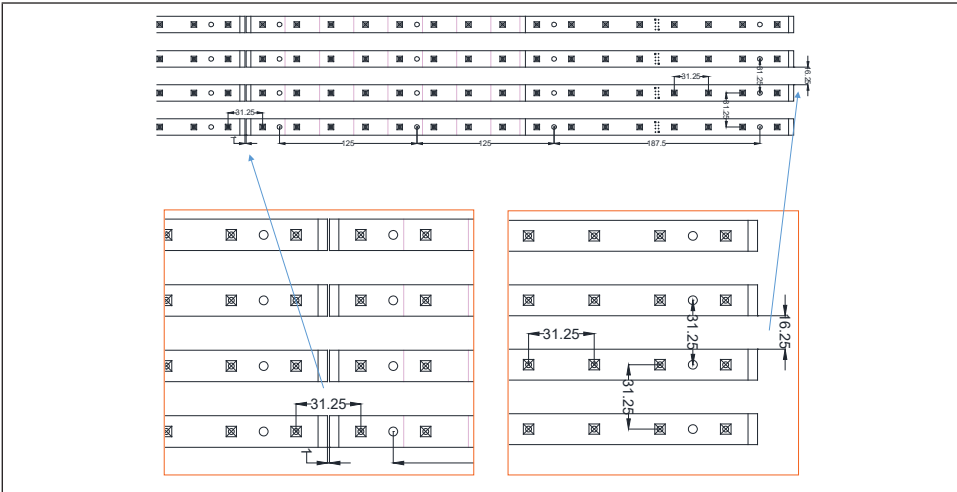


FIG.13: Mounting Multiple 16PXL Strips



3. Safety And Operation

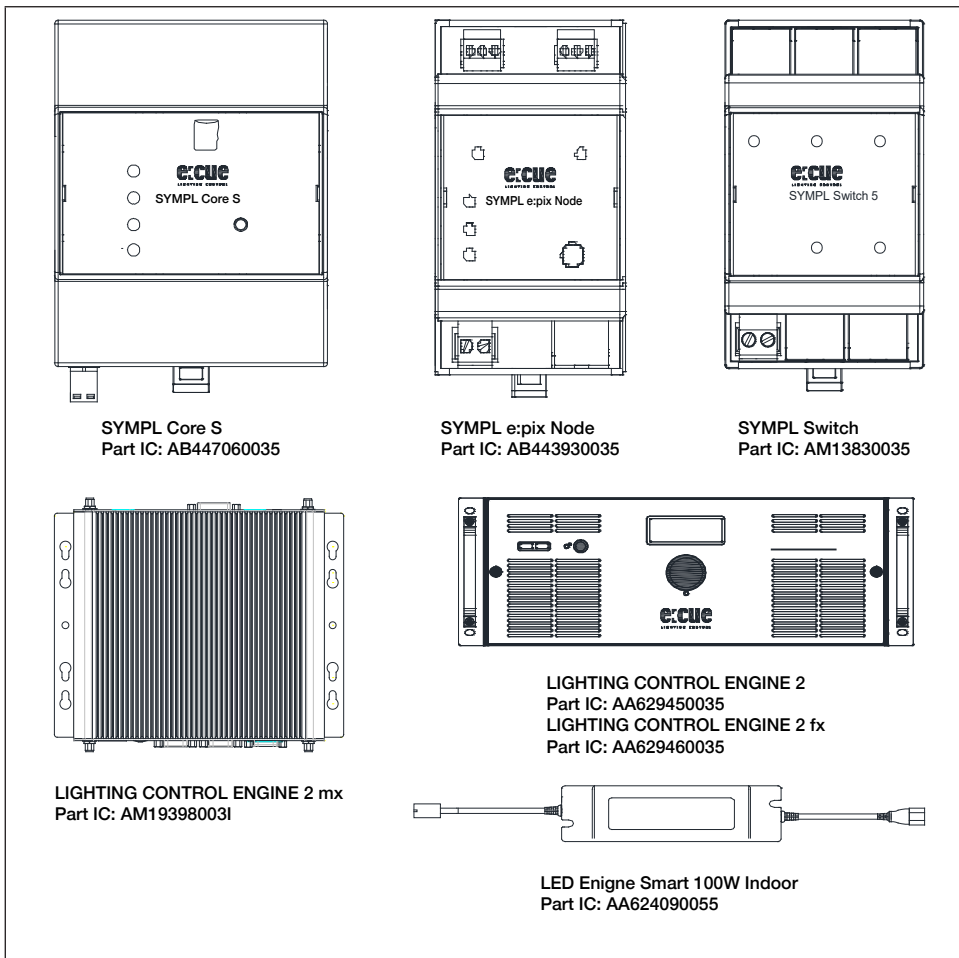
- CAUTION - Unplug the power supply from the mains power before connecting any cables as this can damage the products.
- CAUTION - Avoid looking directly into the LED light source at close range for your own safety.
- CAUTION - The device and its controls must be supplied by a separate certified NEC SELV Class 2 power supply.
- Persons installing this product should make sure:
 - a. The installation complies with all applicable codes, state and local laws, ordinances, standards and safety regulations.
 - b. The installation environment is carefully studied and suitable surge protection measure(s) is taken.
 - c. He or she is 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 use.
- Ensure product operates within the specified temperature range. (Refer to “6. Technical Specification” on page 20 for more details.)
- Do not attempt to open the product. Not user serviceable.
- Do not use the product if any part of it, or the power cables are damaged.
- Only use product for specified voltage, do not exceed. (Refer to “6. Technical Specification” on page 20 for more details.)
- 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 Traxon website www.traxon-ecue.com before setup.
- Any non-compliance of the Installation Guide will void the Traxon warranty.

4. System Configuration

4.1 Typical Connection Components

TX Connect System is an interconnection system that combines power and DMX data on a single connector cable so that only one connection is required between luminaires. The PXL Boards and the PXL Strips use the TX Connect System for all interconnections. Below diagram shows some components for the TX Connect System.

FIG.14: TX Connect System Components

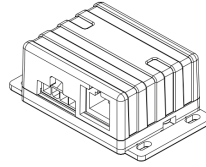




TX Connect Data Cable

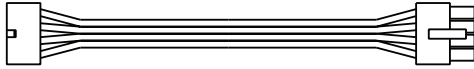
Part IC:

AA556120055	0,2m	AM275770035	1m
A63408C0055	3m	AA556140055	5m
A6341040055	10m	AA556150055	20m



**TX Connect Smart Power/
Data Injector Box**

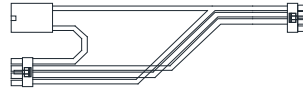
Part IC: A704836003J



TX Connect Smart Extension Cable Mini

Part IC:

A6342330055	1m
A6342410055	3m
AA580410055	5m
A6342680055	10m



**TX Connect Smart Power
Injector Cable Mini**

Part IC: AA556380055

TX Connect Smart Extension Adapter Micro-Mini

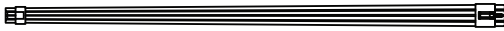
Part IC: AM308050035 0,5m



TX Connect Smart Interconnection Cable Mini

Part IC:

A63420F0055	0,3m
AM275760035	0,35m
AA556360055	0,8m



TX Connect Smart Interconnection Adapter cable 35cm Mini-Micro

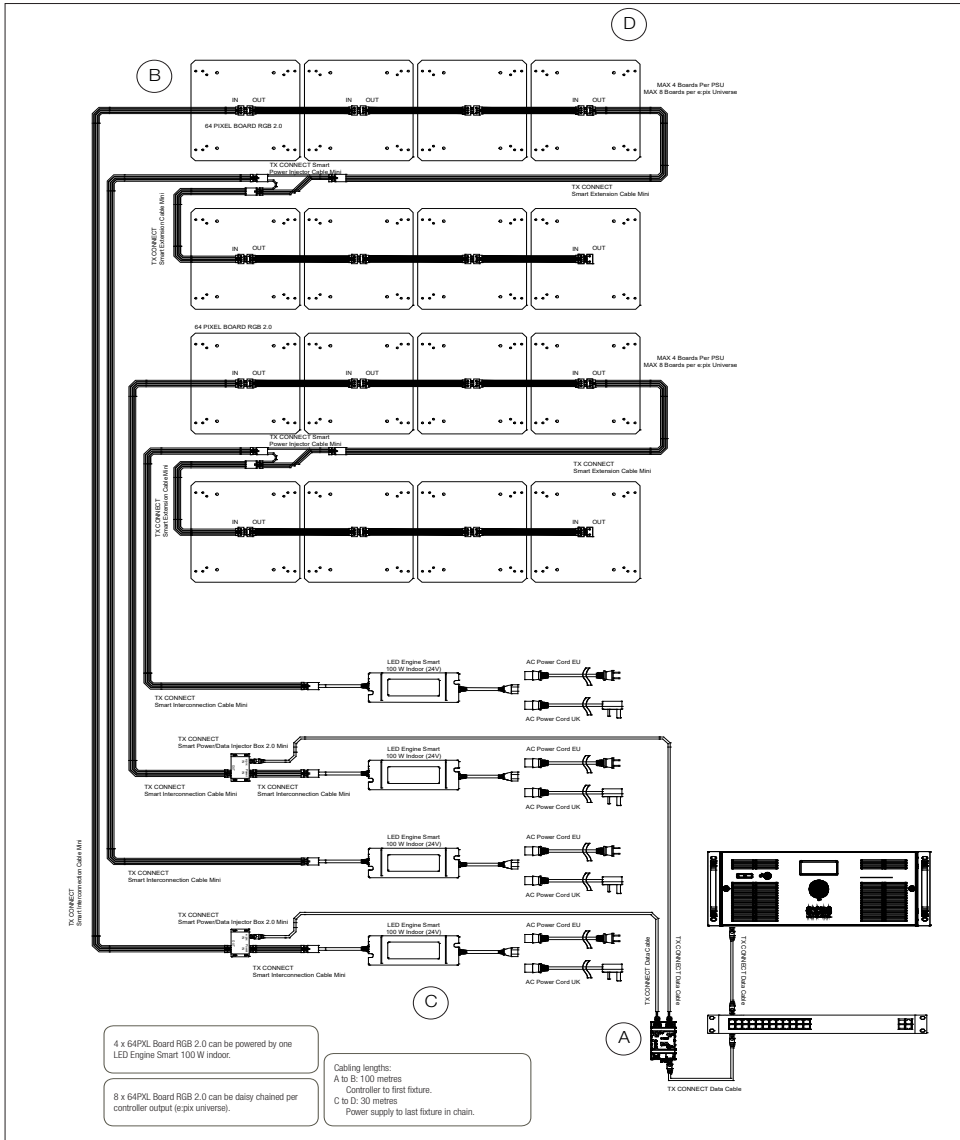
Part IC: AM275780035 0,35m



TX Connect Smart Extension Adapter 50cm Micro-Mini

Part IC: AM308050035 0,5m

FIG.15: System Diagram - 64PXL Board - LCE2



4.2 Connection between Fixtures

Use the TX Connect Smart Interconnection Cable to connect between boards. For longer distances, use existing cable together with a TX Connect Smart Extension Cable.

FIG.18: Connecting Fixtures

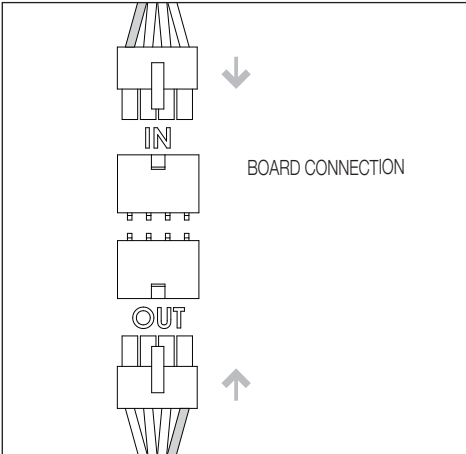
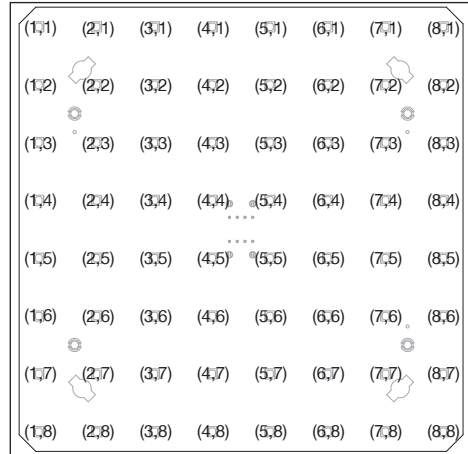


FIG.19: LED Positions on Board



4.3 LED Control

The LEDs on the luminaire are controlled by DMX or e:pix. The LED location on the luminaire and its DMX channel is shown in the following table.

LED Dice	DMX Channel Number
R	$192(n-1) + 24(x-1) + 3(y-1) + 1$
G	$192(n-1) + 24(x-1) + 3(y-1) + 2$
B	$192(n-1) + 24(x-1) + 3(y-1) + 3$
Where: n is the Board position in the chain. x is the LED horizontal position on the Board. y is the LED vertical position on the Board.	

Power On: The luminaire has an approximately one second initialization period after power-on. During this period, the LEDs on the board may light up randomly. This is normal behavior of the luminaire.

5. Care and Maintenance

Traxon™ products are of superior design and quality and should be treated with care. The recommendations below will help fulfill any warranty obligations and gain good use and longevity from the products.

- Do not attempt or use the product(s) until you read and understand the installation instructions. Failure to adhere to these instructions could result in serious injury or property damage.
- Do not use product(s) if cables are damaged.
- Do not connect cables and connectors when wet or in wet area. Moisture on bare connectors can cause electric shock and damage to product(s).
- Do not use product(s) in extreme heat environment. Ensure there is sufficient airflow and use cool air circulation if required.
- Do not drop, knock, or shake product(s). Rough handling can damage the electronics and void the warranty.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean products. Wipe with a damp cloth on housings and a dry cloth on electronics to remove dirt or dust.
- Do not use product(s) outdoors.
- Do not attempt to service or repair the product(s) unless done by an authorized service personnel. Contact your local Traxon office or distributor for details.
- If the product is not working as specified, please contact your nearest authorized service center or Traxon Technologies office for assistance.

6. Technical Specification

Model	64PXL Board RGB 2.0	16PXL Board RGB 2.0	16PXL Strip RGB 2.0
Color Range:	16.7 Million additive RGB colors with variable intensity		
Light Source:	64 Ultra Bright SMD LEDs	16 Ultra Bright SMD LEDs	16 Ultra Bright SMD LEDs
Beam Angle:	115°		
Power Input*:	24V DC		
Power Consumption:	24W max.	8W max.	8W max.
Weight:	250g	250g	40g
Operating Temperature:	+5°C to +40°C/+41°F to +104°F		
Storage Temperature:	+5°C to +60°C/+41°F to +140°F		

* For use with TRAXON LED Engine Smart 100W Indoor (IC AA624090055) power unit.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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 degradation is a complex function of many factors such as operating efficiency, duration of continuous operation, and operating conditions (e.g. ambient temperature).

7. Troubleshooting



CAUTION: Ensure power supply is OFF when disconnecting / connecting cables.

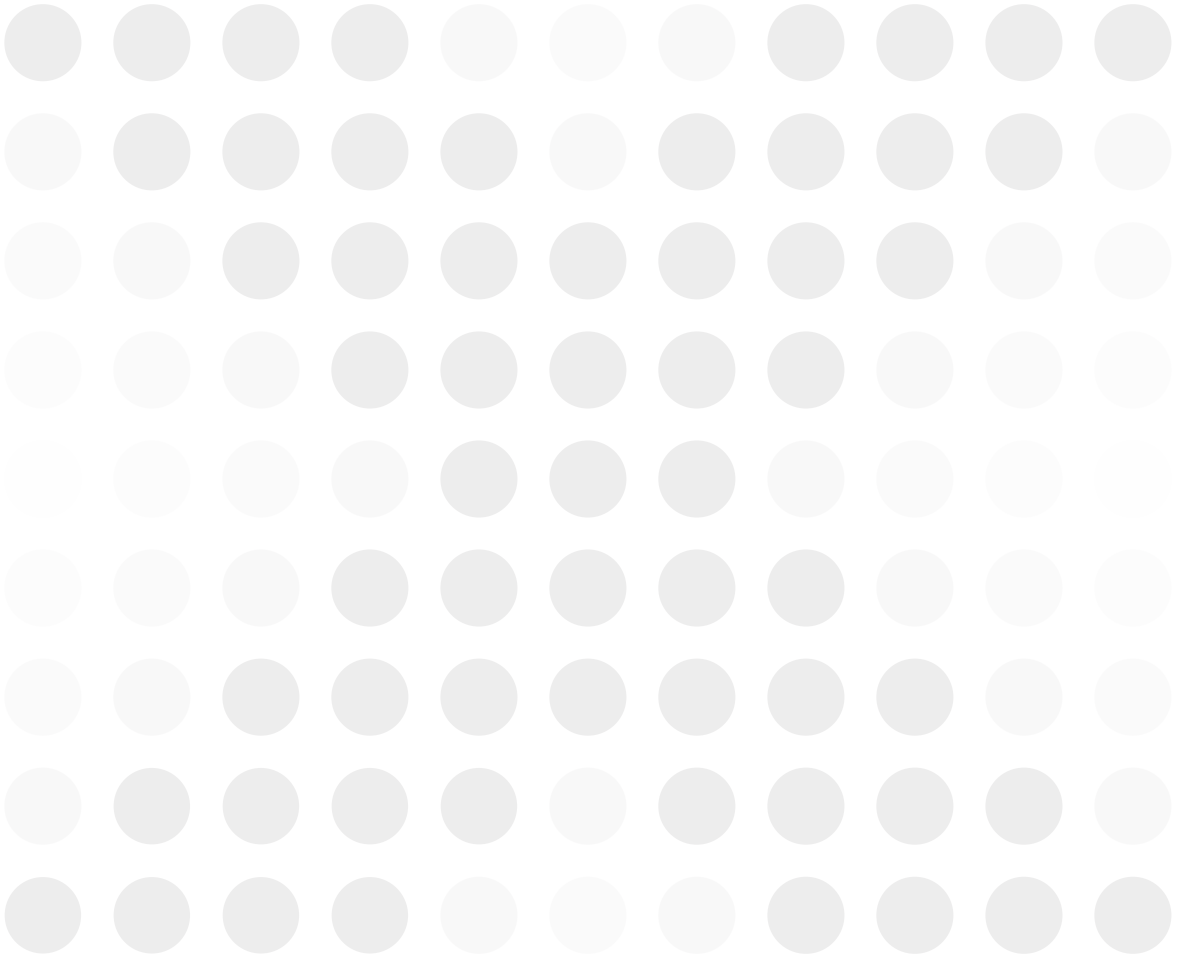
Problem	Cause	Possible Solutions
Product does NOT light up after installation	Incorrect power connection	<ul style="list-style-type: none">– Check Mains Power– Check power supply leads and wire connections– Ensure output wires are connected with proper polarity
Shadowing	Light source covered	<ul style="list-style-type: none">– Check for cables, wires or unwanted debris covering LED light source
Modules are dim	Excess products connected	<ul style="list-style-type: none">– Ensure the power supplies are not overloaded due to an excess of products connected
Flickering	Incorrect power input/ Excess products connected	<ul style="list-style-type: none">– Ensure the input voltage is correct– Ensure the power supplies are not overloaded due to an excess of products connected

If problems persist or the product is not working as specified, please contact your nearest authorized service center or Traxon Technologies office for assistance.

8. Warranty Statement

Traxon Technologies warrants its Products against material or workmanship defects for a period of three (3) years from date of purchase, provided that the purchased items are used under the conditions stated in this user manual.

Please refer to www.traxontechnologies.com for all warranty terms and conditions.



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