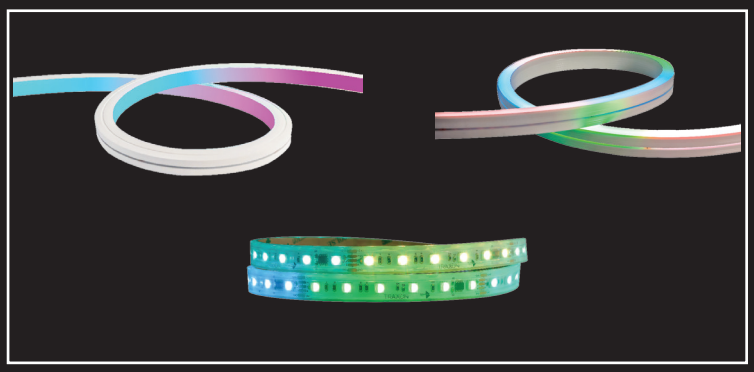
TRAXON

TRAXON Go

Pixel Ribbon Go

INSTALLATION GUIDE



V1.0

Content

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

1. Safety And Operation

Please read through Safety and Operation before start of the installation.

1. CAUTION - Unplug the power supply from the mains power before connecting any cables as this can damage the products.
2. CAUTION - Avoid looking directly into the LED light source at close range for your own safety.
3. 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.
4. 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 use.
5. Ensure product operates within the specified temperature range.
6. Do not attempt to open the product. Not user serviceable.
7. Do not use the product if any part of it, or the power cables are damaged.
8. Only use product for specified voltage, do not exceed.
9. Always maintain connection to ensure waterproofing.
10. 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.
11. 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.
12. Please study this Installation Guide thoroughly and check the latest Technical Specification Sheets available from the Traxon website www.traxon-ecue.com before setup.
13. Any non-compliance of the Installation Guide will void the Traxon warranty.

2. Introduction

2.1 General

The Traxon Pixel Ribbon Go is an IP67 flexible neon strip alternate which can be controlled directly using DMX512. The Pixel Ribbon Go family consists of Top Bend (TB), Side Bending (SB) and Flat models, providing flexibility to fit on any curved surface to accommodate architectural structures. Featuring a 100mm [4”] / 125mm [5”] pixel pitch, the Pixel Ribbon Go is available in an assortment of colors and CCT options, has multiple mounting options to meet project needs, and can be ordered in specified lengths and cable feed positions.

This product is intended for use in high-quality colored light applications.

Features:

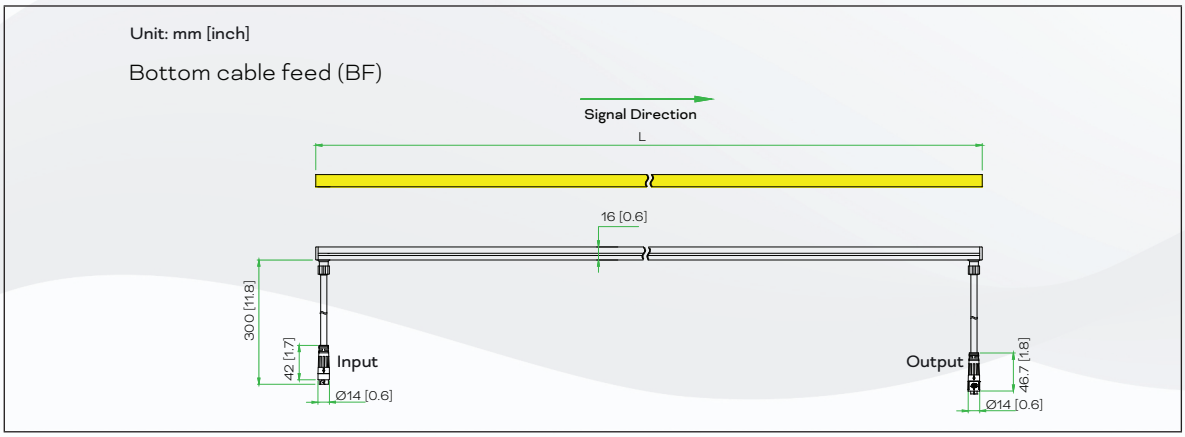
- IP67 Rating: Suitable for outdoor use, protected against dust and water.
- DMX512 Control.
- Diffused material ensures seamless illumination.
- Pixel Pitch: **100mm [4”] / 125mm [5”]** pixel pitch, allowing for precise pixel control.

NOTE **Pixel Ribbon Go Flat only has pixel pitch of 100mm [4”].**

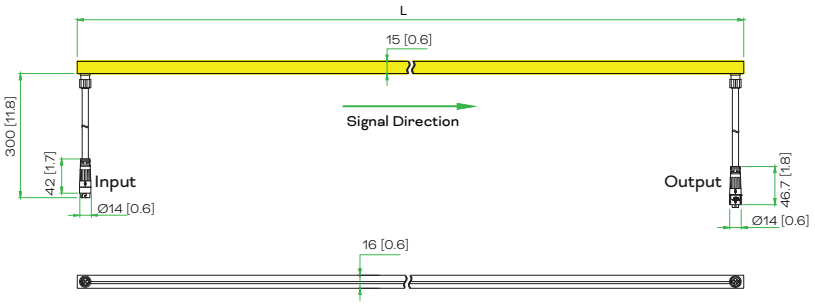
2.2 Dimensions

FIG.1: Pixel Ribbon Go Top Bend

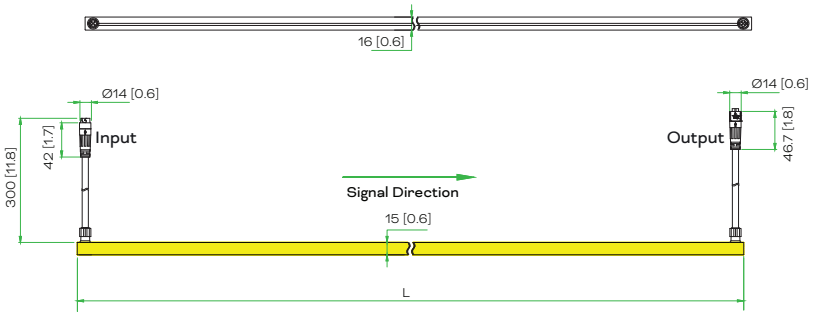
Model	Max. Ribbon length with single power feed	Actual product length with end cap at 2-ends, L
RGBW (14.4W/m) RGB (11W/m)	CE: 8000mm [315”] ETL: 6100mm [240.16”]	CE: 8006mm [315.2”] ± 10mm [0.39”] ETL: 6106mm [240.39”] ± 10mm [0.39”]
DW & W (9.6W/m)	CE: 10000mm [393.7”] ETL: 6100mm [240.16”]	CE: 10006mm [393.94”] ± 10mm [0.39”] ETL: 6106mm [240.39”] ± 10mm [0.39”]



Left cable feed (LF)



Right cable feed (RF)



End cable feed (EF)

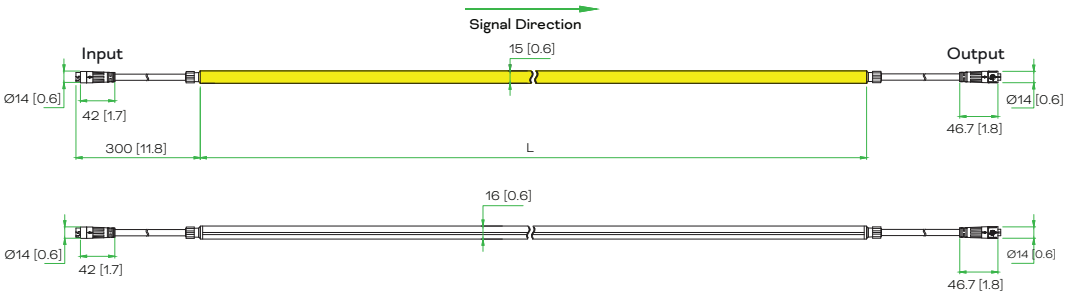
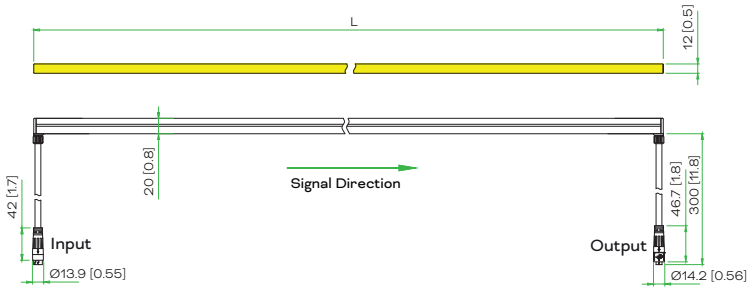


FIG.2: Pixel Ribbon Go Side Bend

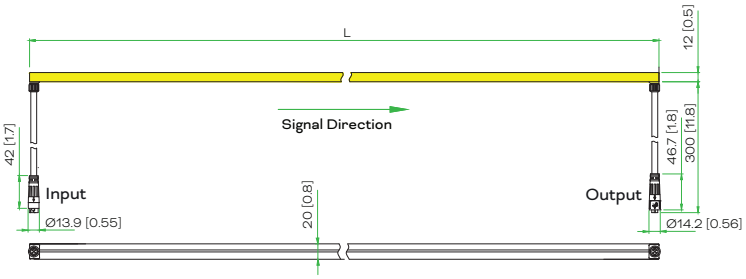
Model	Max. Ribbon length with single power feed	Actual product length with end cap at 2-ends, L
RGBW (14.4W/m) RGB (11W/m)	CE: 8000mm [315”] ETL: 6100mm [240.16”]	CE: 8006mm [315.2”] ± 10mm [0.39”] ETL: 6106mm [240.39”] ± 10mm [0.39”]
DW & W (9.6W/m)	CE: 10000mm [393.7”] ETL: 6100mm [240.16”]	CE: 10006mm [393.94”] ± 10mm [0.39”] ETL: 6106mm [240.39”] ± 10mm [0.39”]

Unit: mm [inch]

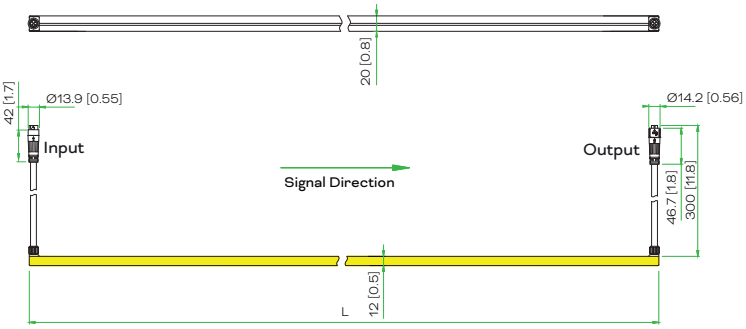
Bottom cable feed (BF)



Left cable feed (LF)



Right cable feed (RF)



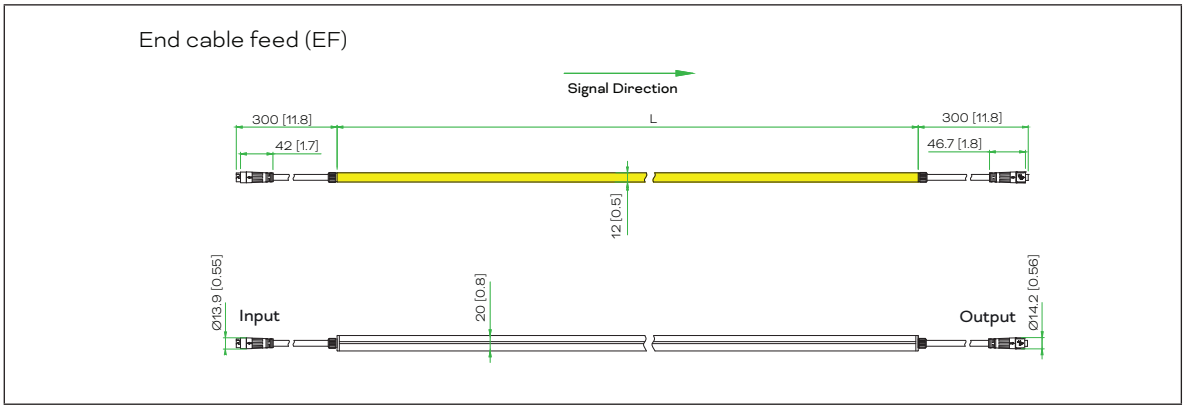


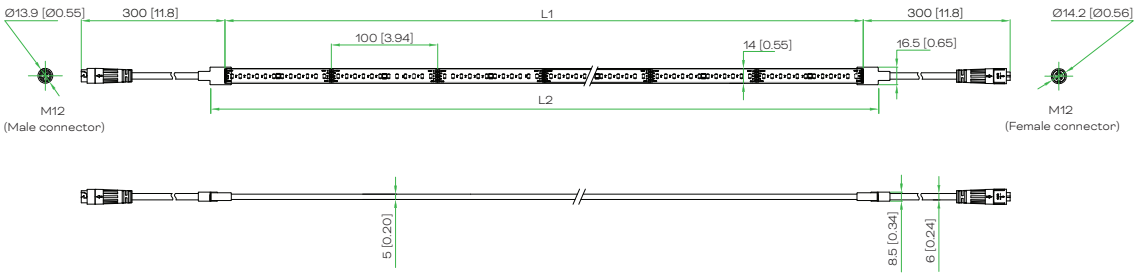
FIG.3: Pixel Ribbon Go Flat

Model	Max. Ribbon length with single power feed	Actual product length with end cap at 2-ends, L
RGBW (14.4W/m) RGB (11W/m)	CE: 8000mm [315"] ETL: 6100mm [240.16"]	CE: 8028mm [316.06"] ± 10mm [0.39"] ETL: 6128mm [241.26"] ± 10mm [0.39"]
DW & W (9.6W/m)	CE: 10000mm [393.7"] ETL: 6100mm [240.16"]	CE: 10028mm [394.8"] ± 10mm [0.39"] ETL: 6128mm [241.26"] ± 10mm [0.39"]

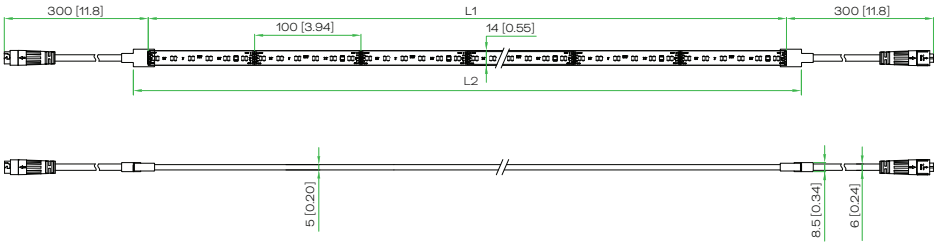
Clear:

Unit: mm [inch]

White

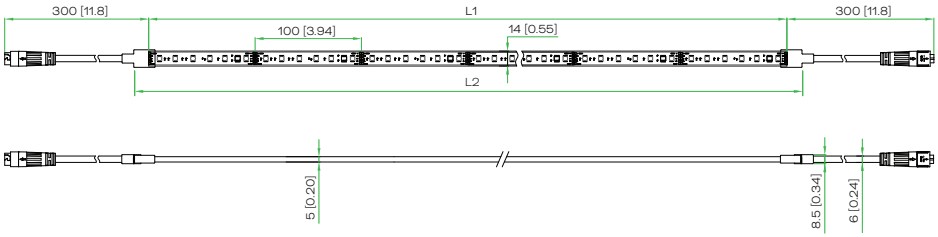


DW



Clear:

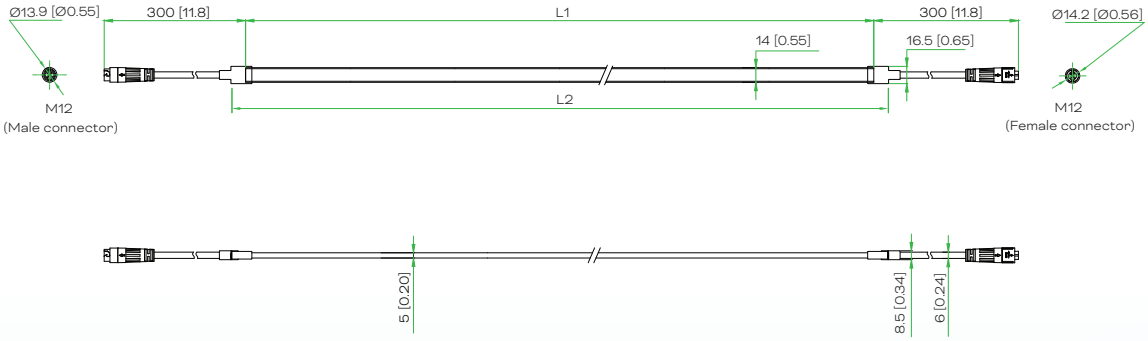
RGB&RGBW



Diffused:

Unit: mm [inch]

White&DW&RGB&RGBW



REMARK

CE: For other customize lengths (in multiply of 100mm / 4” or 125mm / 5”), the actual product length would be customize length ± 10mm [0.39”].
ETL: For other customize lengths (in multiply of 100mm / 4”), the actual product length would be customize length ± 10mm [0.39”].

3. Installation

3.1 Points To Consider

Plan your installation before mounting the Pixel Ribbon Go. The following should be considered for a successful installation.

- Weather conditions and ambient temperature of installation site.
- Adequate space for better heat dissipation (150mm apart) of LED Engines.
- The number of the Pixel Ribbon Go and appropriate LED Engines.
- DMX512 to be used to control the Pixel Ribbon Go.
- Mounting distances should be considered.
- Proper surge protection.

3.2 Pre-Installation Checks

3.2.1 Installation Checklist

1. Prepare cables and all necessary accessories.
2. Perform functional check of the Pixel Ribbon Go. Take care not to damage cables/ connectors during pre-installation checks.
3. Ensure the DATA OUT connector on the Pixel Ribbon Go are covered by the Waterproof End Cap after testing. Keep Waterproof End Caps safe for reuse.
4. Mount the Pixel Ribbon Go. If the installation is to be left uncompleted overnight, place all non-connected Pixel Ribbon Go, Connection Cables, DMX Controller and LED Engines in an indoor environment.
5. Ensure all pre-installation checks laid out above have been followed.

Ensure all the Pixel Ribbon Go, Connection Cables, DMX Controller and LED Engines are initially stored in a dry area to guarantee the complete sealing of the system from water before installation.

3.2.2 Requirements Of Cable Bending And Twisting

Pixel Ribbon Go Flat and Top Bend can only be bent among the vertical axis.

Pixel Ribbon Go Side Bend can only be bent among the horizontal axis

Please take EXTRA precautions before bending Pixel Ribbon Go and Connection Cables. They must be only bent in the direction specified. The Minimum Bending Radius 150mm [5.91”] (Pixel Ribbon Go Top Bend & Side Bend) or 50mm [1.97”] (Pixel Ribbon Go Flat), and the Non-Bendable Length of 20mm [0.79”] near the connector end or near the cable overmold MUST be adhered to.

Do not twist the Pixel Ribbon Go in anyway.

NOTE **Water ingress incurred due to excess cable bending/twisting will not be under warranty by Traxon Technologies.**

FIG.4: Orientation Minimum Cable Bending and Non-Bendable Length Requirement (TB and SB)

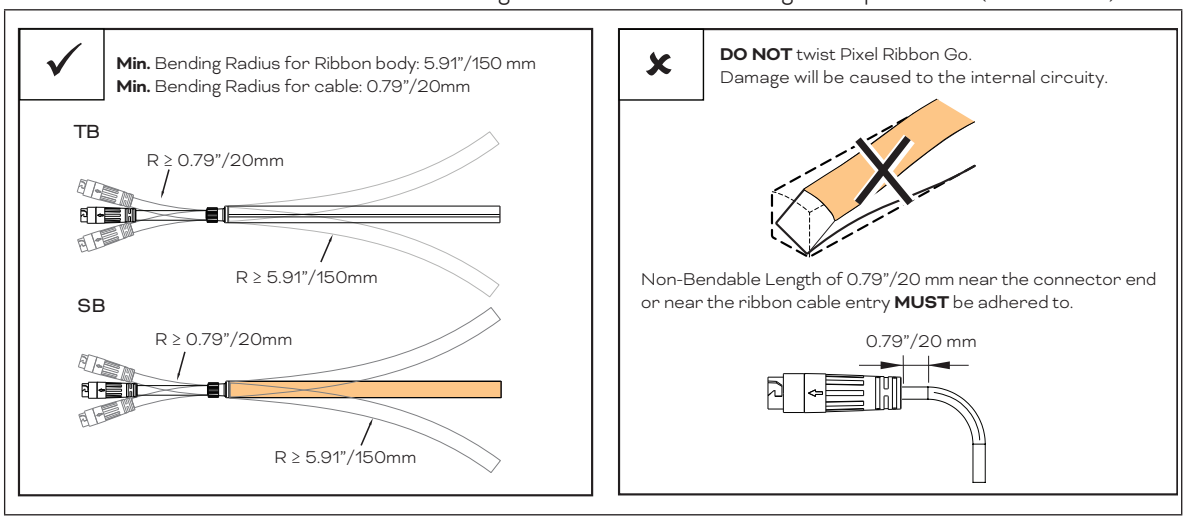
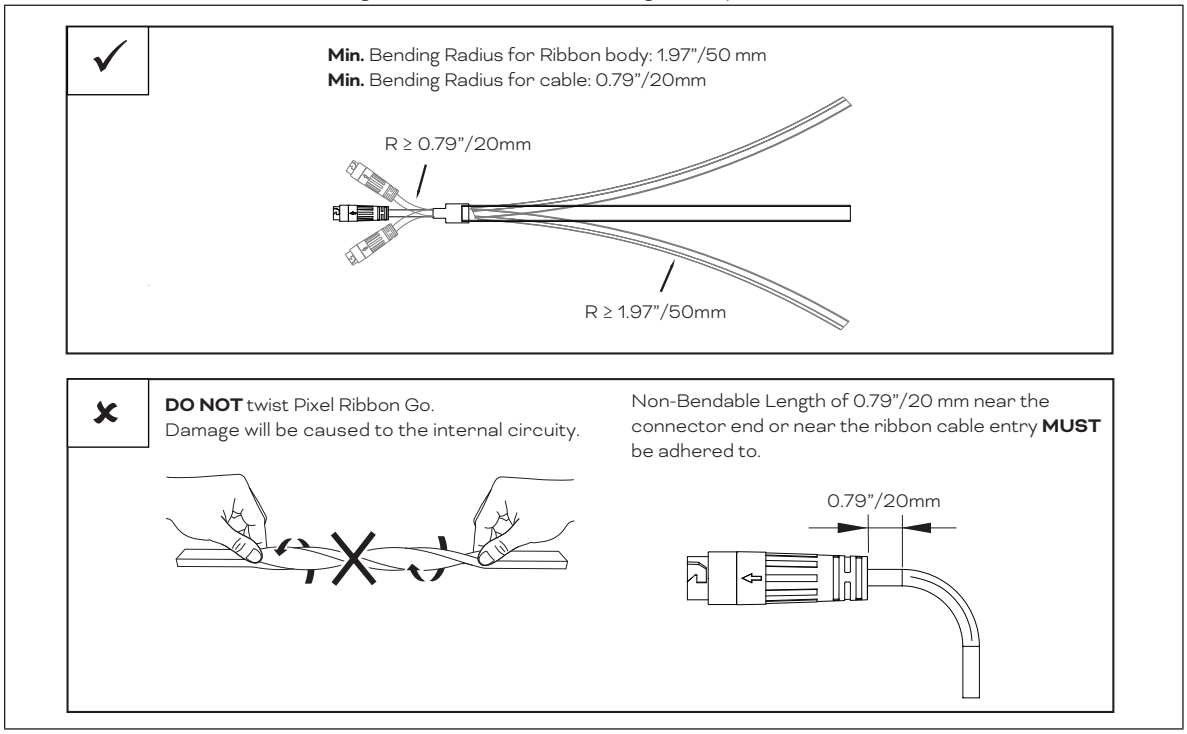


FIG.5: Minimum Cable Bending and Non-Bendable Length Requirement (Flat)



3.2.3 Cut-and-Seal of the Pixel Ribbon Go

Pixel Ribbon Go can be cut every 100mm [3.94”] (cutting pitch).

It is recommended to use the PX RIBBON CUTTING TOOL (AM412950055) for proper cutting.

For Pixel Ribbon Go Flat, look for the copper bridge every 100mm, which are the designated cutting positions.

For Pixel Ribbon Go TB / SB, the cutting position can be revealed from the window of the silicone body.

Cutting should only be done on the copper bridge position as indicated. Cutting outside the position shall void the warranty.

FIG.6: Ribbon Cutting for Pixel Ribbon Go TB / SB

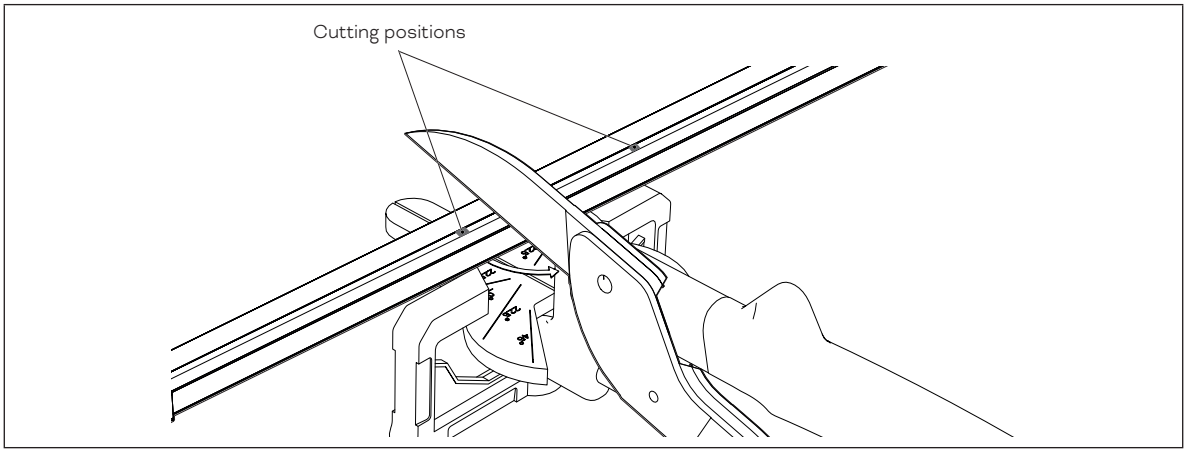
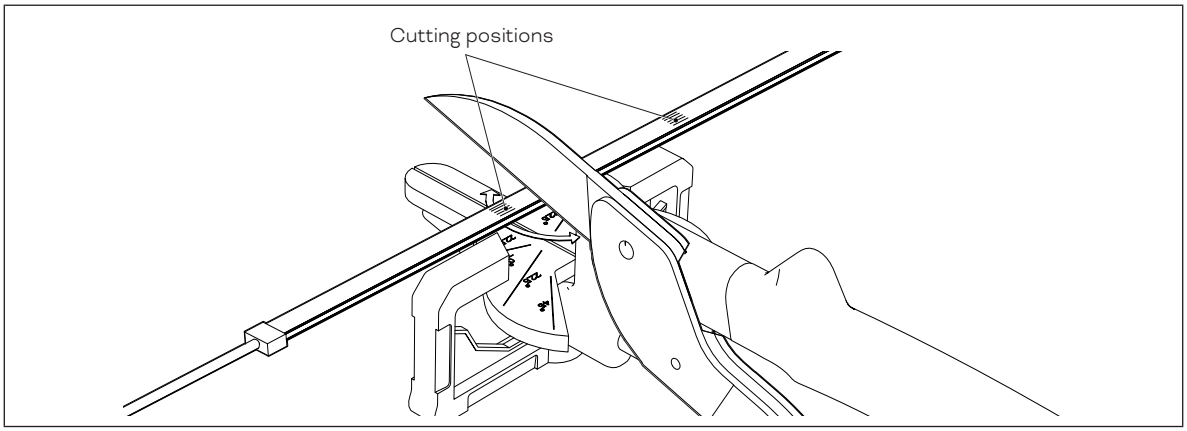


FIG.7: Ribbon Cutting for Pixel Ribbon Go Flat



After cutting, the Cut End of the LED Strip should be covered with the End Cap, and sealed with RTV Silicone.

Item Code	Description
AM412950055	PX RIBBON CUTTING TOOL
AM412960055	PX RIBBON SEALING GLUE 100ML
AM412970055	RX RIBBON VB FIELDCUT ENDCAP 20P
DA24102365955	PIXEL RIBBON GO SB FIELDCUT ENDCAP 20PC
AM412990055	RX RIBBON FLAT FIELDCUT ENDCAP 20PC

For Pixel Ribbon Go SB / TB:

— Place the Pixel Ribbon Go TB / SB on the cutting tool, with the window of the body facing upward.

For Pixel Ribbon Go Flat:

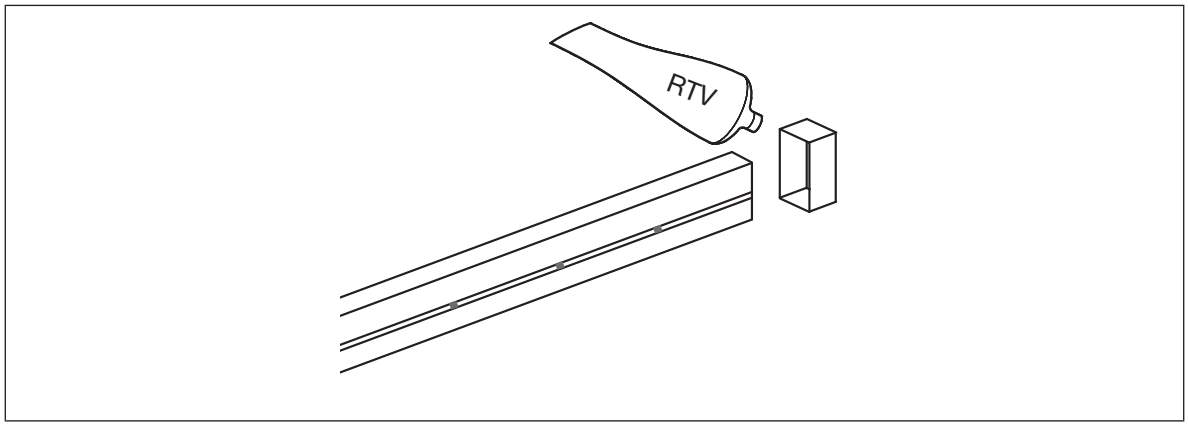
— Place the Pixel Ribbon Go Flat on the cutting tool, the LED should face upward.

— Avoid contact of the silicone body with the cutter edge when the cutting position is not in place to avoid damage of silicone body.

— The Ribbon should be placed perpendicular to the cutting edge to make sure the cut surface is not tilted.

— The cut surface should be flush and smooth.

FIG.8: LED Strip Sealing



— After cutting, the Field-Cut End Cap should be used with the RTV PX Ribbon Sealing Glue applied on the cut end.

— The sealing should be done at least 1-2 days at room condition (temperature 25°C & relative humidity 55%) before on-site installation to allow complete curing of silicone.

Sealing Procedure:

— Fill the End Cap with Sealing Glue completely.

— Insert the Ribbon into the bottom of the End Cap.

— Clean excess silicone glue from the Ribbon.

— Let dry for at least 1 hour before any movement. Complete curing of silicone should be expect for at least 24 hours.

3.3 On-Site Installation

- DO NOT attempt installation in wet or severe weather conditions.
- DO NOT leave and expose any Pixel Ribbon Go, Pixel Distributor or LED Engine unconnected under wet/raining or snowing environment.
- DO NOT pull on cable of Pixel Ribbon Go. IP failure induced by stressed/damaged cables during or after installation will not be under warranty by Traxon Technologies.
- ALWAYS keep the cables and the ribbon body protected from sharp objects and ensure no damage is generated.
- Failure to keep Pixel Ribbon Go within the operating temperature range of -20°C to +50°C / -4°F to +122°F, and storage temperature range of –40°C to +70°C / -40°F to +158°F will void the product's warranty.

4. System Configuration

4.1 Typical Power Injection with Wiring Y-Cable

FIG.9: Pixel Ribbon Go TB / SB Wiring System

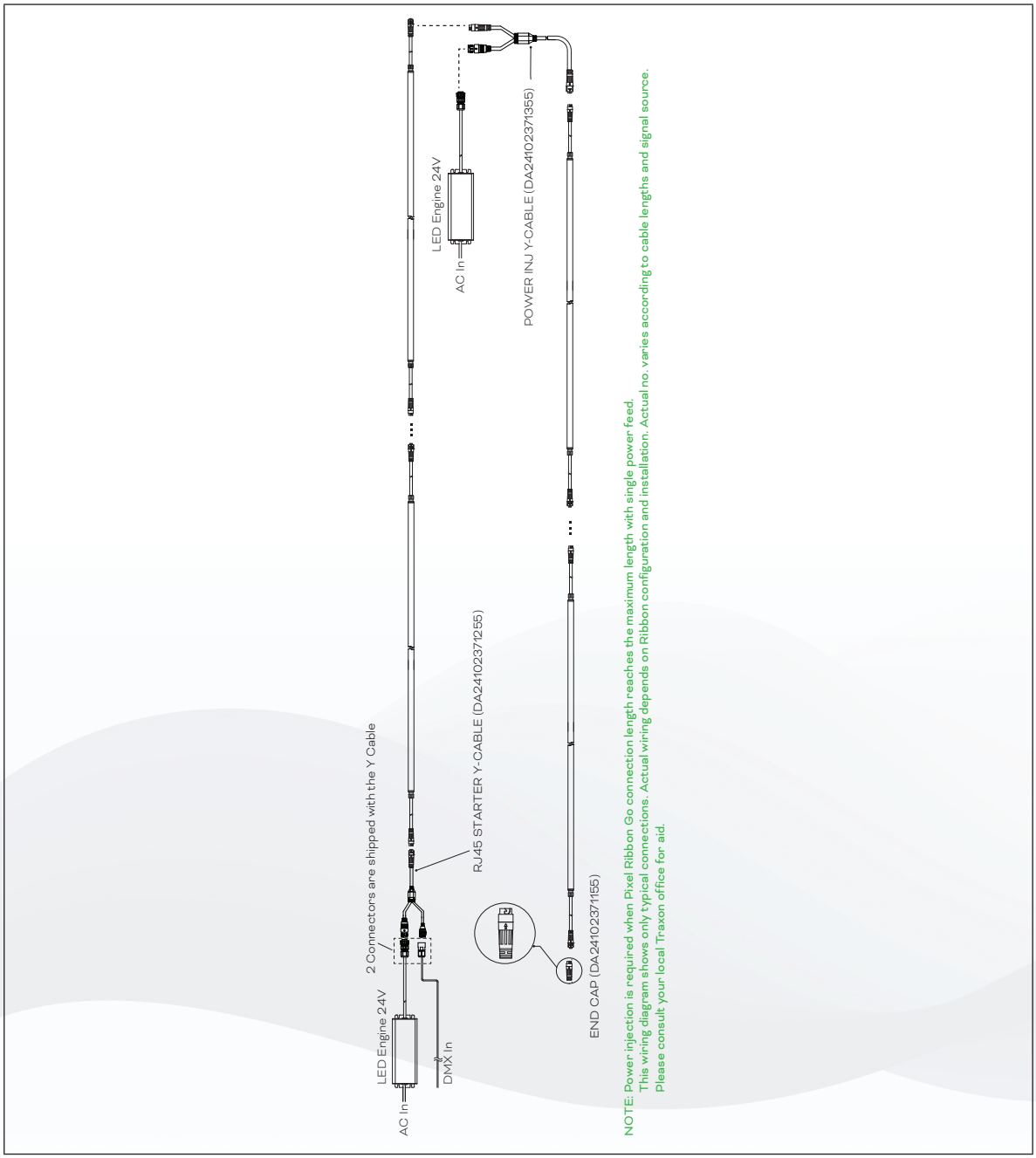
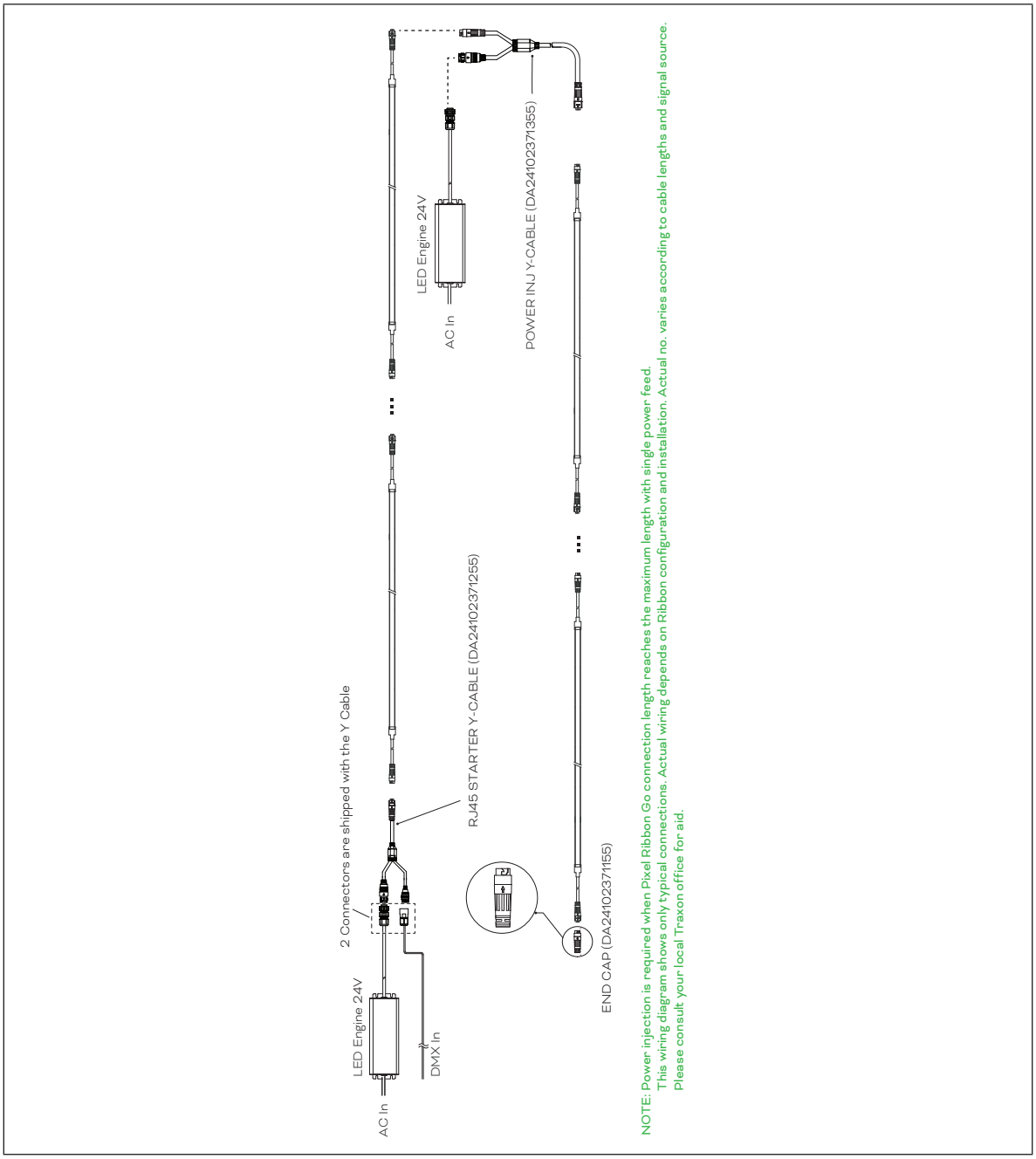


FIG.10: Pixel Ribbon Go Flat Wiring System



4.2 Typical Wiring with Starter Cable

FIG.11: Pixel Ribbon Go TB / SB Wiring System

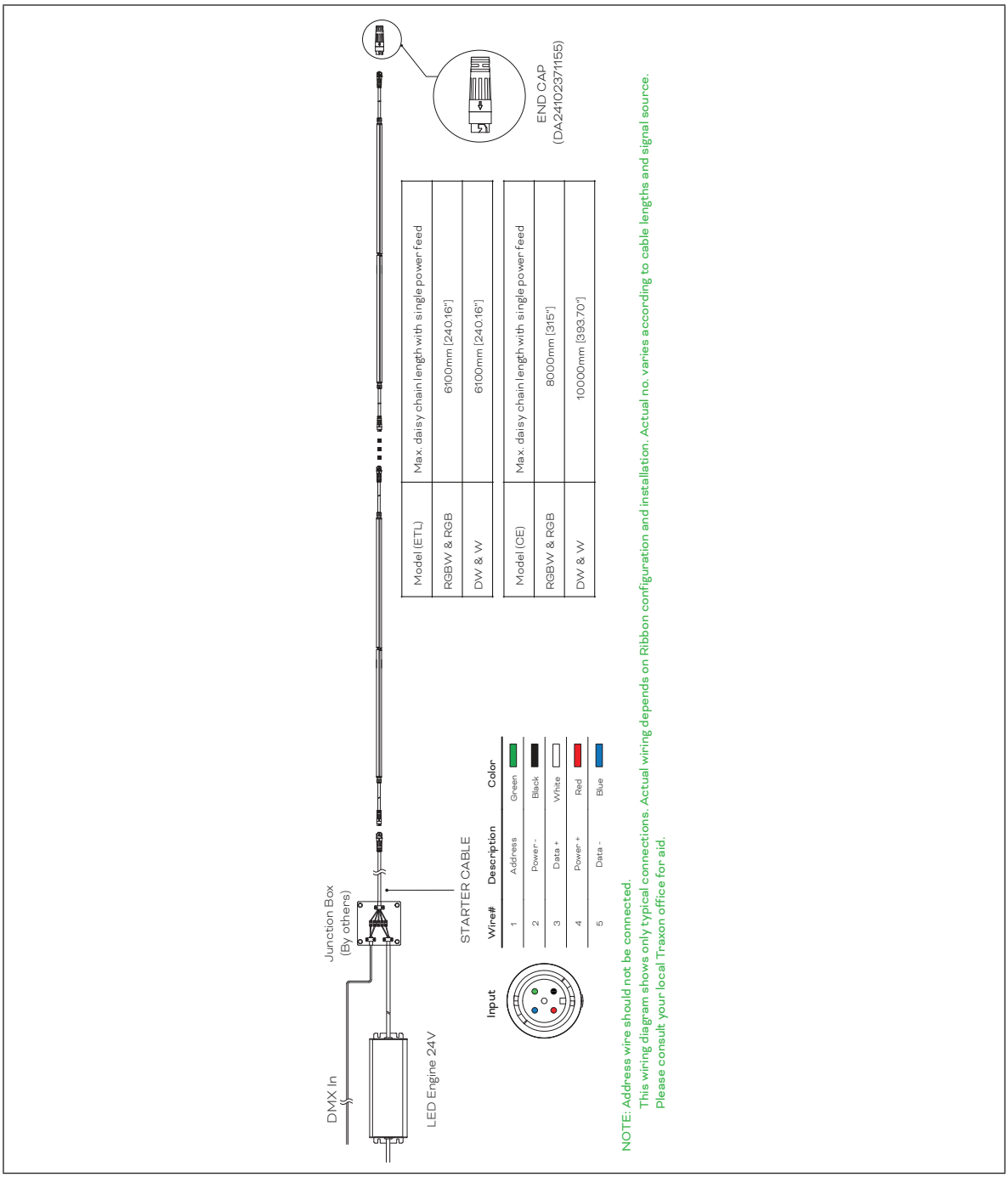
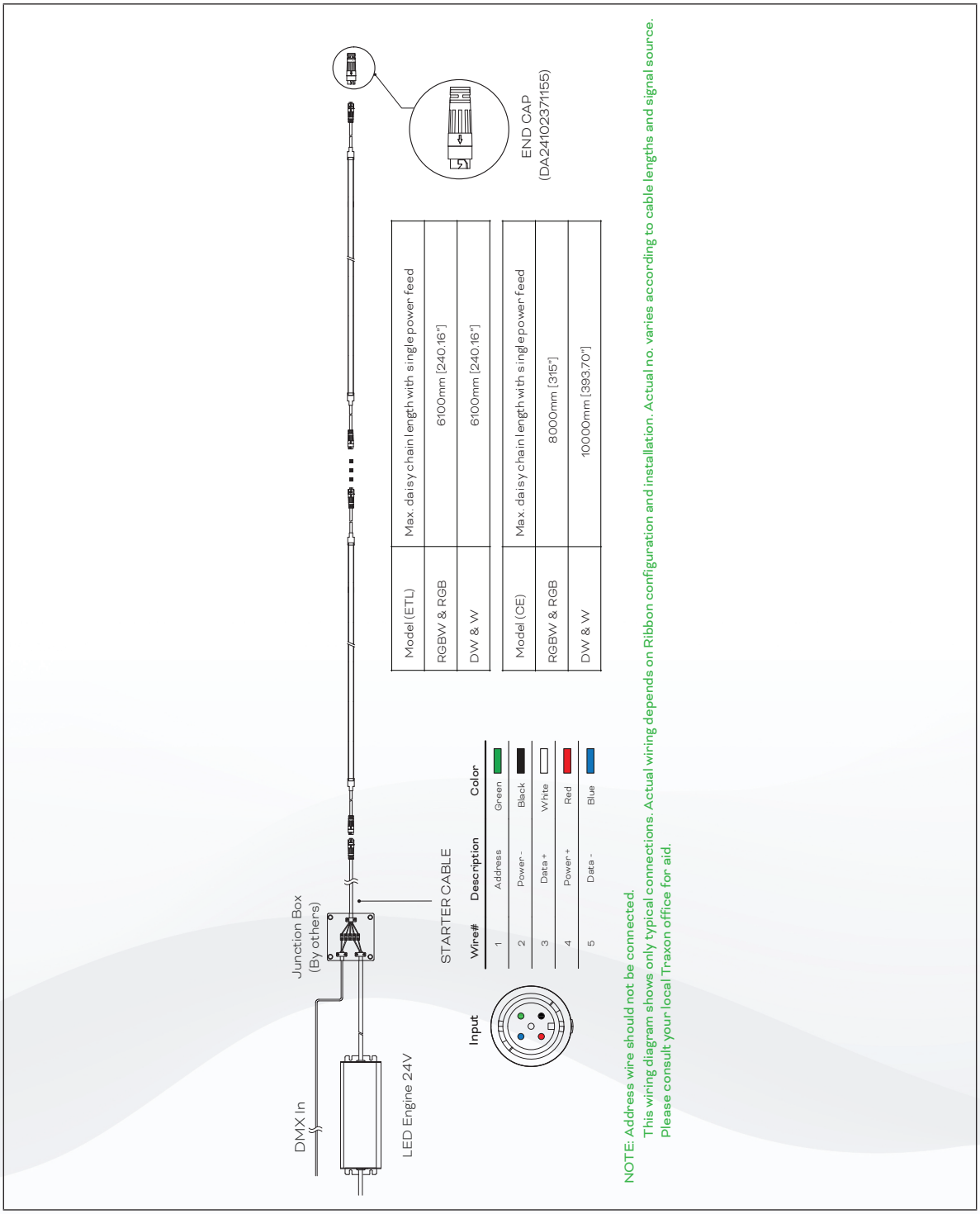


FIG.12: Pixel Ribbon Go Flat Wiring System



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 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.
- The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.

6. Technical Specification

For detailed product specifications, please refer to the product data sheet or www.traxon-ecue.com.

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).

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 always results 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.

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	— Check Mains Power — Check power supply leads and wire connections — Ensure output wires are connected with proper polarity — Check if LED Engine's secondary output is working as specified.
Shadowing	Light source covered	— Check for cables, wires or unwanted debris covering LED light source
Modules are dim	Excess products connected	— Ensure the power supplies are not overloaded due to an excess of products connected
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 products connected

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

8. Warranty Statement

Traxon Technologies warrants its Products against material or workmanship defects for a period of five (5) years from date of invoicing, provided that the purchased items are used under the conditions stated in this user manual.

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

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Please check for the latest updates and changes on the Traxon website.

www.traxon-ecue.com