

## FXN 1129 | FLEXIBLE NEON

### UNPACKING - White Box Packing



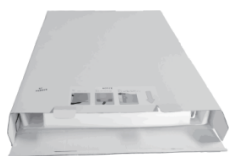
1



2



3



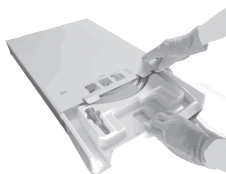
4



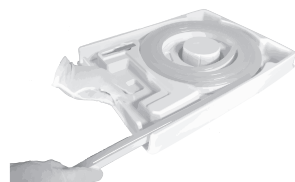
5



6



7



8



## FXN 1129 FLEXIBLE NEON

### UNPACKING - Reel Packing



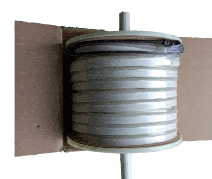
1



2



3



4



5

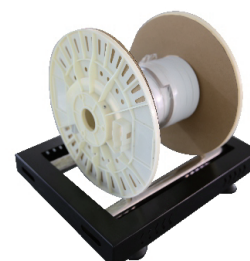


## FXN 1129 FLEXIBLE NEON

### UNPACKING - Reel Packing



Uncoiling Roller



Put the light on the middle of uncoiling roller



Rotate the roller edge to uncoil the light with another hand



Use recommended cutter to cut the light vertically



Roll up the rest of the light



Protect the light end and fix it

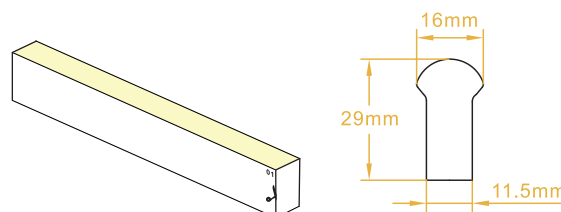


Uncoiling Roller (Optional Device)

## FXN 1129 | FLEXIBLE NEON

### BASIC PARAMETERS

1. Dimensions: 11.5mm \* 29mm.
2. Min. bending diameter: 120mm.
3. Protection rate: IP68/IP67/IP65/IP40/IP20
4. IP68 protection rate: Protected against dust and submersion in water (1 meter above).
5. The product IP Rate is ultimately in line with properly applied IP rated connectors.  
Connector termination required after cutting to achieve appropriate IP Rating.
6. Easy to use, with a range of accessories for joining, terminating, mounting & powering.
7. Long lifetime: 5 years.
8. Environmental Working Temperature: -20°C TO 45°C (High Voltage: -20°C TO 35°C)
9. Environmental Installation Temperature: 0°C TO 45°C (High Voltage: -20°C TO 35°C)



Note: Unless otherwise stated, the tolerance of light is  $\pm 0.3\text{mm}$ .

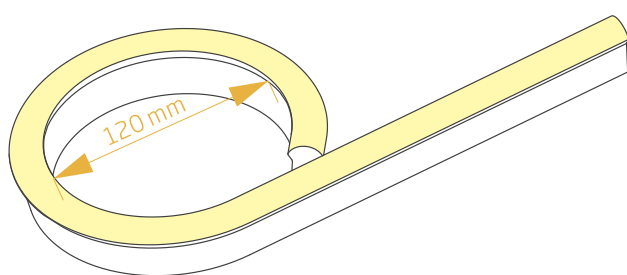
|                                 |                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electrical                      | Power Consumption<br>Operating Voltage<br>Installation Temperature<br>Operating Temperature<br>Storage Temperature                                                                                                                                                              | 15W per metre (fixed, standard configuration)<br>24V DC<br>-40°C TO 50°C - (-40°F TO 122°F)<br>-40°C TO 55°C - (-40°F TO 131°F)<br>-40°C TO 60°C - (-40°F TO 140°F)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Physical                        | Dimensions<br>Bending<br>Housing / Lens<br>Weight/m<br>IK Rating<br>IP Rating<br>Min. Cutting Unit<br>Min. Cutting Length<br>Min. Bending Diameter<br>Unit/m (Pixel Qty/m)<br>Connectors<br>Mounting Profiles<br>Mounting Brackets<br>Mounting Clips<br>Data Maximum Run Length | L: 1000mm – H: 29mm – W: 11.5mm<br>Horizontal Bending<br>Silicone<br>450g<br>IK08<br>IP67<br>10LEDs(1unit)<br>166.7mm(1unit)<br>120mm<br>6 pixels<br>Swivel Connector, Sleeve Connector, Snap Connector, Socket Connector, Injection-moulded Connector<br>Silicone Injection-moulded Connector, Dual Injection-moulded Connector<br>Aluminium Profile, Flange Aluminium Profile, Serrated Aluminium Profile, Flange Serrated Aluminium Profile, Thickened Plastic Profile, Bendable Serrated Aluminium Profile, Surface-mounted Raceway Aluminium Profile, Suspended Raceway Aluminium Profile, Bendable Anole Profile<br>Pivot Mounting Bracket, Rotary Locking Bracket, Side Mounting Bracket, Joining Bracket<br>Ceiling Mounting Clip, Suspended Mounting Clip, Cable-exit Mounting Clip<br>128m @ 6pixels/m – 6 universes |
| Optical                         | Beam Angle<br>Colour Range<br>LED Qty/m<br>LED Type<br>LED Distance<br>Total Lumens                                                                                                                                                                                             | 160°<br>RGBW, RGB, RGBA White<br>60LEDs<br>EPISTAR SMD LED<br>16.67mm<br>>280lm/m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Diming & Control                | Control Protocols<br>Dimming Resolution                                                                                                                                                                                                                                         | X-Stream: SPI protocol with data redundancy<br>Others – SPI, DMX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Fixture Rating & Certifications | UL LISTED, CE<br>RoHs COMPLIANT                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Limited Warranty                | 5 Years                                                                                                                                                                                                                                                                         | Extendable Warranty Available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |



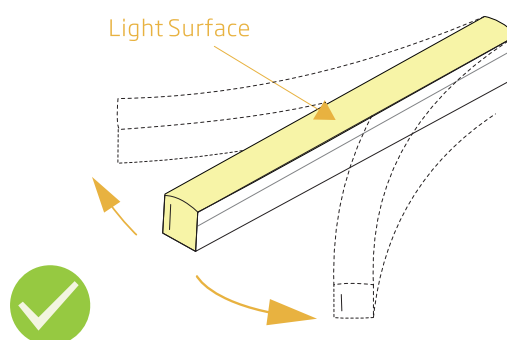
## FXN 1129 | FLEXIBLE NEON

### CAUTIONS

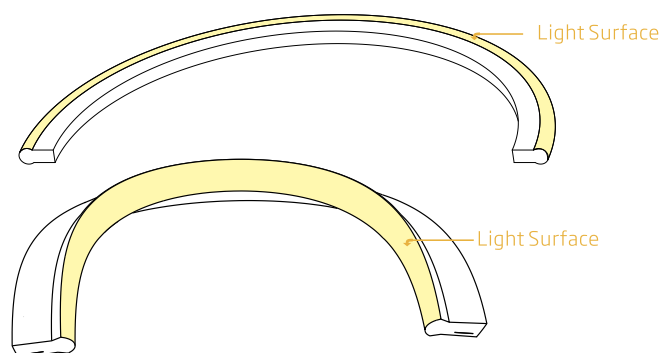
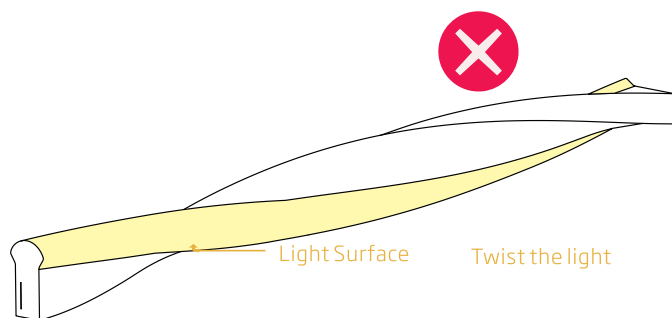
1. Before making any cuts, installation, maintenance or connection, be sure the main is disconnected.
2. Note – all connectors should be properly installed to achieve the appropriate level of IP, IP Rating can NOT be achieved without connector termination.
3. Please operate this flex light by instructions, and confirm the work voltage, it must be matched with product requirements.
4. Please confirm the polarity of connector before insertion front connection cable.
5. Connect and cut this product correctly. Any wrong operation will damage this product.
6. Using qualifies DC power supply.
7. Please correctly use and bend this flex ribbon light, see the figures below.
8. Do not operate light when ambient temperature exceeds the range of specified temperature in User Manual.
9. Do not energise the light over 30 minutes in coil packaging.
10. Do not mix the four colours (R, G, B, W) in full load simultaneously.



Do not bend smaller than allowed minimum bend diameter 120mm.



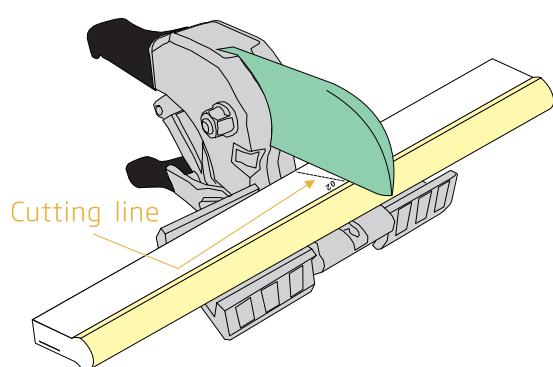
(HB) Horizontal Bending



**WARNING: The above wrong approaches will damage the light.**

## FXN 1129 FLEXIBLE NEON

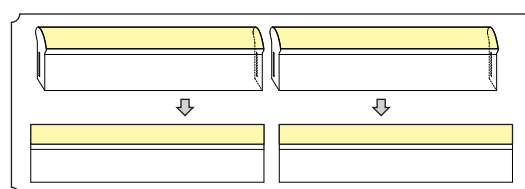
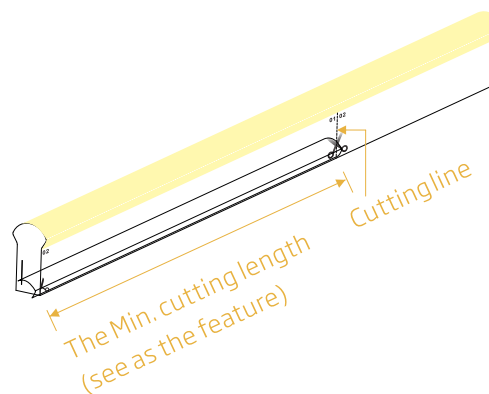
### INSTRUCTIONS FOR THE LIGHT CUTTING



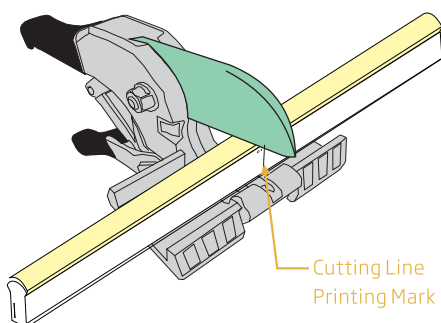
Cut the light only at printed cutting line with printing mark face upwards.

**Note:**

1. Place the light horizontally when cutting it.
2. Use only factory-recommended cutter.
3. Cut the light according to the following instructions  
Incorrect operation will damage the light.

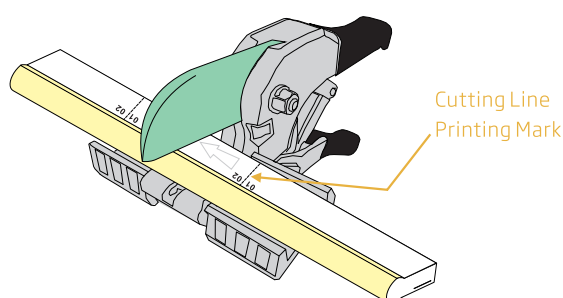


The cutting surface must be flush and smooth



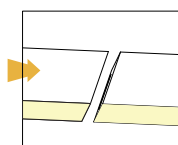
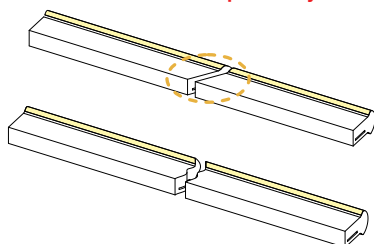
Printing mark should be faced upwards

Please use a smooth and sharp cutter for cutting when the dedicated cutter is not available, any rusty or jagged cutter is prohibited



Cutting can only be made at the printed cutting line

**Note: Waterproof may not be achieved with the following situations**



Don't cut slantingly



## FXN 1129 | FLEXIBLE NEON

### SCREW FRONT CONNECTOR

#### 1. Selection of Front Connector

Note: The light ends are marked with either a 01 or a 02. Always make sure to use an identically labeled connector.

#### 2. Assembly of Front Connector

Please ignore these steps if the connector has been assembled before delivery.

Note:

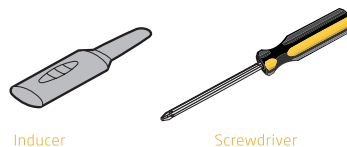
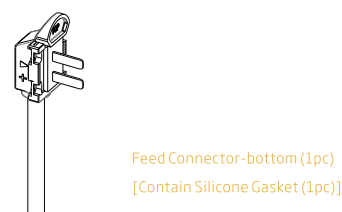
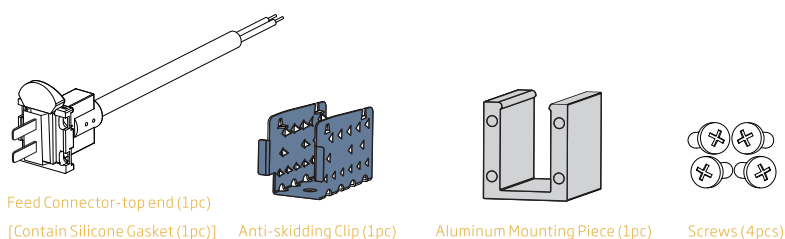
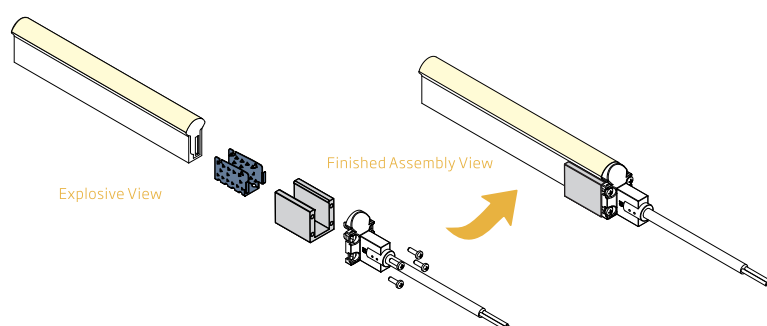
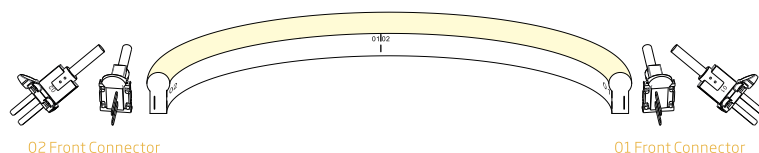
1. Never wet the assembly units or assemble with wet hands;
2. Please use the tools correctly;
3. Please pay attentions to personal security when using tools.
4. Failure to properly seal and assemble as instructed may void warranty.
5. Repeated assembly or reuse of the connector may result in waterproof failure.

#### 3. Components of Front Connector

Note:

The light ends are marked with either an 01 or an 02. Always make sure to use an identically labeled connector for the appropriate direction.

#### 4. Tools:

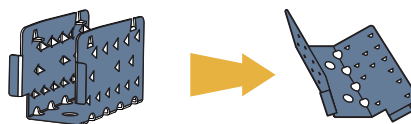


## FXN 1129 | FLEXIBLE NEON

### SCREW FRONT CONNECTOR

#### 5. Installation Steps

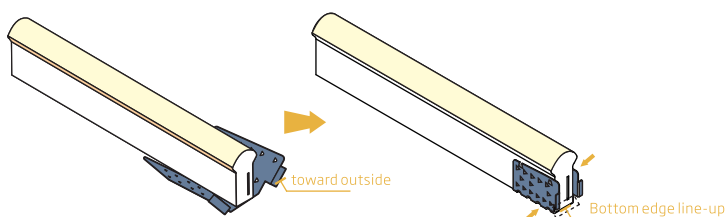
##### 5.1 Treatment of Anti-Skidding Clip



Gently unfold the anti-skidding clip about 20 degrees on both sides as the picture shows.

##### 5.2 Installation of Anti-Skidding Clip

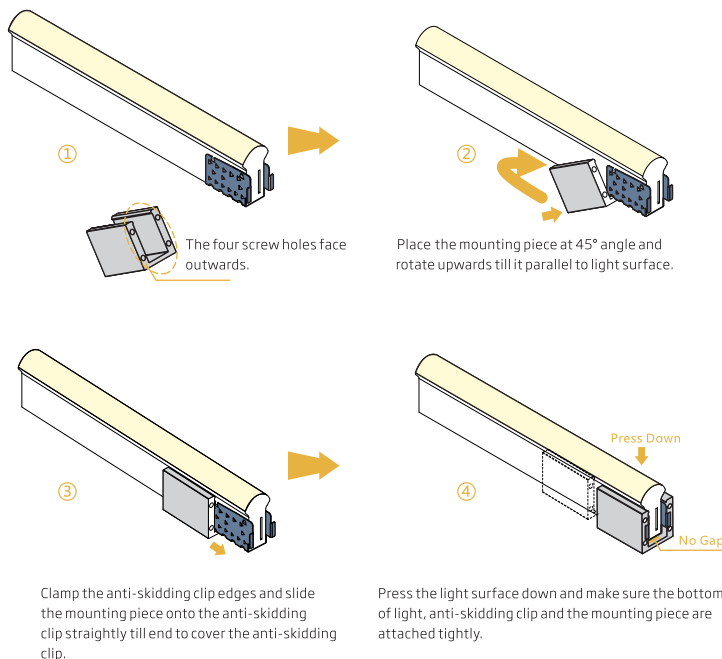
Prepare the light, and the end surface should be flush and smooth.



Place the anti-skidding clip onto the end of the light with tiny stabs pointing inwards.

Fit the anti-skidding clip to the end of light so that it wraps tightly and its brim is aligned with the bottom cut edge of the light.

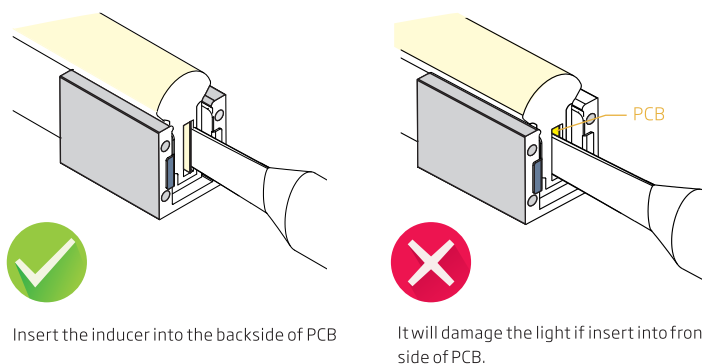
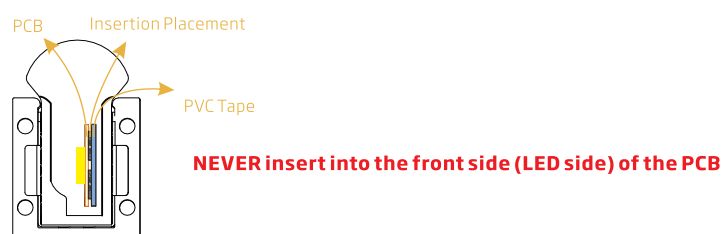
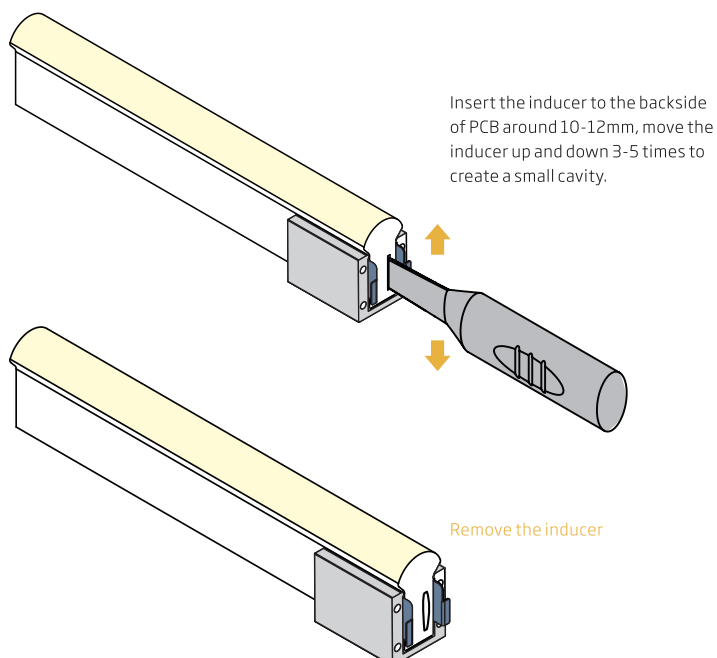
##### 5.3 Installation of Aluminum Mount Piece



## FXN 1129 | FLEXIBLE NEON

### SCREW FRONT CONNECTOR

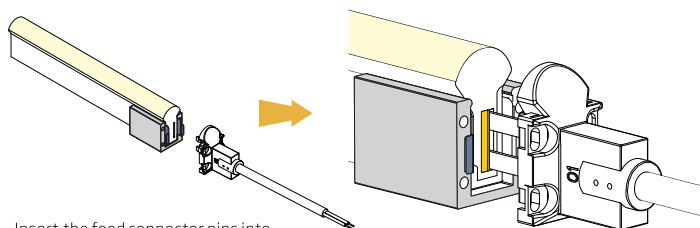
#### 5.4 Inducing a Cavity for Feed Connector



## FXN 1129 | FLEXIBLE NEON

### SCREW FRONT CONNECTOR

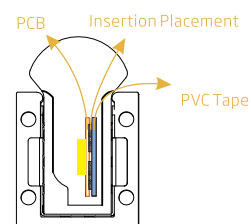
#### 5.5 Inserting the Feed Connector



Insert the feed connector pins into the cavity that you created with the inducer (backside of PCB).

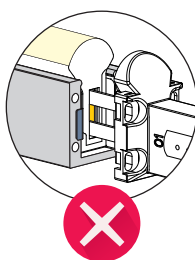
The silicone gasket is attached on the feed connector.

**NEVER insert into the front side (LED side) of the PCB**

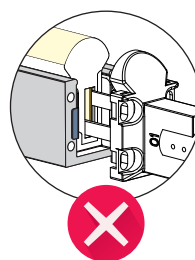


Correct Operation:  
The pins must be inserted into the BACKSIDE of the PCB.

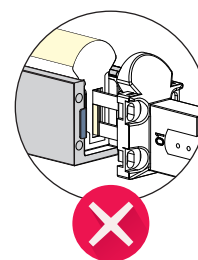
The operations on the right are prohibited:



Insert into the front side of the PCB



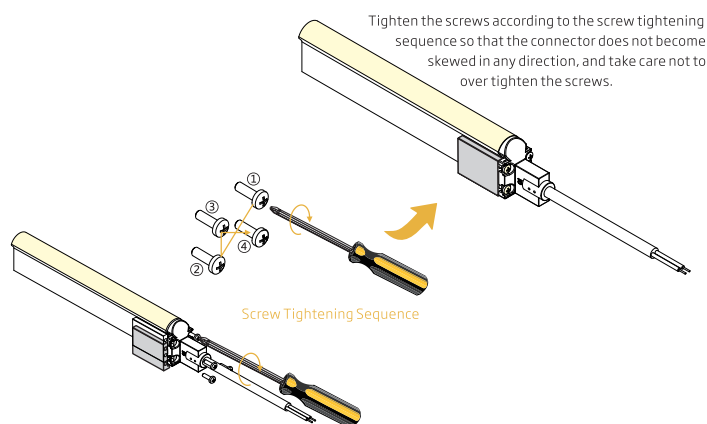
Insert crosswise into the PCB



Insert crosswise into the PCB

#### 5.6 Screws Fixation for Front Connector

Please energize the light to check its functionality and do waterproof reliability testing (refer to "waterproof reliability testing instruction" video) after connector assembly.



## FXN 1129 | FLEXIBLE NEON

### SCREW END CAP

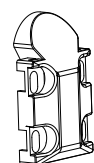
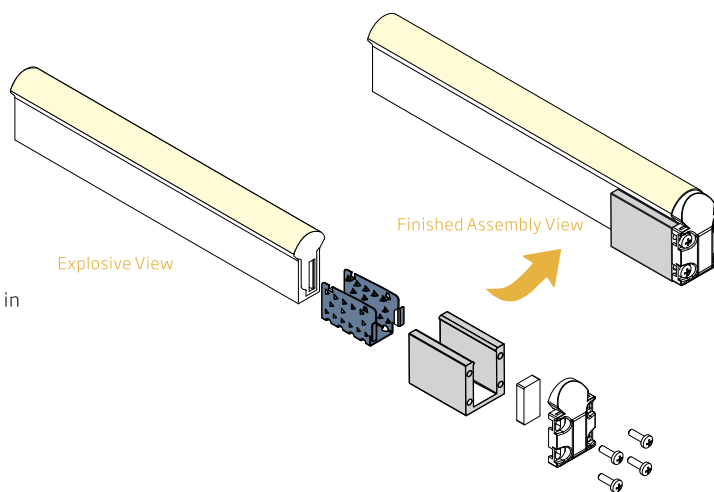
**Please ignore these steps if the end cap has been assembled before delivery.**

Note:

1. Never wet the assembly units or assemble with wet hands.
2. Please use the tools correctly.
3. Please pay attentions to personal security when using tools.
4. Failure to properly seal and assemble as instructed may void warranty.
5. Repeated assembly or reuse of the connector may result in waterproof failure.

### 1. Components of End Cap

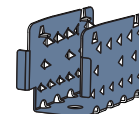
### 2. Tools



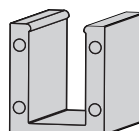
The Tail Plug (1pc)



Silicone Gasket (1pc)



Anti-skidding Clip (1pc)



Aluminum Mounting Piece (1pc)



Screws (4pcs)



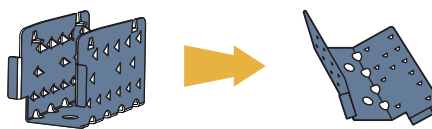
Screwdriver

## FXN 1129 | FLEXIBLE NEON

### SCREW END CAP

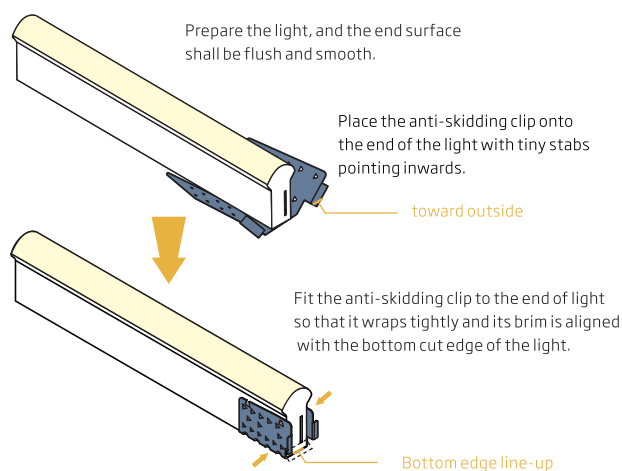
### 3. Installation Steps:

#### 3.1 Treatment of Anti-Skidding Clip

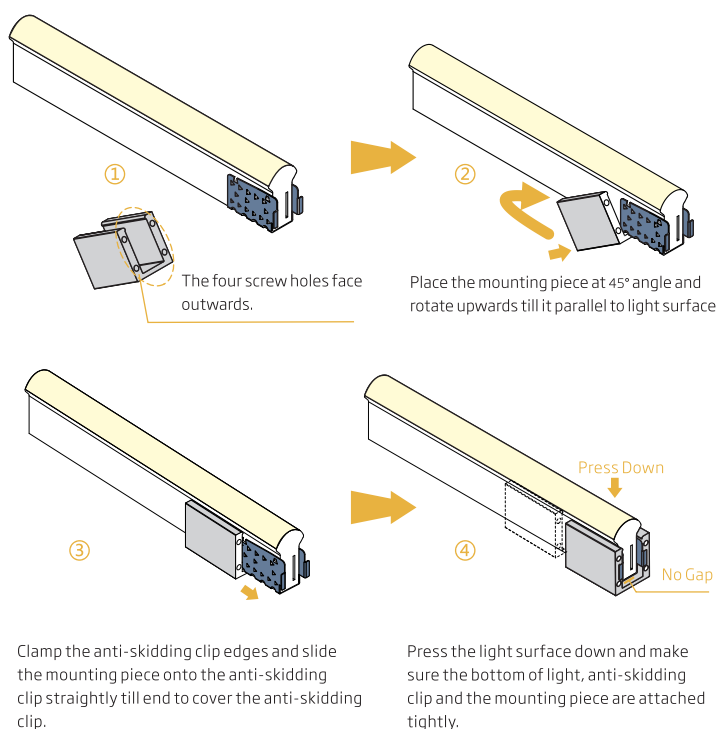


Gently unfold the anti-skidding clip about 20 degrees on both sides as the picture shows.

#### 3.2 Installation of Anti-Skidding Clip



#### 3.3 Installation of Aluminum Mounting Piece

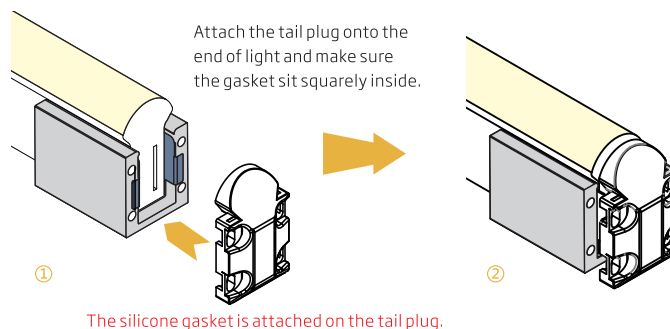




## FXN 1129 | FLEXIBLE NEON

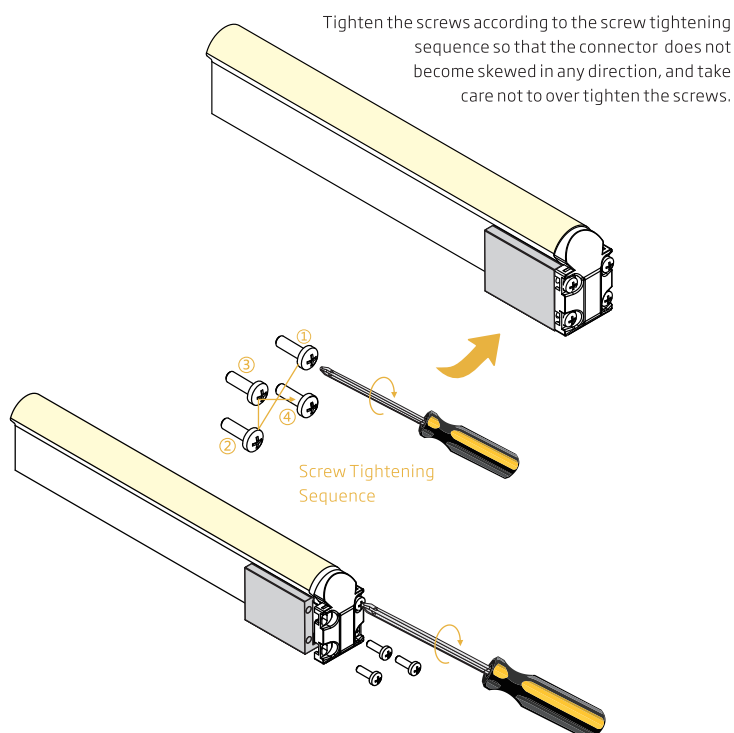
### SCREW END CAP

#### 3.4 Installation of Tail Plug



#### 3.5 Screw Fixation for End Cap

Please energize the light to check its functionality and do waterproof reliability testing (refer to "waterproof reliability testing instruction" video) after connector assembly.



## FXN 1129 | FLEXIBLE NEON

### CLASP FRONT CONNECTOR

**Please ignore these steps if the front connector has been assembled before delivery.**

Note:

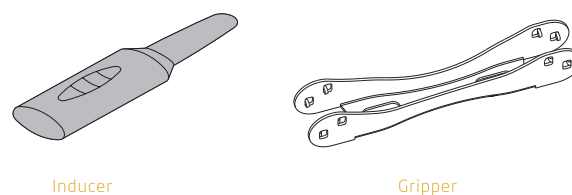
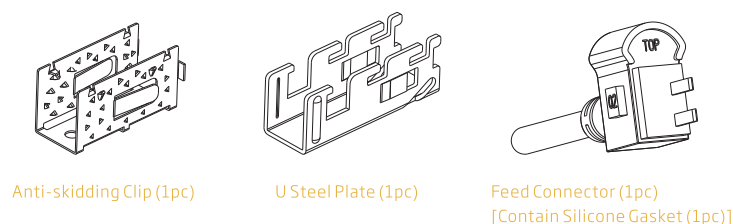
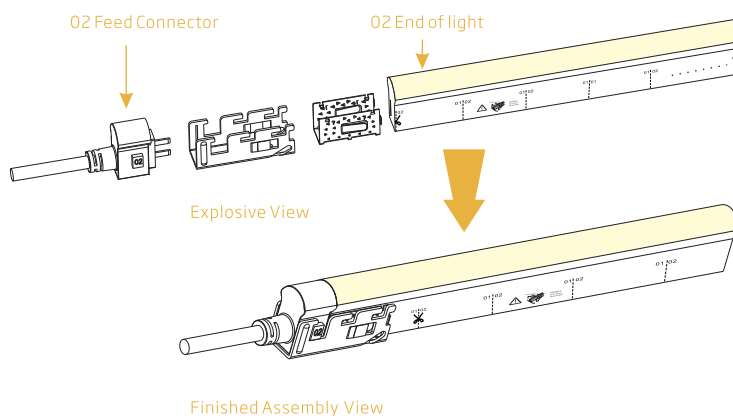
1. Never wet the assembly units or assemble with wet hands;
2. Please use the tools correctly;
3. Please pay attentions to personal security when using tools.
4. Failure to properly seal and assemble as instructed may void warranty.
5. Repeated assembly or reuse of the connector may result in waterproof failure.

### 1. Components of Front Connector

Note:

The light ends are marked with either an O1 or an O2. Always make sure to use an identically labeled connector for the appropriate direction.

### 2. Tools

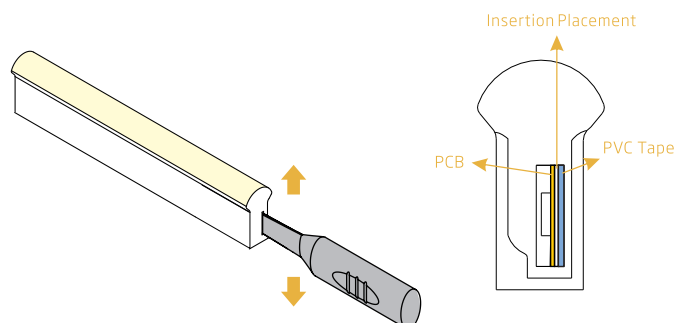


## FXN 1129 FLEXIBLE NEON

### CLASP FRONT CONNECTOR

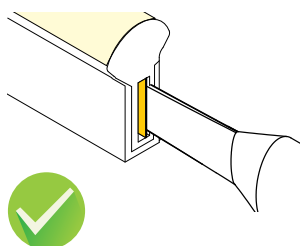
### 3. Installation Steps

#### 3.1 Inducing a Cavity for Feed Connector

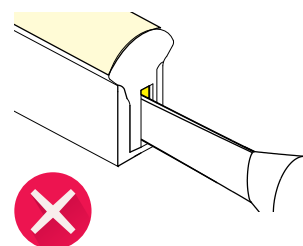


**NEVER insert into the front side (LED side) of the PCB**

Insert the inducer to the backside of PCB around 10~12mm, move the inducer up and down 3~5 times gently to create a small cavity.



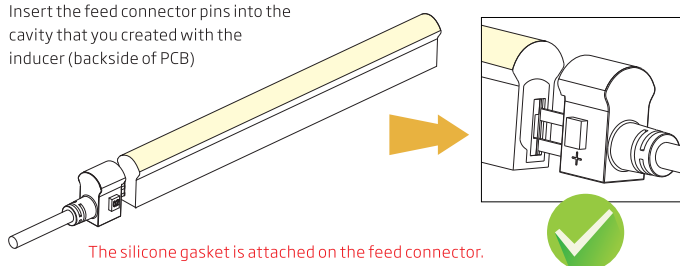
Insert the inducer into the backside of PCB



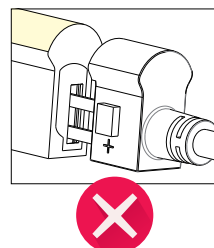
It will damage the light if insert into front side of PCB

#### 3.2 Inserting the Feed Connector

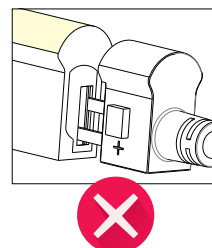
Insert the feed connector pins into the cavity that you created with the inducer (backside of PCB)



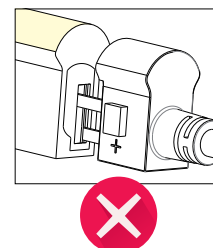
The following operations are prohibited:



Insert into the front side of the PCB



Insert crosswise into the PCB

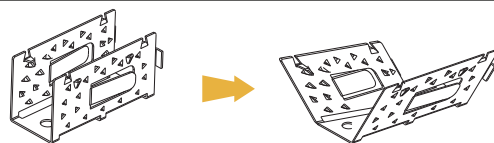


Insert crosswise into the PCB

## FXN 1129 FLEXIBLE NEON

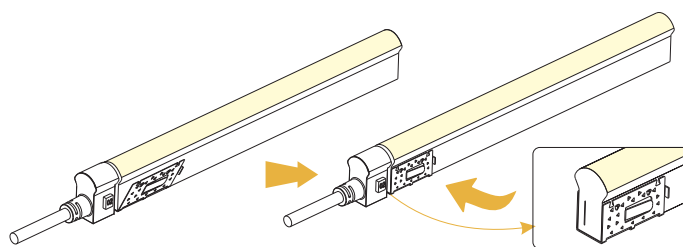
### CLASP FRONT CONNECTOR

#### 3.3 Treatment of Anti-skidding Clip



Unfold the anti-skidding clip about 20 degrees on both sides.

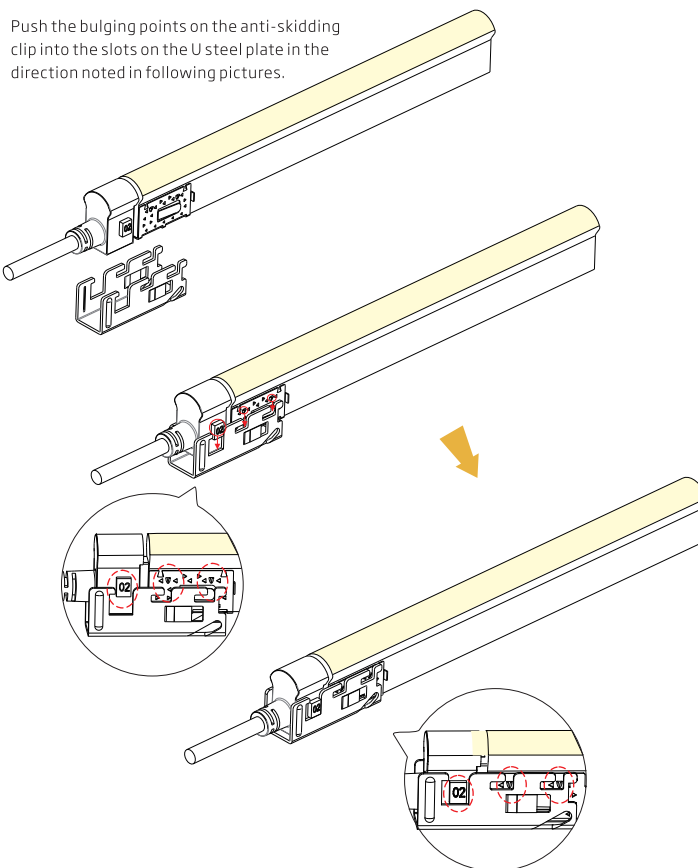
#### 3.4 Installation of Anti-Skidding Clip



Place the anti-skidding clip onto the end of the light.  
Notice its installation direction.

Fit the anti-skidding clip to the end of the light tightly and align with the light end edge.

#### 3.5 Installation for U Steel Plate

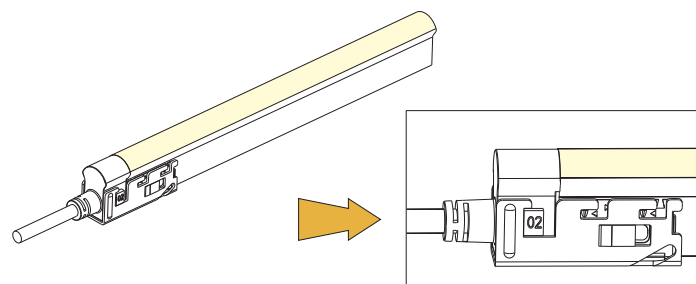
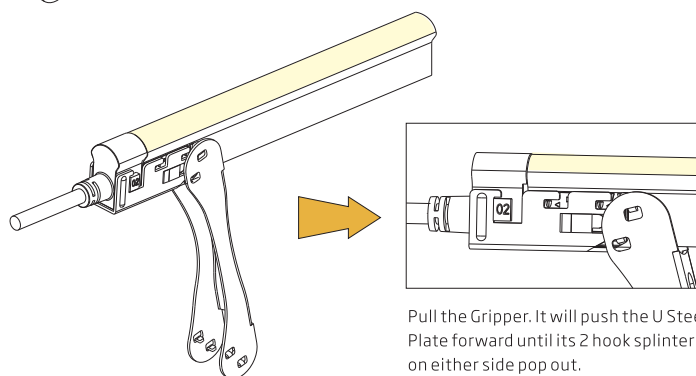
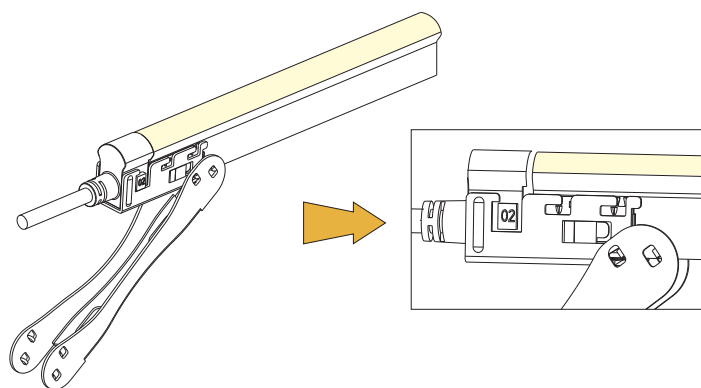
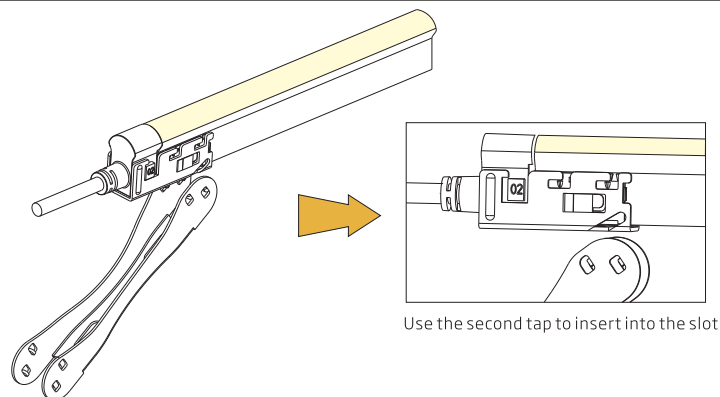


Push the bulging points on the anti-skidding clip into the slots on the U steel plate in the direction noted in following pictures.

## FXN 1129 | FLEXIBLE NEON

### CLASP FRONT CONNECTOR

**3.6 Push the anti-skidding clip to the end until the 2 hook splinters on either side pop out to lock the U steel plate. Use the gripper to help tighten the piece.**



**Please energize the light to check its functionality and do waterproof reliability testing (refer to "waterproof reliability testing instruction" video) after connector assembly.**

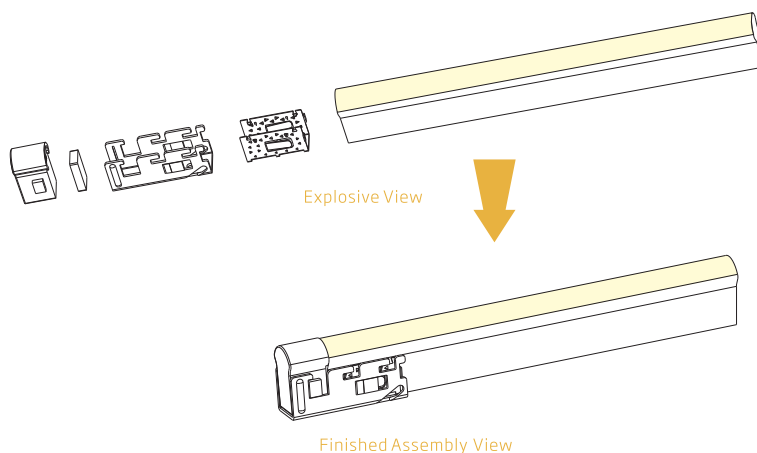
## FXN 1129 | FLEXIBLE NEON

### CLASP END CAP

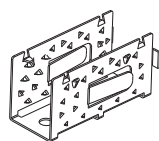
**Please ignore these steps if the end cap has been assembled before delivery.**

Note:

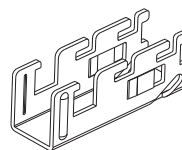
1. Never wet the assembly units or assemble with wet hands;
2. Please use the tools correctly;
3. Please pay attentions to personal security when using tools.
4. Failure to properly seal and assemble as instructed may void warranty.
5. Repeated assembly or reuse of the connector may result in waterproof failure.



### 1. Components of End Cap



Anti-skidding Clip (1pc)



U Steel Plate (1pc)

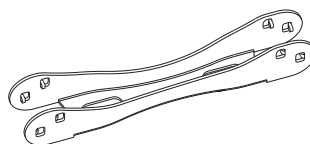


Silicone Gasket (1pc)



Tail Plug (1pc)

### 2. Tools



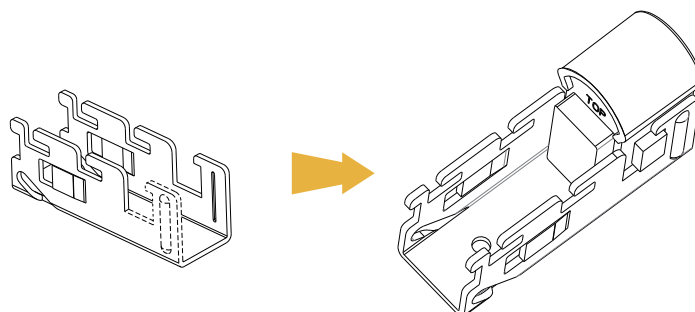
Gripper

## FXN 1129 | FLEXIBLE NEON

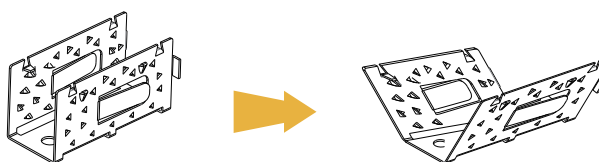
### CLASP END CAP

#### 3. Installation Steps

3.1 Place the tail plug into the U steel plate

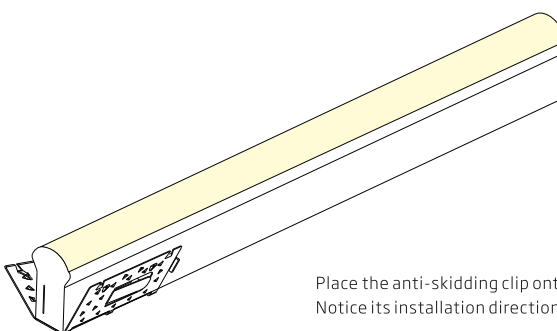


3.2 Treatment of Anti-Skidding Clip

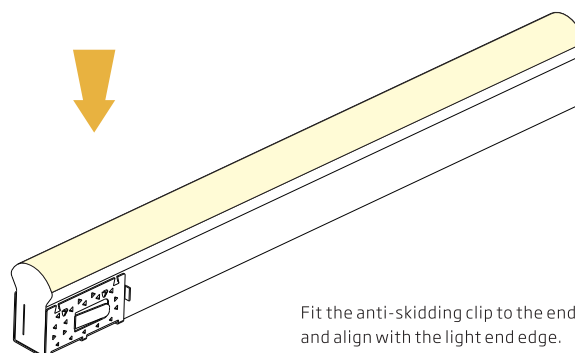


Unfold the anti-skidding clip about 20 degrees on both sides.

3.3 Installation of Anti-Skidding Clip



Place the anti-skidding clip onto the end of the light. Notice its installation direction.

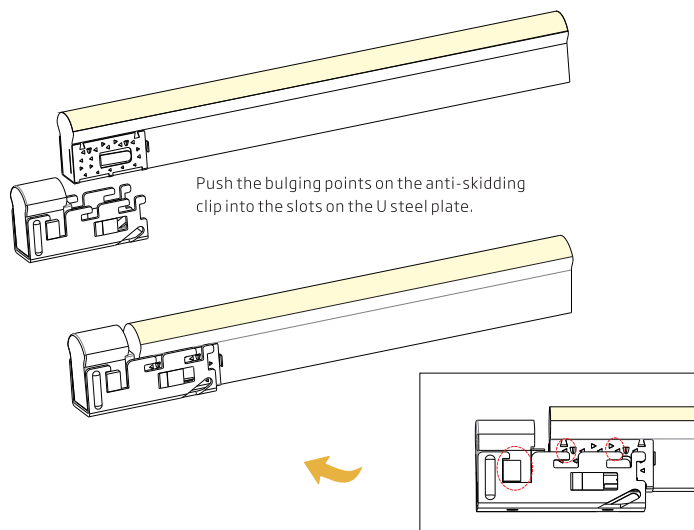


Fit the anti-skidding clip to the end of the light tightly and align with the light end edge.

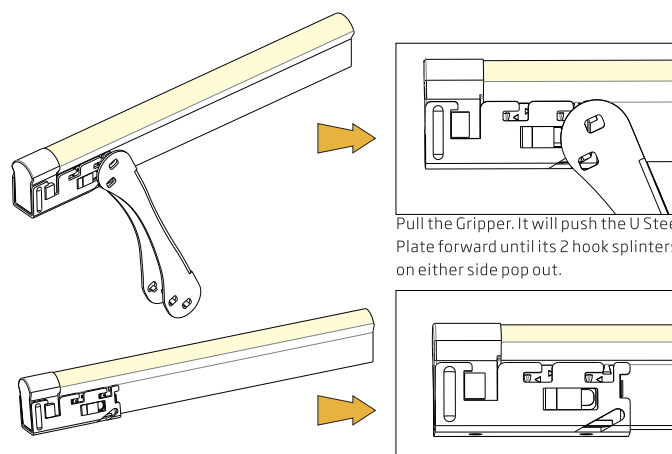
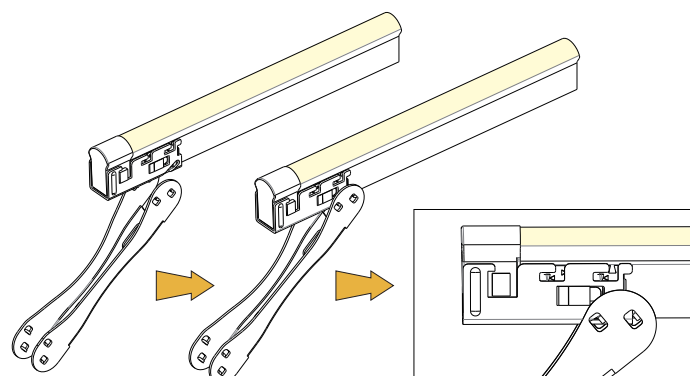
## FXN 1129 | FLEXIBLE NEON

### CLASP END CAP

#### 3.4 Installation of Tail Plug



**3.5** Push the anti-skidding clip to the end until the 2 hook splinters on either side pop out to lock the U steel plate. Use the gripper to help tighten the piece.



Please energize the light to check its functionality and do waterproof reliability testing (refer to "waterproof reliability testing instruction" video) after connector assembly.



## FXN 1129 | FLEXIBLE NEON

### SLEEVE FRONT CONNECTOR

Please ignore these steps if the front connector has been assembled before delivery.

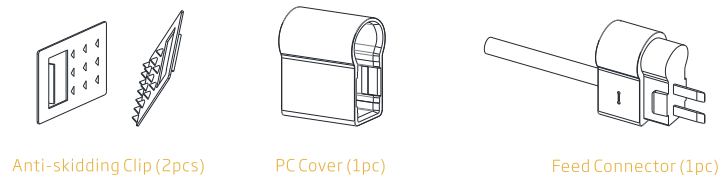
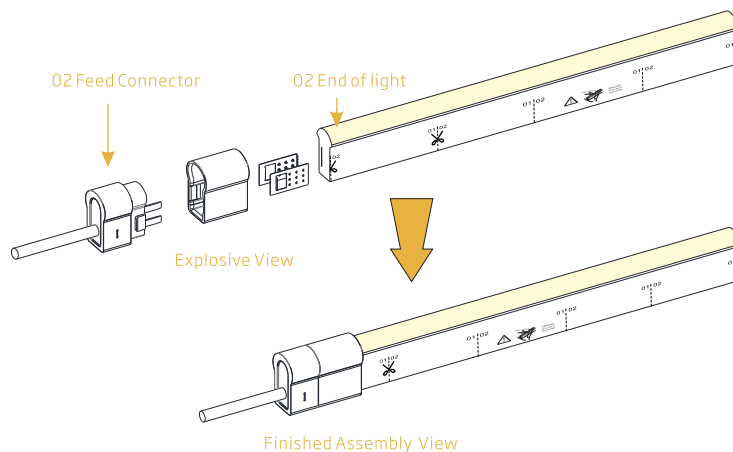
Note:

1. Repeated assembly or reuse of the connector may result in waterproof failure.

## 1. Components of Front Connector

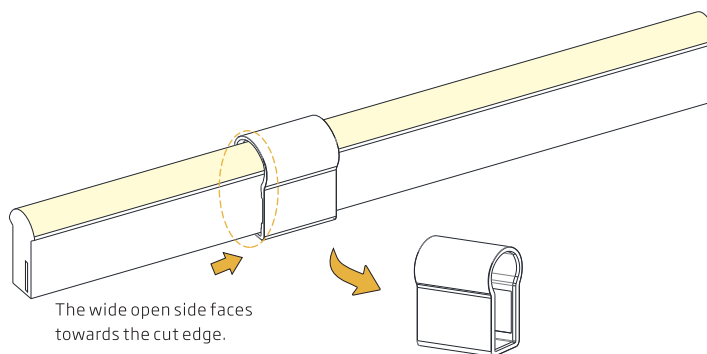
Note:

The light ends are marked with either an O1 or an O2. Always make sure to use an identically labeled connector for the appropriate direction.



## 2. Installation Steps

### 2.1 Placing PC Cover



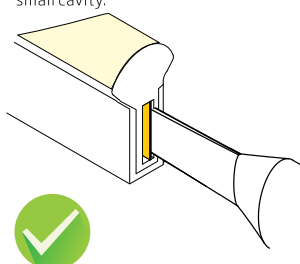
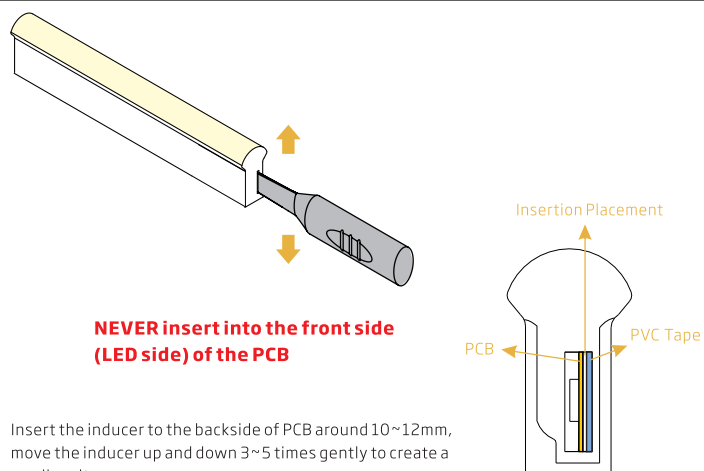
Pay attention the direction of the PC cover

## FXN 1129 | FLEXIBLE NEON

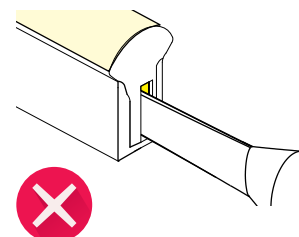
### SLEEVE FRONT CONNECTOR

### 3. Installation Steps

#### 3.1 Inducing a Cavity for Feed Connector

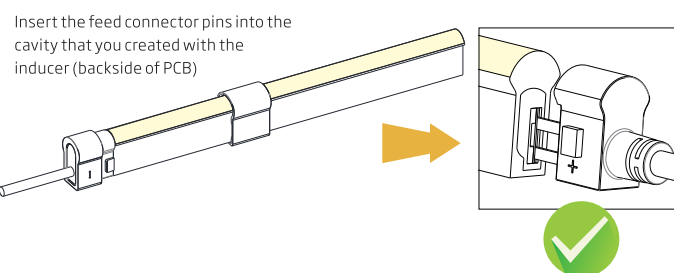


Insert the inducer into the backside of PCB

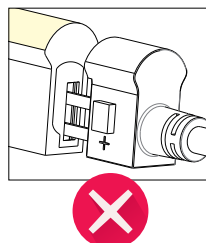


It will damage the light if insert into front side of PCB

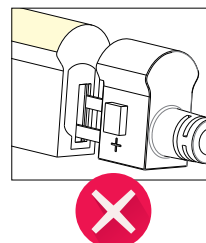
#### 3.2 Insert the Feed Connector



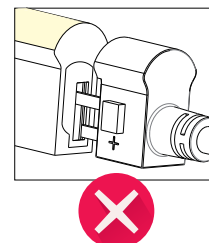
The following operations are prohibited:



Insert into the front side of the PCB



Insert crosswise into the PCB

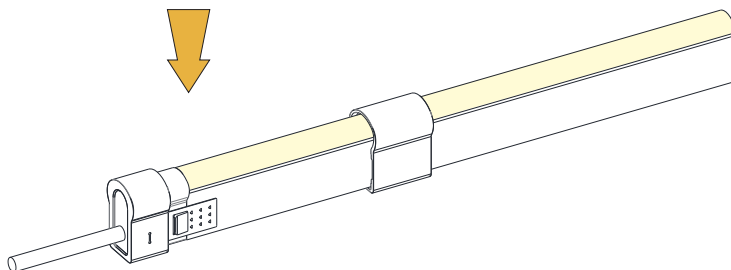
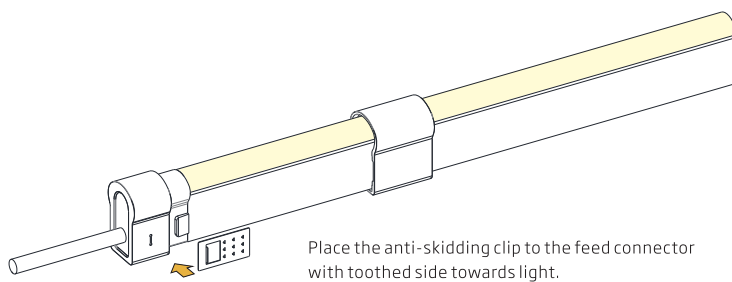


Insert crosswise into the PCB

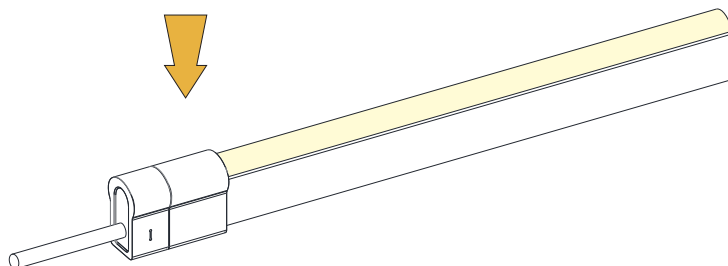
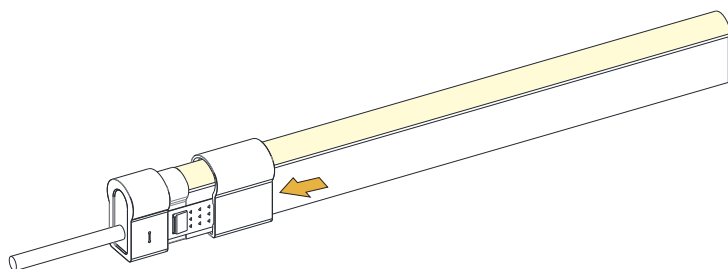
## FXN 1129 | FLEXIBLE NEON

### SLEEVE FRONT CONNECTOR

#### 3.3 Installation of Anti-Skidding Clip



#### 3.4 Slide back the PC Cover to cover the anti-skidding clip completely until it snaps in the feed connector.



Please energize the light to check its functionality after connector assembly.

## FXN 1129 | FLEXIBLE NEON

### SLEEVE END CAP

Please ignore these steps if the end cap has been assembled before delivery.

Note:

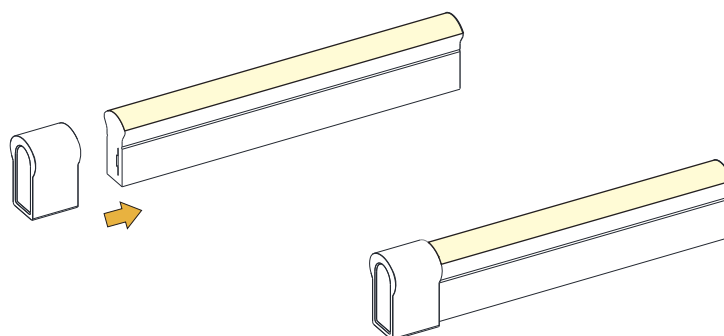
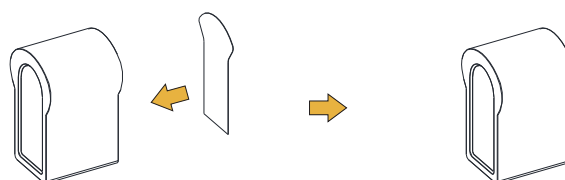
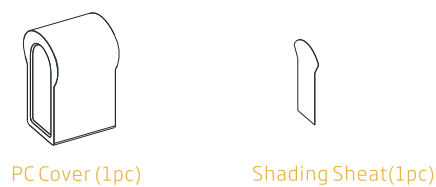
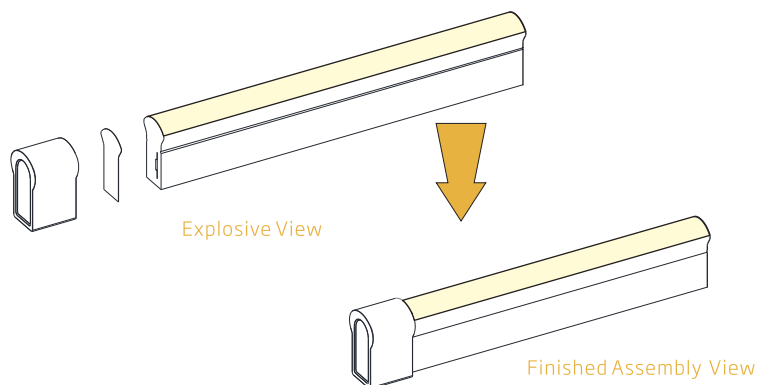
1. Repeated assembly or reuse of the connector may result in waterproof failure.

#### 1. Components of End Cap

#### 2. Installation Steps

##### 2.1 Placing Shading Sheat

##### 2.2 Insert the PC Cover



## FXN 1129 | FLEXIBLE NEON

### SNAP FRONT CONNECTOR

**Please ignore these steps if the front connector has been assembled before delivery.**

Note:

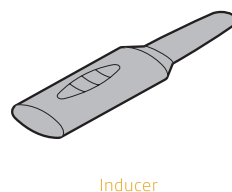
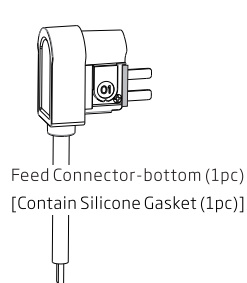
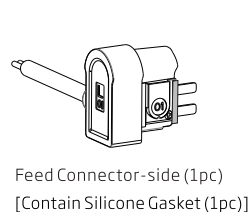
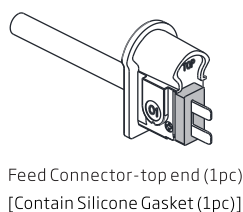
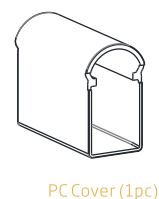
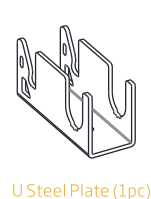
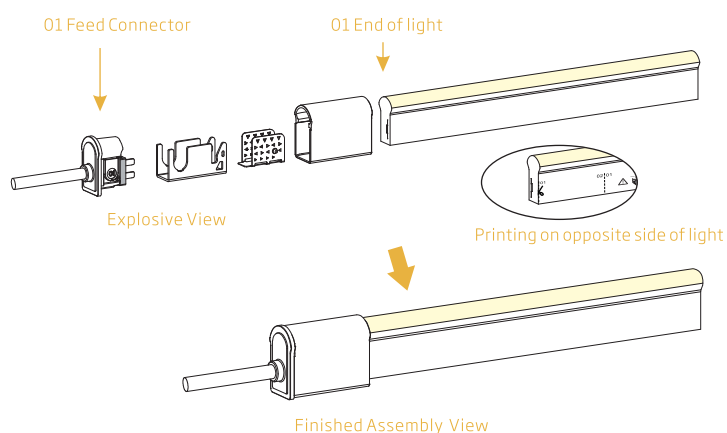
1. Repeated assembly or reuse of the connector may result in waterproof failure.

#### 1. Components of Front Connector

Note:

The light ends are marked with either an 01 or an 02. Always make sure to use an identically labeled connector for the appropriate direction.

#### 2. Tools



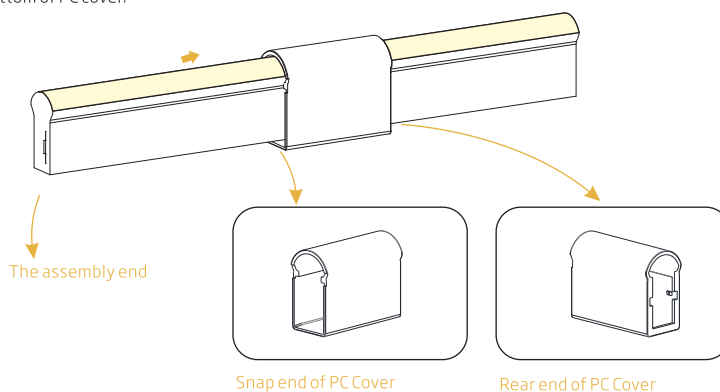
## FXN 1129 | FLEXIBLE NEON

### SNAP FRONT CONNECTOR

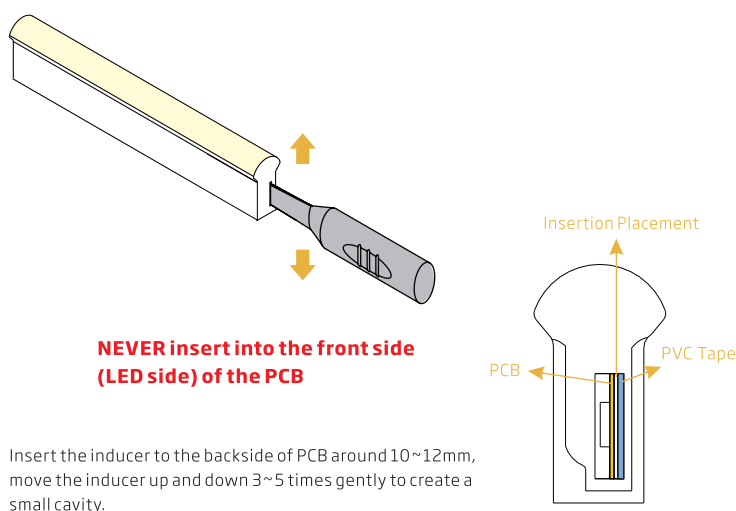
#### 3. Installation steps

##### 3.1 Placing PC Cover

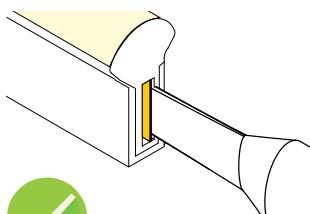
Pay attention to the direction marked on the bottom of PC cover.



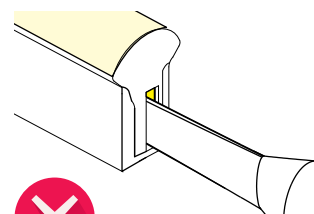
##### 3.2 Inducing a Cavity for Feed Connector



Insert the inducer to the backside of PCB around 10~12mm, move the inducer up and down 3~5 times gently to create a small cavity.



Insert the inducer into the backside of PCB

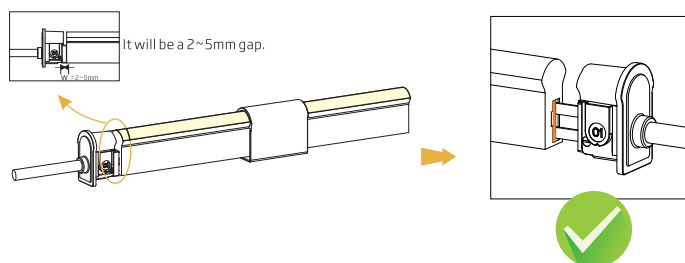


It will damage the light if insert into front side of PCB

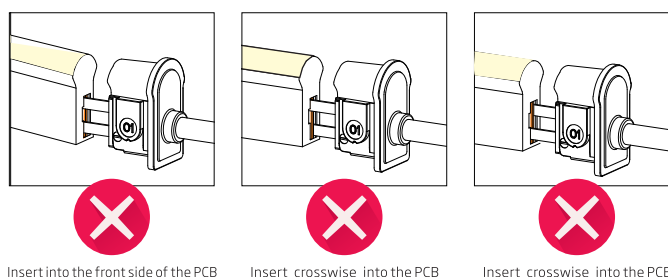
## FXN 1129 | FLEXIBLE NEON

### SNAP FRONT CONNECTOR

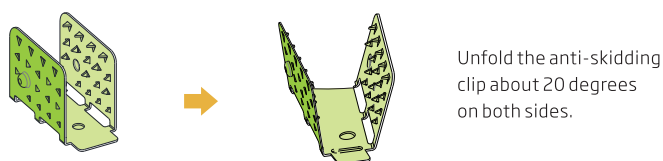
#### 3.3 Inserting the Feed Connector



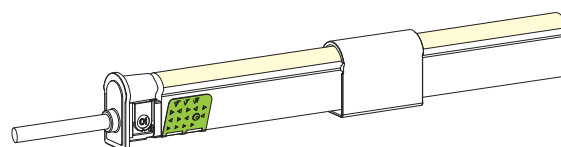
The following operations are prohibited:



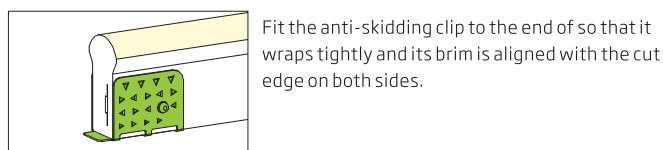
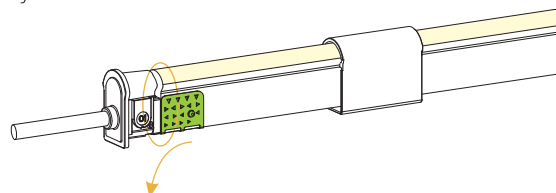
#### 3.4 Treatment of Anti-skidding Clip



#### 3.5 Installation of Anti-Skidding Clip



Place the anti-skidding clip onto the assembly end of the light.  
Pay attention to its direction

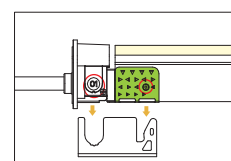
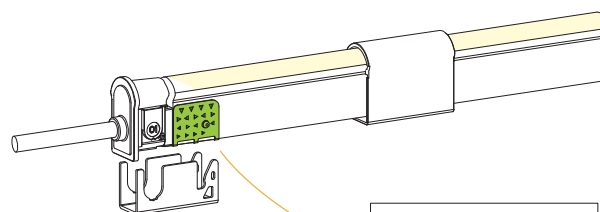


## FXN 1129 FLEXIBLE NEON

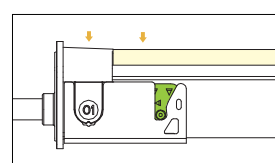
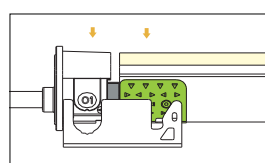
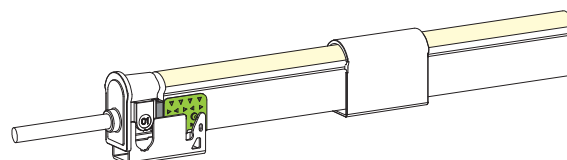
### SNAP FRONT CONNECTOR

#### 3.6 Installation of U Steel Plate and PC Cover

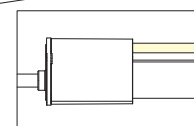
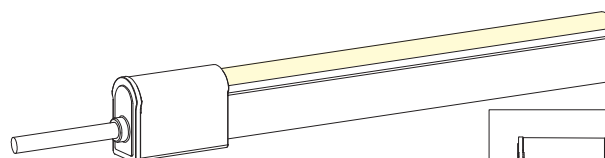
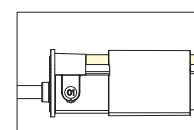
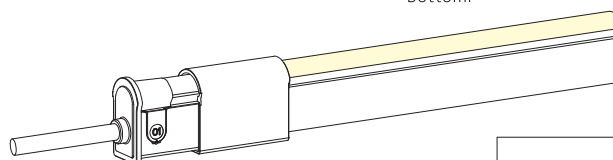
Please energize the light to check its functionality and do waterproof reliability testing (refer to "waterproof reliability testing instruction" video) after connector assembly.



Align the feed connector and anti-skidding clip with the U steel plate.



Press the feed connector and light downwards at the same time till bottom.



Slide back the PC cover till it snaps in the feed connector.



## FXN 1129 | FLEXIBLE NEON

### SNAP END CAP

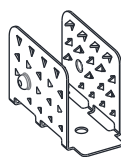
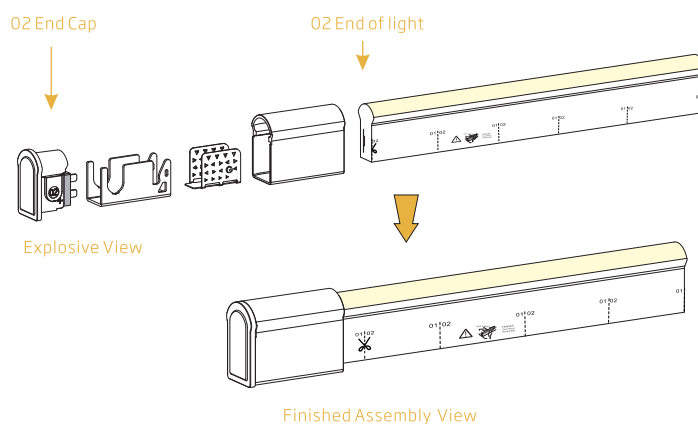
Please ignore these steps if the End Cap has been assembled before delivery.

Note:

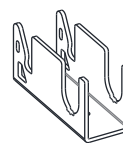
1. Repeated assembly or reuse of the connector may result in waterproof failure.

#### 1. Components of End Cap

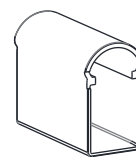
#### 2. Tools



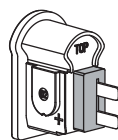
Anti-skidding Clip (1pc)



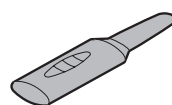
U Steel Plate (1pc)



PC Cover (1pc)



Tail Plug (1pc)  
[Contain Silicone Gasket (1pc)]



Inducer

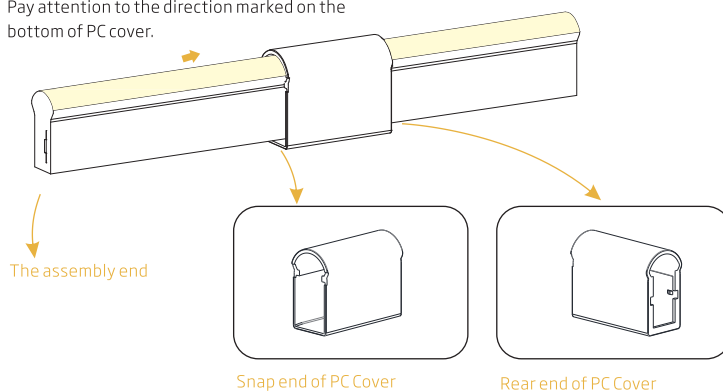
## FXN 1129 | FLEXIBLE NEON

### SNAP END CAP

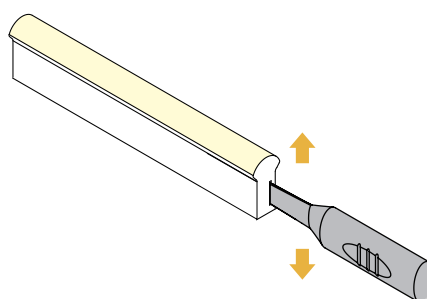
### 3. Installation steps

#### 3.1 Placing PC Cover

Pay attention to the direction marked on the bottom of PC cover.

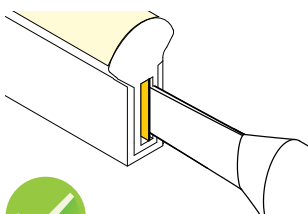
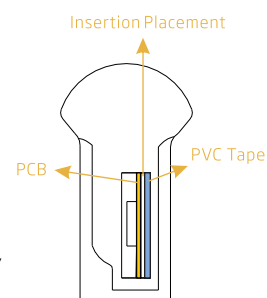


#### 3.2 Inducing a Cavity for Tail Plug

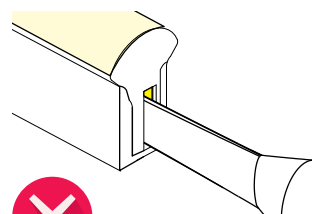


**NEVER insert into the front side (LED side) of the PCB**

Insert the inducer to the backside of PCB around 10~12mm, move the inducer up and down 3~5 times gently to create a small cavity.



Insert the inducer into the backside of PCB

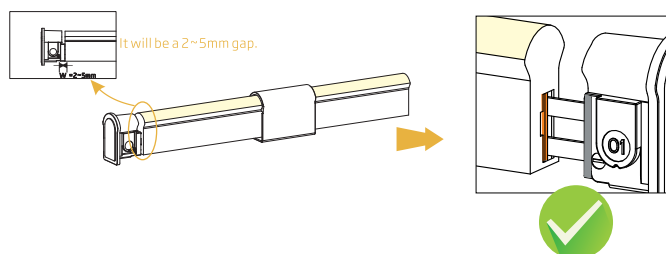


It will damage the light if insert into front side of PCB

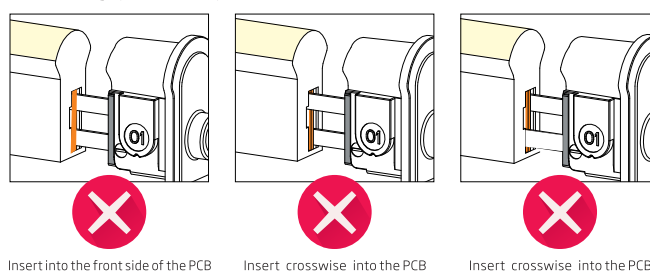
## FXN 1129 | FLEXIBLE NEON

### SNAP END CAP

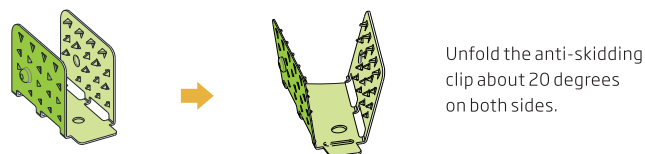
#### 3.3 Inserting the Tail Plug



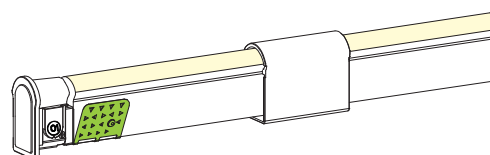
The following operations are prohibited:



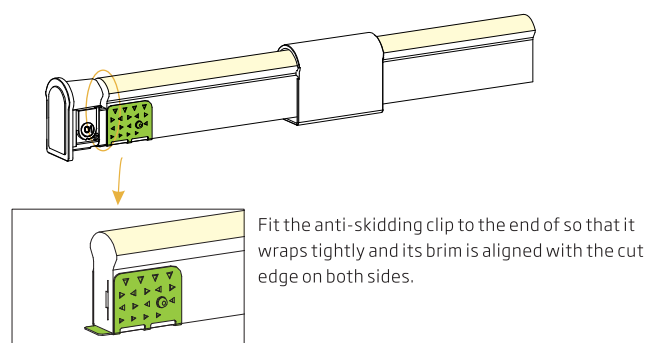
#### 3.4 Treatment of Anti-skidding Clip



#### 3.5 Installation of Anti-Skidding Clip



Place the anti-skidding clip onto the assembly end of the light.  
Pay attention to its direction



## FXN 1129 | FLEXIBLE NEON

### SWIVEL FRONT CONNECTOR

**Please ignore these steps if the front connector has been assembled before delivery.**

Note:

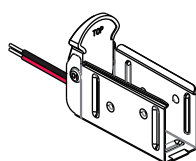
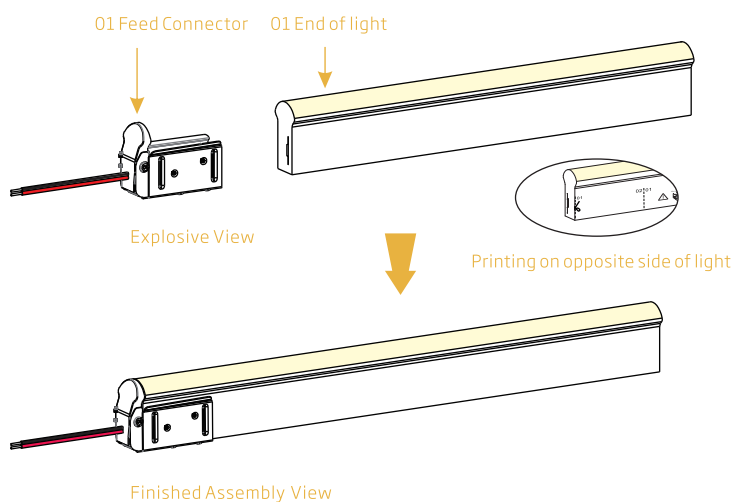
1. Never wet the assembly units or assemble with wet hands;
2. Please use the tools correctly;
3. Please pay attentions to personal security when using tools.
4. Failure to properly seal and assemble as instructed may void warranty.
5. Repeated assembly or reuse of the connector may result in waterproof failure.

## 1. Components of Front Connector

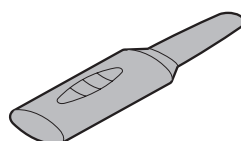
Note:

The light ends are marked with either an O1 or an O2. Always make sure to use an identically labeled connector for the appropriate direction.

## 2. Tools



Feed Connector-top end (1pc)  
[U Steel Plate (1pc)]



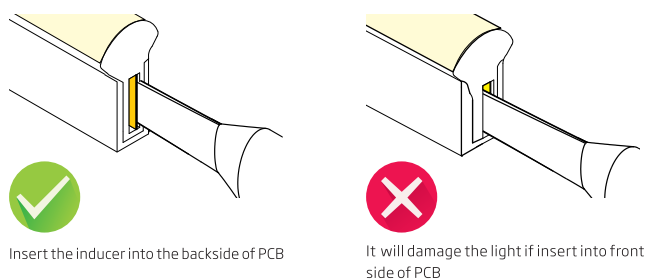
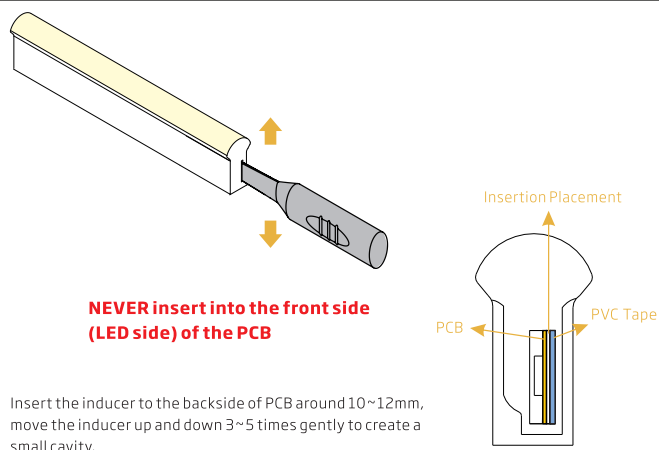
Inducer

## FXN 1129 | FLEXIBLE NEON

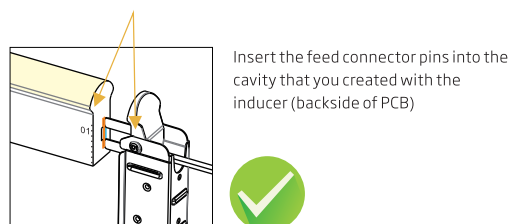
### SWIVEL FRONT CONNECTOR

## 2. Installation Steps

### 2.1 Inducing a Cavity for Feed Connector

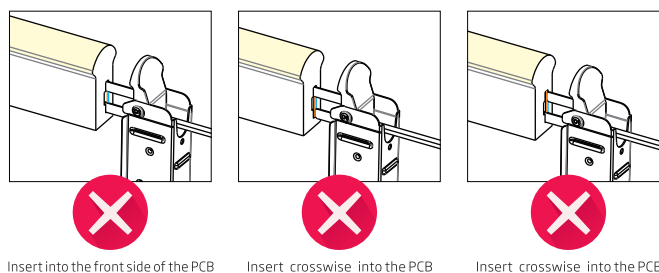


Ensure that the number designations on the connector matches that on the cut mark



The silicone gasket is attached on the feed connector.

The following operations are prohibited:



### 2.2 Inserting the Feed Connector

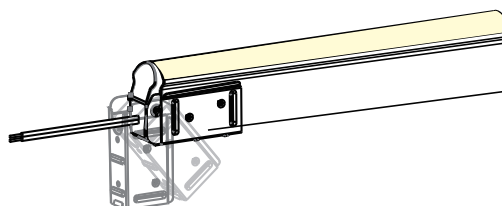
Rotate the feed connector pin to make its orientation vertical and insert it into the backside of PCB tightly.

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### SWIVEL FRONT CONNECTOR

#### 2.3 Rotate back till the light seat into the steel plate tightly

Apply power to test light after assembly



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### SWIVEL END CAP

**Please ignore these steps if the end cap has been assembled before delivery.**

Note:

1. Never wet the assembly units or assemble with wet hands;
2. Please use the tools correctly;
3. Please pay attentions to personal security when using tools.
4. Failure to properly seal and assemble as instructed may void warranty.
5. Repeated assembly or reuse of the connector may result in waterproof failure.

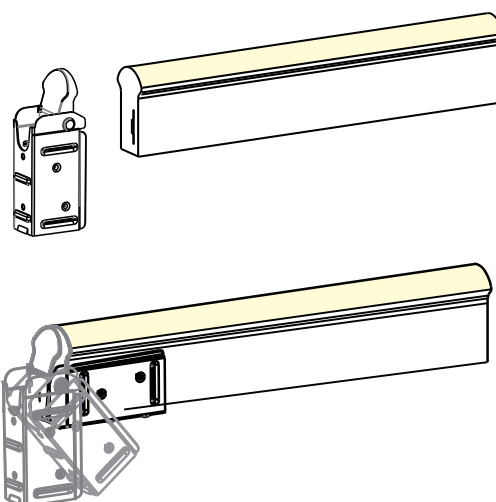
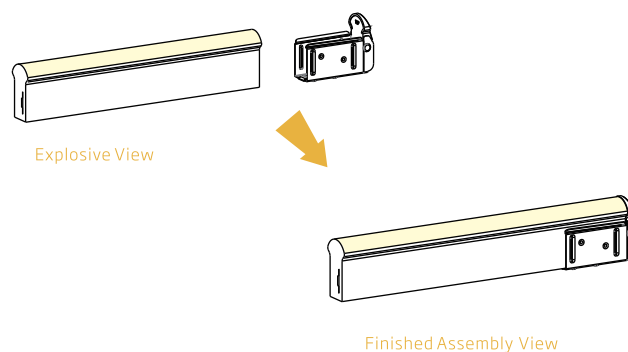
### 1. Components of End Cap

### 2. Installation Steps

**2.1 Rotate the end cap clockwise by 90 degrees.**

#### 2.2 Installation of Tail Plug

Put the light end and end cap together and rotate it to seat into the steel plate horizontally. Slide the light to the end cap and make sure they are attached tightly.



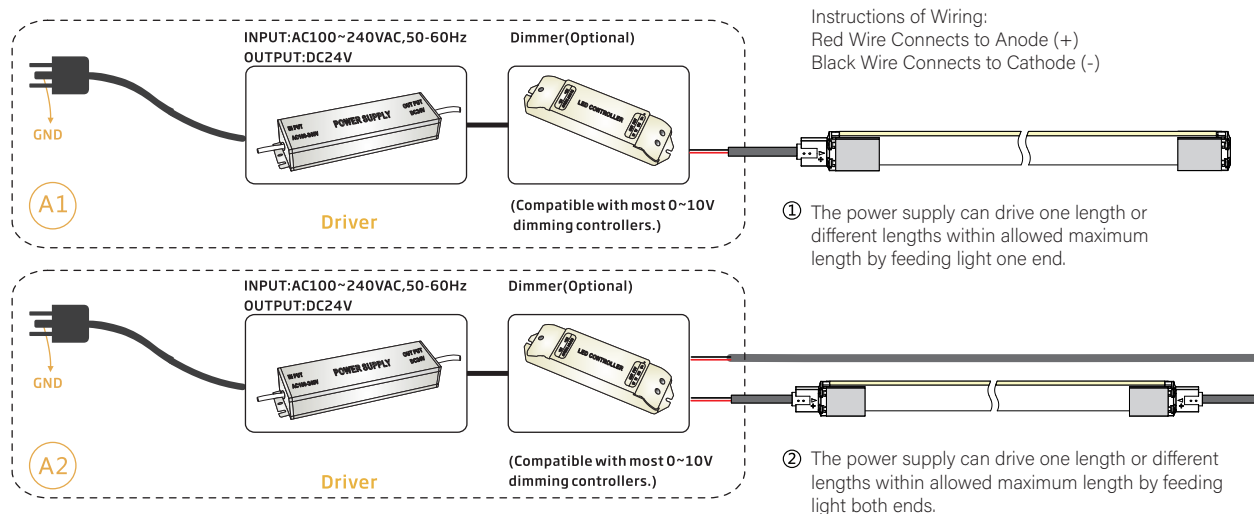
## FXN 1129 | FLEXIBLE NEON

### DIAGRAM OF LIGHT WIRING

#### 1. Monochrome Light Wiring

Note:

1. This LED Neon Flex Ribbon must be used in conjunction with DC24V power supply.
2. Always observe proper polarity
3. Ensure to add 20% buffer when sizing power supply.
4. Ensure that the power cable carried current is no greater than 80% of its capacity.
5. To minimise the voltage drop and keep light consistency, position power supply nearest to the power feed end of LED Neon Flex Ribbon and keep the power line as short as possible.





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### DIAGRAM OF LIGHT WIRING

#### 2. RGB Light Wiring

Note:

1. This LED Neon FLex Ribbon must be used in conjunction with DC24V power supply.
2. Always observe proper polarity. Polarity symbols should match on each component.
3. Ensure to add 20% buffer when sizing power supply.
4. Ensure that the power cable carried current is no greater than 80% of its capacity.
5. To minimise the voltage drop and keep light consistency, position power supply nearest to the power feed end of LED Neon Flex Ribbon and keep the power line as short as possible.
6. Compatible with RGB controller and DMX control.

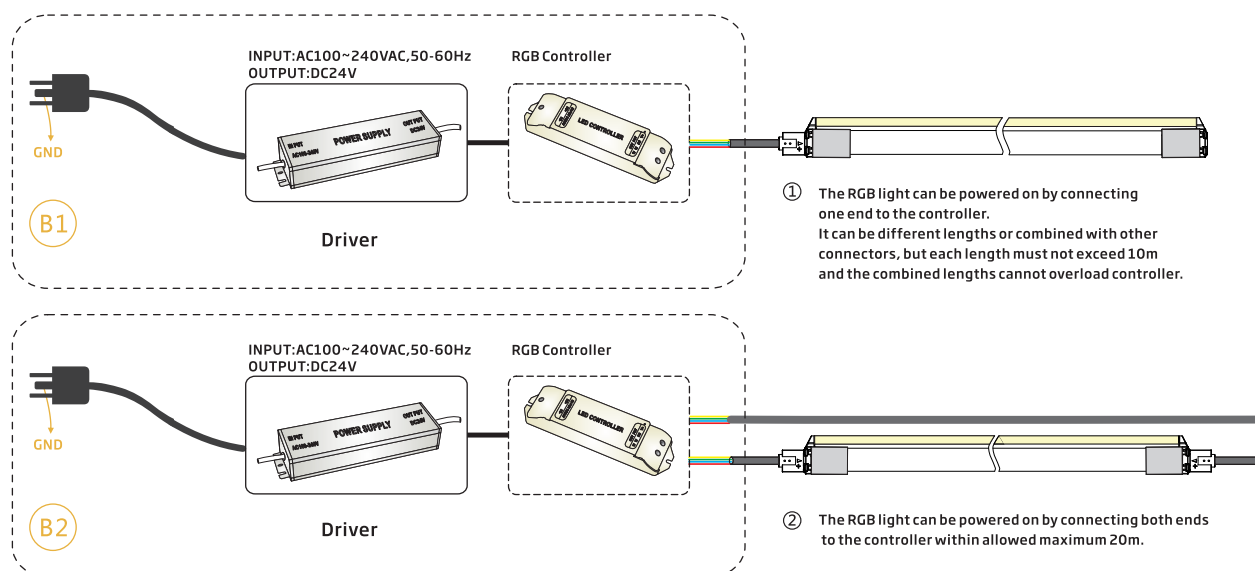
Instructions of RGB Light Wiring:

Yellow Wire Connects to Anode (+).

Red Wire Connects to the "R" Terminal, Cathode (-).

Green Wire Connects to the "G" Terminal, Cathode (-).

Blue Wire Connects to the "B" Terminal, Cathode (-).



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### DIAGRAM OF LIGHT WIRING

#### 3. Dynamic Light Wiring

Note:

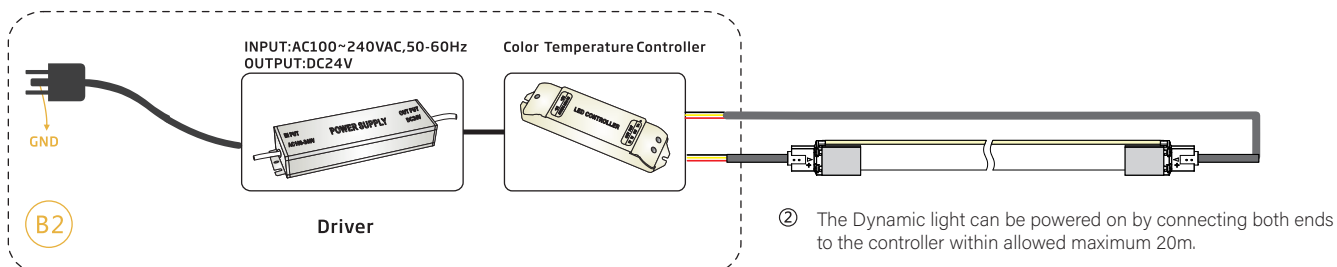
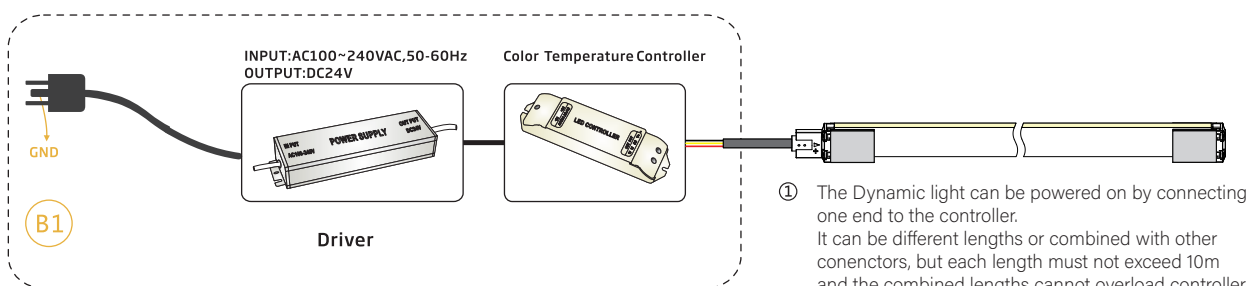
1. This LED Neon Flex Ribbon must be used in conjunction with DC24V power supply.
2. Always observe proper polarity. Polarity symbols should match on each component.
3. Ensure to add 20% buffer when sizing power supply.
4. Ensure that the power cable carried current is no greater than 80% of its capacity.
5. To minimise the voltage drop and keep light consistency, position power supply nearest to the power feed end of LED Neon Flex Ribbon and keep the power line as short as possible.
6. Compatible with RGB controller and DMX control.

Instructions of Dynamic Light Wiring:

Red Wire Connects to Anode (+).

Yellow Wire Connects to Low Colour Temperature Connection, Cathode (-).

Black Wire Connects to High Colour Temperature Connection, Cathode (-).



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### DIAGRAM OF LIGHT WIRING

#### 4. RGBW Light Wiring

Note:

1. This LED Neon Flex Ribbon must be used in conjunction with DC24V power supply.
2. Always observe proper polarity. Polarity symbols should match on each component.
3. Ensure to add 20% buffer when sizing power supply.
4. Ensure that the power cable carried current is no greater than 80% of its capacity.
5. To minimise the voltage drop and keep light consistency, position power supply nearest to the power feed end of LED Neon Flex Ribbon and keep the power line as short as possible.
6. Compatible with RGBW controller and DMX control.

Instructions of RGBW Light Wiring:

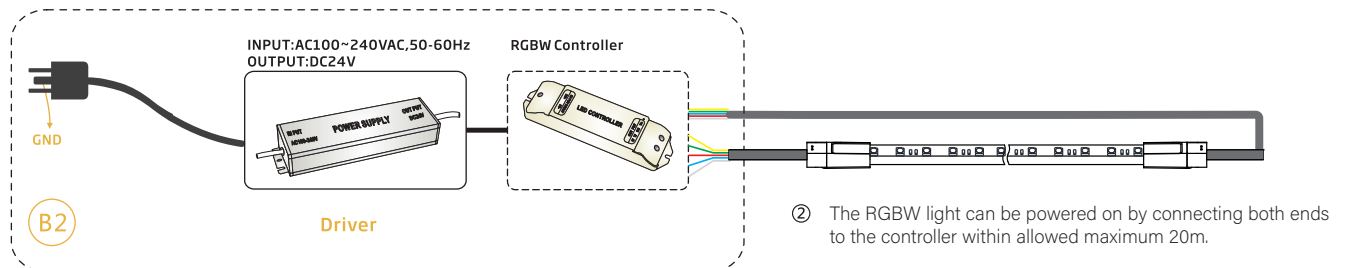
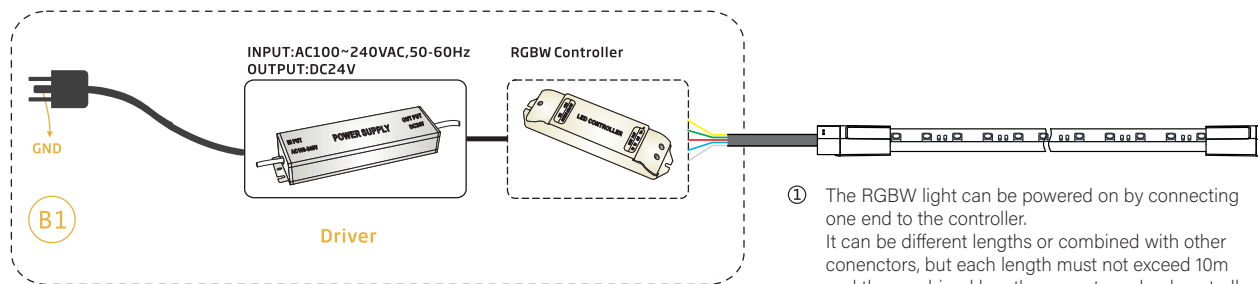
Yellow Wire Connects to Anode (+).

Red Wire Connects to the "R" Terminal, Cathode (-).

Green Wire Connects to the "G" Terminal, Cathode (-).

Blue Wire Connects to the "B" Terminal, Cathode (-).

White Wire Connects to the "W" Terminal, Cathode (-).



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## DIAGRAM OF LIGHT WIRING

## 5. Chasing Light Wiring

Note:

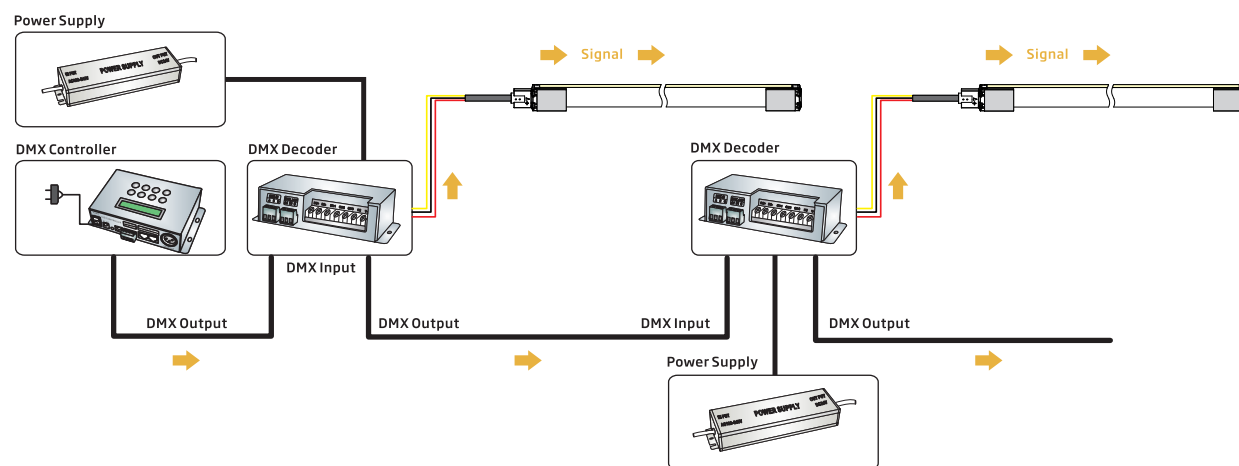
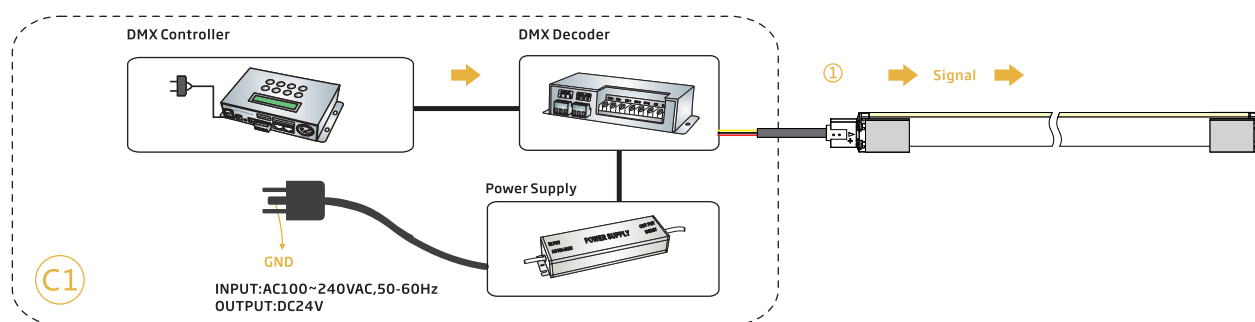
1. This LED Neon Flex Ribbon must be used in conjunction with a DC24V power supply and IC-UC2903 (2904) compatible controller or decoder.
2. Polarity symbols, GND, signal line connection should match on each component properly.
3. Ensure to add 20% buffer when sizing power supply.
4. Ensure that the power cable carried current is no greater than 80% of its capacity.
5. To minimise the voltage drop and keep light consistency, position power supply nearest to the power feed end of LED Neon Flex Ribbon and keep the power line as short as possible.
6. This Chasing Ribbon Light is one directional. The signal input direction is always indicated by an arrow marked on the side of light.

### Instructions for Chasing Light Wiring:

Bed Wire Connects to the "VCC" or Anode (+) Terminal.

Yellow Wire Connects to the "Signal" Terminal.

Black Wire Connects to the "GND" or Cathode (-) Terminal.



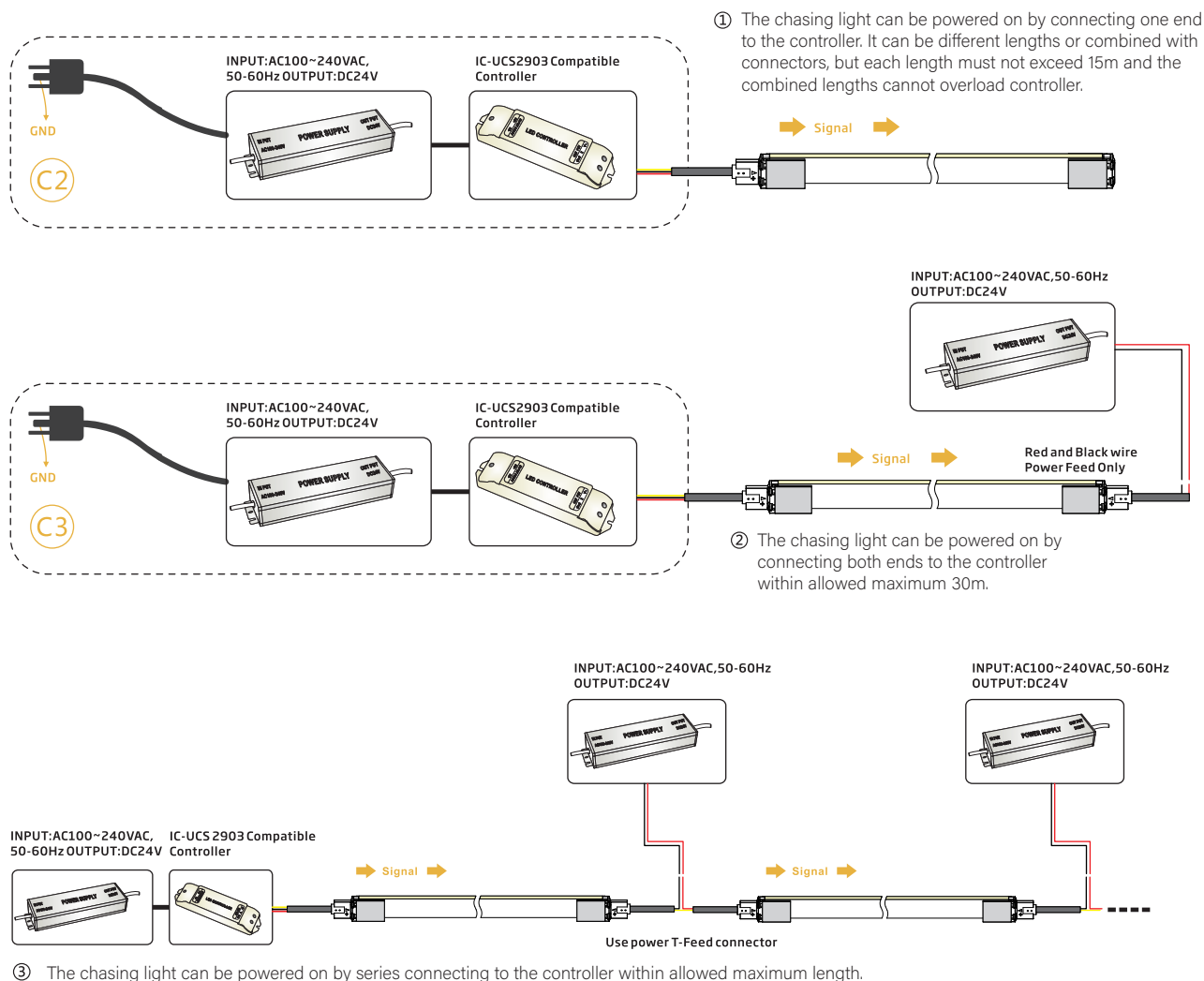
Note:

The Pixel Addressable Light series allows precise control of every cutting increment. To ensure IC chips receive strong control signals, please adhere to the parameters listed below.

- 1) To ensure strong signal the 3-wire signal cable should not exceed 10m.
- 2) For cable lengths longer than 10m, a signal amplifier must be used for strong signal transmission. Please ask our technical team for more details.

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### DIAGRAM OF LIGHT WIRING



Note:

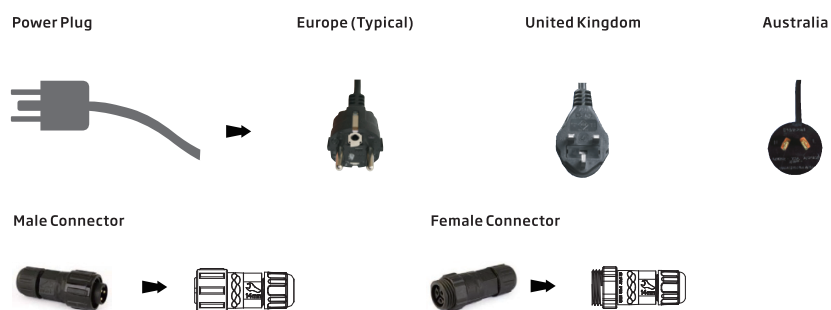
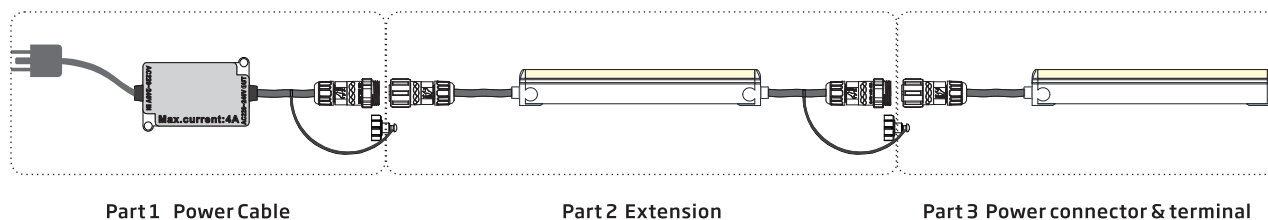
The Pixel Addressable Light series allows precise control of every cutting increment. To ensure IC chips receive strong control signals, please adhere to the parameters listed below.

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## FXN 1129 | FLEXIBLE NEON

### DIAGRAM OF LIGHT WIRING

#### 6. High Voltage Light Wiring



#### Part 1: Power Cable

High voltage power supply with fuse box for not UL listed light  
 Note: Please select the plug type based on your country electricity standard.  
 Part 1 can power Part 2 or Part 3 directly.

#### Part 2: Extension

With injection-moulded connectors on both ends, Part 2 can be used for light extension.

#### Part 3: Power connector & terminal

Connect with Part 1 directly

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## TR TROUBLESHOOTING

### The whole light doesn't work.

Check power supply is plugged, switched on and receiving power.  
 Check all light, dimmer or controller connections connection from the power supply to LED Neon Flex Ribbon.  
 Check polarity of all wire connections.  
 Make sure power supply output voltage is 24VDC  
 Check front connector is inserted into backside of PCB and properly assembled.

### Light emitting appear dim or dull at one end.

Check whether the output voltage of the power supply is lower than that of light.  
 Adjust the dimming level to the maximum.  
 Power from both ends or shorten lighting length to prevent voltage drop.

### Light emitting appear excessive brightness.

Check whether the output voltage power supply is higher than that of light.  
 Check whether the power grid is stable.

### If the first segment doesn't work.

Cut not in indicated cutting line or not in a straight line. Cut out and remove the first segment.  
 Damage caused to the first LED when inserting the front connector to the right side of PCB. Cut out the first segment and properly assemble connector.  
 Water ingress due to poor connector assembly could cause a short circuit of first segment. Replace length with a new one.  
 External impact damage inside LEDs. Only use your hands to install LED Neon Flex Ribbon into aluminium profile.

### LED Neon Flex Ribbon is flashing on and off.

Check the power supply to ensure it supports the length you are using. Select the appropriate strength or install and additional power supply to support your installation.  
 Check power supply output voltage is stable.  
 Check front connector is properly installed with good contact with the copper PCB.  
 Check proper controller is connected for light working.

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## LIMITED WARRANTY

LEDCTRL® hereby warrants, to the original purchaser, LEDCTRL® finished products to be free of manufacturing defects in material and workmanship for a standard period of **5 year** unless otherwise stated from the date of purchase, with an extended warranty available upon request. This warranty shall be valid only if the product is purchased from LEDCTRL®. During the warranty period, you are entitled to have the products repaired or replaced if the products fail to be of acceptable quality and damage occurred under normal use. It is the owner's responsibility to establish the date and warranty as acceptable evidence, at the time service is sought.

Warranty is applied by LEDCTRL®, LEDCTRL® retains the right to review the justification of the claim. The limited warranty is subjected to the following additional conditions:

- The product is properly handled, installed and maintained according to official latest instructions or manual of LEDCTRL® and applicable regulations and standards.
- Purchaser must notify LEDCTRL® in writing of a **BD CORRECTIVE ACTION REPORT** to specify the defect in question no later than 15 days after they were detected. Acceptance of the product shall not be denied on the grounds of insignificant defects. Claims for defects notified belatedly are excluded.
- A copy of the purchase invoice of the concerned products must be attached to submit to LEDCTRL®.
- The concerned products sample shall be returned back as required quantity to LEDCTRL® for inspection upon request and sent to the following address:

LEDCTRL® Warehouse  
3/482 Balmain Rd  
Lilyfield, Sydney  
NSW, 2040  
Australia

This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check-up. Parts not covered by this warranty include: fuses, external power supplies, third party items not manufactured by LEDCTRL®, accessories. During the period specified above, if any product covered by this limited warranty, LEDCTRL® determines to its satisfaction that such product failed to satisfy this warranty, LEDCTRL® will, at its own discretion, repair or replace the product or the defective part thereof.

For purpose of clarity, "repair or replace the product or the defective part thereof" does not include any removal or reinstallation costs or expenses, including, without limitation, any labor costs or expenses, shipping costs to return non-conforming products or any damages that may occur during the return of product to LEDCTRL®. A refund will not be provided for any warranty claim, but the purchaser may, at its discretion, require deducting the original purchase price of defective product or part from future purchase orders.

If LEDCTRL® chooses to replace the product and is not able to do so because it has been discontinued or is not available, LEDCTRL® may replace it with a comparable product. LEDCTRL® reserves the right to use new, reconditioned, refurbished, repaired, or remanufactured products or parts in the repair or replacement of any product covered by this limited warranty. Please note that lighting properties of replacement products may differ from original product due to technical advancements and usage-related changes in the light flux and light colour.

The warranty period is neither extended nor renewed if the product is repaired or replaced by LEDCTRL®.

LEDCTRL® reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products heretofore manufactured.

### Exclusion of Warranty:

- Warranty period has expired.
- Legal proof-of-purchase invoice or PO numbers are not provided, or are reasonably believed to have been forged or tampered with.
- Damage caused by improper installation, wiring, storage, transportation, incorrect use, bending or operation not in accordance with the official latest instructions or manual.
- Damage caused by unauthorized modification, dissection, soldering, or any deliberate damage or losses.
- Damaged caused by the carrier-in-transit, which will be handled under separate terms (Purchaser's designated consignee is responsible for all freight claims; LEDCTRL® will be available to assist in such matters if proving forward service).
- Accessories or attachments to the product that are not supplied or approved by LEDCTRL® and led to the damage.
- The products not used for the purpose for which designed or if any repairs, alterations or maintenance are made by any person not authorized by LEDCTRL®.
- Product silk printed serial numbers, crimped waterproof ring of strip lamps of tampering or removal.
- Conditions demonstrating misapplication, under/over voltage situations, extreme environmental conditions beyond those defined in the product specification.
- Abrasions and natural appearance variations (i.e. dusty, fouling, etc.) that do not affect the function of the product.
- Direct or indirect losses caused by force majeure (i.e. vandalism, natural disaster, warface, acts of terrorism, riots, fire, explosion, etc.).

### Freight

Transportation cost for return product will be carriage paid (at the cost of the claimant). If the product was found to be defective after inspection, LEDCTRL® will reimburse the freight cost by deducting it from future order and bear the cost of replacement or repaired product delivery. If the product was found not to be defective or exclusion of warranty, the claimant shall bear all the return expenses, and may be required to re-purchase the product if it requires replacement.

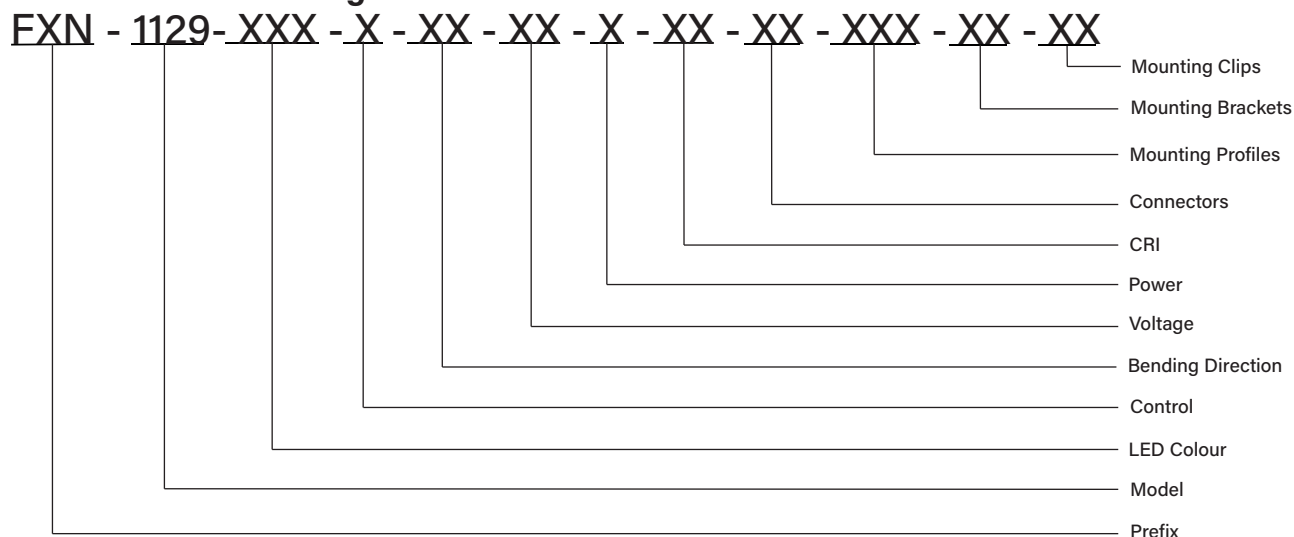
All products covered by this warranty were manufactured after January 1, 2025 and bear identifying code on the product itself. This warranty is the only written warranty applicable to LEDCTRL® Lighting Products supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.



## FXN 1129 | FLEXIBLE NEON

### APPENDIX

#### 1. Part Number Configuration



#### 2. Correlated Colour Temperature (CCT) For Example – FXN - 1121 - RGBW(27K) - X - VB - 24 - 6 - 80

##### ANSI STANDARD Nominal CCT Categories

| Nominal CCT | Target CCT and tolerance(K) | Target $D_{uv}$ | $D_{uv}$ Tolerance Range             |
|-------------|-----------------------------|-----------------|--------------------------------------|
| 2200K       | 2238 ±102                   | 0.0000          | Tx:CCT of the source                 |
| 2500K       | 2460 ±120                   | 0.0000          | For Tx < 2870K                       |
| 2700K       | 2725 ±145                   | 0.0000          | 0.000 ± 0.0060                       |
| 3000K       | 3045 ±175                   | 0.0001          | For Tx ≥ 2870K                       |
| 3500K       | 3465 ±245                   | 0.0005          | $D_{uv}(Tx) \pm 0.0060$              |
| 4000K       | 3985 ±275                   | 0.0010          | where                                |
| 4500K       | 4503 ±243                   | 0.0015          | $D_{uv}(Tx) = 57700 \times (1/Tx)^2$ |
| 5000K       | 5029 ±283                   | 0.0020          | -44.6 × (1/Tx)                       |
| 5700K       | 5667 ±355                   | 0.0025          | +0.00854                             |
| 6500K       | 6532 ±510                   | 0.0031          |                                      |

##### Remark:

- 1)  $T_r$  is chosen to be at 100K steps (2300, 2400, ..., 6400K), excluding the ten nominal CCTs listed in Table 1.
- 2)  $\Delta T = 1.1900 \times 10^6 \times T^3$ .  
 $1.5434 \times 10^4 \times T^2 + 0.7168 \times T - 902.55$
- 3) Same as in the  $D_{uv}$  Tolerance Range.

**Flexible CCT**  $T_F \pm \Delta T^{(2)}$   $D_{uv} T_F^{(3)}$   
(2200-6500K)

#### 3. Chart of Recommended Feed Cable Length According to Power Consumption

This chart only applicable to input voltage of 24V DC

| WattS of Light | 22AWG / 0.34mm <sup>2</sup> | 20AWG / 0.53mm <sup>2</sup> | 18AWG / 0.82mm <sup>2</sup> | 17AWG / 1.04mm <sup>2</sup> | 16AWG / 1.38mm <sup>2</sup> | 14AWG / 2.07mm <sup>2</sup> | 12AWG / 3.29mm <sup>2</sup> | 10AWG / 5.62mm <sup>2</sup> |
|----------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 10W            | 36m                         | 60m                         | 100m                        | 120m                        | 140m                        | 240m                        | 400m                        | 600m                        |
| 20W            | 18m                         | 30m                         | 50m                         | 60m                         | 70m                         | 120m                        | 200m                        | 300m                        |
| 30W            | 12m                         | 20m                         | 30m                         | 38m                         | 45m                         | 80m                         | 130m                        | 200m                        |
| 40W            | 8m                          | 15m                         | 22m                         | 28m                         | 35m                         | 60m                         | 95m                         | 140m                        |
| 50W            | 6m                          | 12m                         | 18m                         | 22m                         | 28m                         | 48m                         | 75m                         | 105m                        |
| 60W            | 5m                          | 10m                         | 15m                         | 18m                         | 22m                         | 36m                         | 60m                         | 88m                         |
| 70W            | /                           | 8m                          | 12m                         | 14m                         | 18m                         | 30m                         | 50m                         | 72m                         |
| 80W            | /                           | 6m                          | 10m                         | 11m                         | 14m                         | 24m                         | 40m                         | 58m                         |
| 90W            | /                           | 4m                          | 7m                          | 8m                          | 10m                         | 18m                         | 30m                         | 45m                         |
| 100W           | /                           | /                           | 5m                          | 6m                          | 7m                          | 12m                         | 22m                         | 32m                         |
| 110W           | /                           | /                           | 3m                          | 4m                          | 5m                          | 8m                          | 15m                         | 22m                         |
| 120W           | /                           | /                           | 2m                          | 2.5m                        | 3m                          | 0m                          | 8m                          | 12m                         |

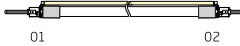
##### Note:

1. Please adhere to parameters in below chart, feed cable length longer than what specified here will create voltage drop and eventually affect the lumen output of light.
2. The 0.3m feed cable length attached to front connector is not included in this chart.
3. Feed cable length over 10m is NOT recommended unless special circumstance, especially for pixel addressable lights.

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### LOADING CHART

#### 4. Loading Chart

| Type.          | Rated Power /mtr | Power Supply                                                                                     |      |      |      |      |      |      |                                                                                                             |      |      |      |      |
|----------------|------------------|--------------------------------------------------------------------------------------------------|------|------|------|------|------|------|-------------------------------------------------------------------------------------------------------------|------|------|------|------|
|                |                  | 35w                                                                                              | 60w  | 75w  | 80w  | 100w | 120w | 150w | 120w                                                                                                        | 150w | 185w | 240w | 320w |
| FXN 1129       | 6.5w/7.2w/8w     | 3m                                                                                               | 6m   | 7.5m | 8m   | 10m  | 12m  | 15m  |                                                                                                             |      | 18m  | 24m  | 30m  |
|                | 10.6w/11w/12w    | 2m                                                                                               | 3.5m | 4.5m | 5m   | 6m   | 7m   | 10m  |                                                                                                             |      | 12m  | 14m  | 20m  |
|                | 15w              | 2m                                                                                               | 3m   | 4m   | 4.2m | 5m   |      |      | 6m                                                                                                          | 8m   | 10m  |      |      |
| Energising Way |                  | DC input  01/02 |      |      |      |      |      |      | DC input  01 02 DC input |      |      |      |      |

- Note:
- These are the light maximum recommended running length subject to selected power supply.
  - For example: it is recommended to use one 80W power supply loading maximum 8m light (7.2w/m) or maximum 5m light (12w/m) by energising the light one end.