

OPERATION INSTRUCTION

Pre-Installation

- + Precaution
- + Unpacking
- + Lighting Test
- + Connector
- + Cable
- + Profile

Installation

- + Light Installation
- + Light Uninstallation
- + Wiring Diagram

-  Wrong operation, Not allowed.
-  Correct operation, please comply with it strictly.

FXN 1617F FLEXIBLE NEON

Pre-Installation – Precaution

Temperature



Ambient Working Temperature

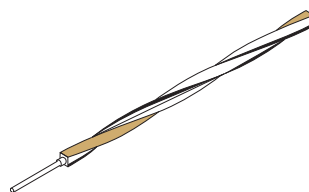
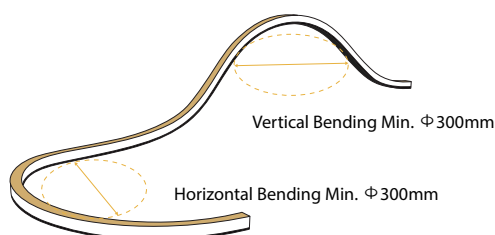
16W~22W	-40~-45 °C	-40~-113 ° F
13W~15W	-40~-50 °C	-40~-122 ° F
10W~12W	-40~-55 °C	-40~-131 ° F
7W~9W	-40~-60 °C	-40~-140 ° F
≤6W	-40~-65 °C	-40~-149 ° F



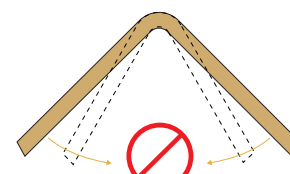
Max. Mounting Surface Temperature

85 °C/185 ° F

Bending



Max. Twist Degree: 360°



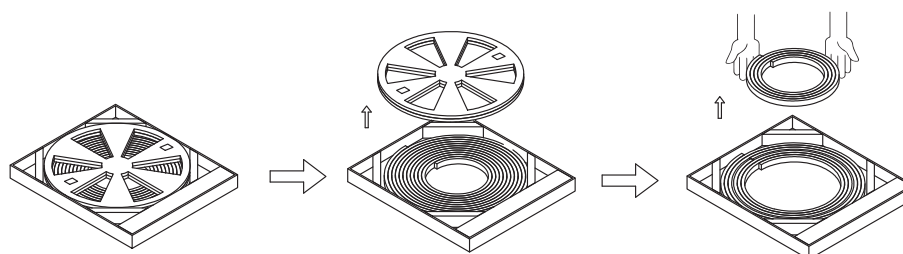
Do not force fold

Please note and follow the bending mark on the light body, otherwise it may cause the PCB damage and lead to the failure of light.

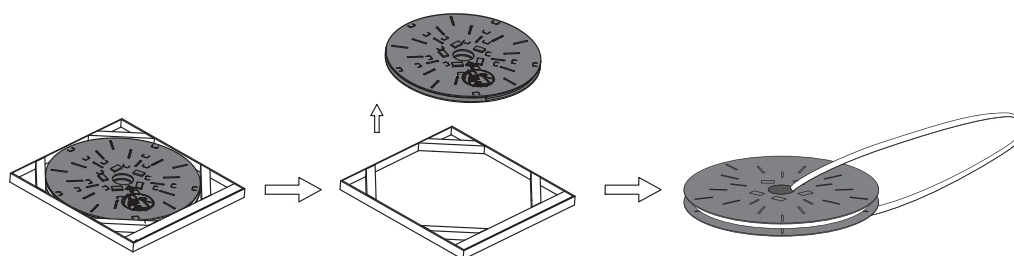


Pre-Installation – Unpacking

#1

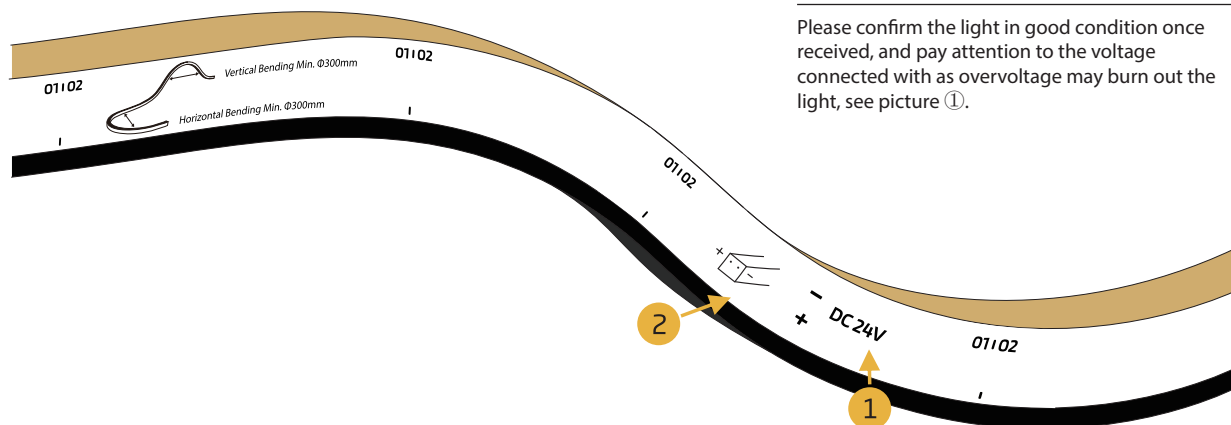


#2



FXN 1617F FLEXIBLE NEON

Pre-Installation – Lighting Test



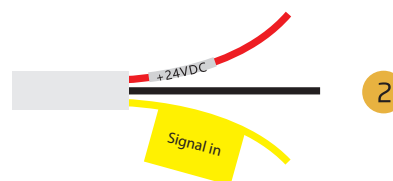
Check Working Voltage

Please confirm the light in good condition once received, and pay attention to the voltage connected with as overvoltage may burn out the light, see picture ①.

Confirm "+", "-", Signal Wire

For pixel product, distinguish the polarity and signal direction as per marks on the cable. See picture ②. The touch of positive wire(+) and yellow signal wires are prohibited when powered on, otherwise the inside IC can be disabled. Please separate them as picture ②.

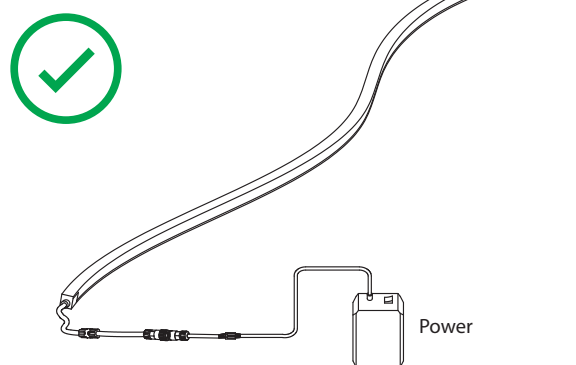
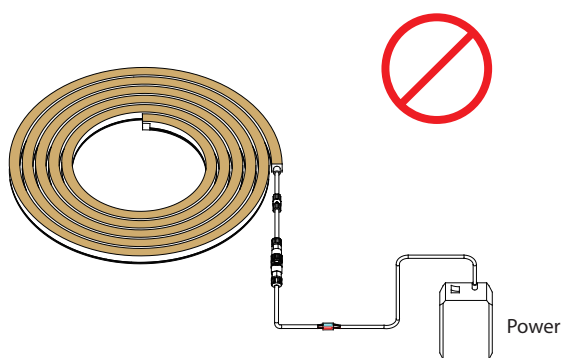
Please distinguish signal in (+) and signal out (-) marks when connecting the wires, otherwise the signal will not be transmitted.



Lighting

Please do not light up the products over 30 minutes in the coil package, otherwise it may cause the overheating of light and lead to the damage on housing material and inside electronic components.

If you need to do some aging test for the light, please uncoil it to ensure enough space for heat dissipation.

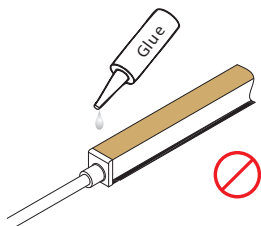


For pixel products in white, the brightness will be one-third of the normal one when powered on disconnected with signal wire, while blue will be displayed when it comes to pixel products in RGB or RGBW.

FXN 1617F FLEXIBLE NEON

Pre-Installation – Connector

Glue on Connector

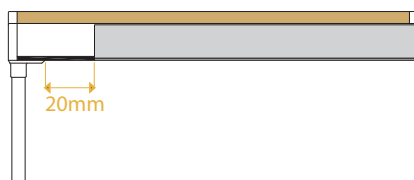


Do not glue the connector on the mounting surface as tear may occur at the connector due to expansion and contraction, leading to water ingress and product failure.

Placement of Connector

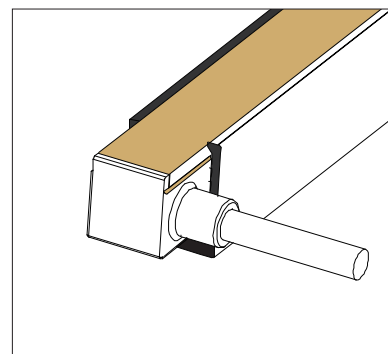
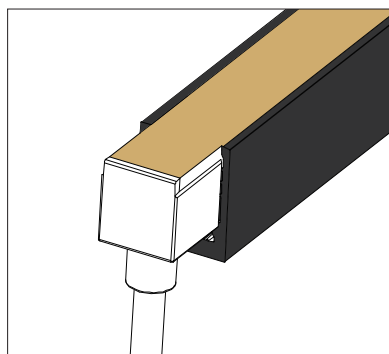
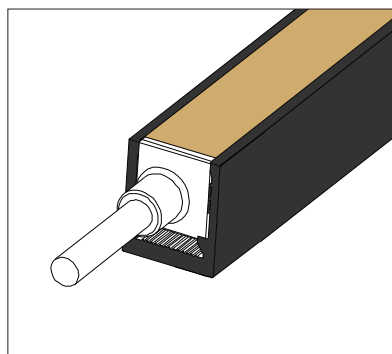
When using aluminum profile, please reserve around 20mm distance between the connector and mounting profile, otherwise the connector might be damaged due to contraction and expansion of the light and displacement of mounting profile, thus resulting in water ingress and the failure of product.

Aluminum Profile



Anole™ Profile

When using Anole™ profile, the connectors can be put into the profile if it is necessary except for the ones with bottom cable entry and side cable entry.

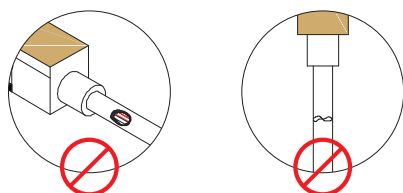


FXN 1617F FLEXIBLE NEON

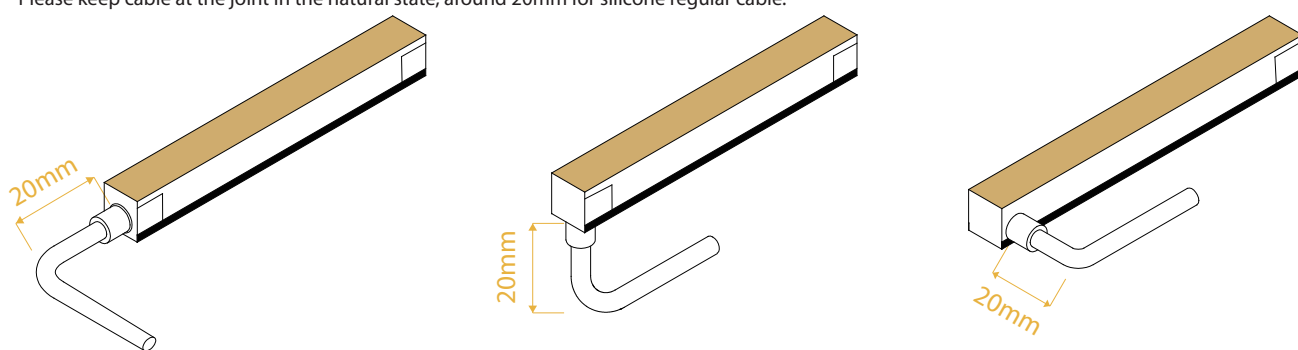
Pre-Installation – Cable

Cable Requirement

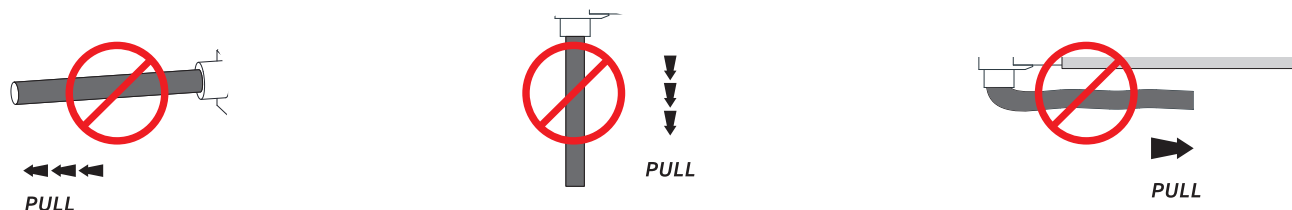
Make sure no scratches on the cable sheath, otherwise water ingress may occur.



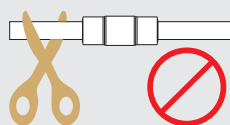
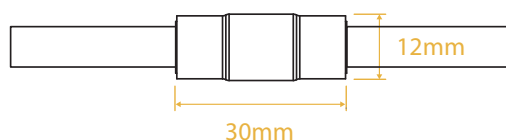
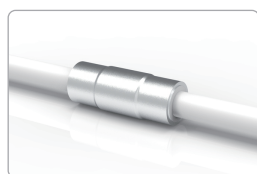
Please keep cable at the joint in the natural state, around 20mm for silicone regular cable.



Do not pull the cable, otherwise it may disable the function of the connector and lead to water ingress.



Anti-wicking Ferrule

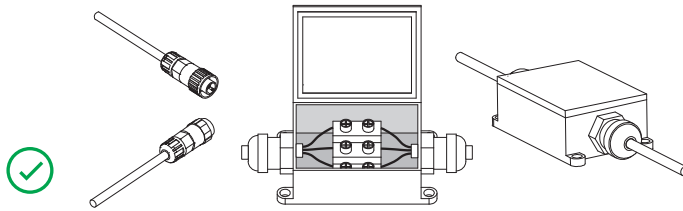


The removal of anti-wicking ferrule will increase the risk of water ingress and void the warranty out of it.
The anti-wicking ferrule is designed to lower the risk of water ingress from the cable in case of inadequate waterproof treatment on site. Note that waterproof performance can't solely rely on the anti-wicking ferrule of connector, waterproof treatment at cable joint is also important.

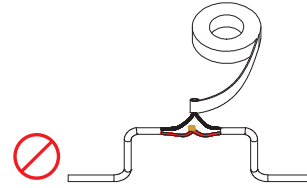
FXN 1617F FLEXIBLE NEON

Pre-Installation – Cable

Cable Requirement



Please use the professional waterproof box or waterproof connector to do the cable junction.



Wrapping the cable using adhesive plaster alone could be the cause of water ingress.

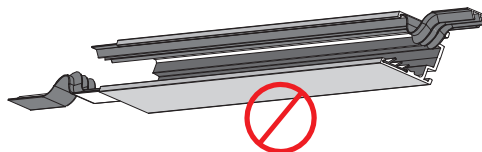
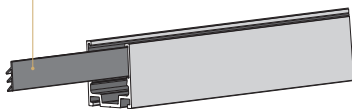
Pre-Installation – Profile

Profile Processing

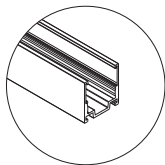
1. Do not process the profile without any protection by finishing or coating, etc.
2. If any similar circumstance demands, please keep the profile clean after processing.
3. For the profile involved the serrated tape, please take its serrated tape out to avoid being deformed and useless affected by the high temperature, or discuss with the manufacturer to separate the package in advance.

Serrated Tape

Deformed by high temperature

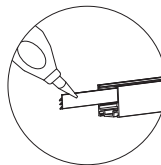


Profile Cutting



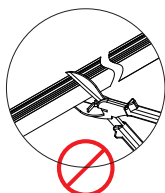
Aluminum Profile

Make sure the cross-section of profile is smooth without any burrs when cutting, otherwise the light housing will be impaled and cause water ingress.



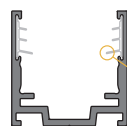
Serrated Aluminum Profile

For the profiles involved serrated tape, in case of any drop of serrated tape after cutting, please insert and fix it to the profile by a few adhesive glues on its backside, 5~8mm diameter of touching area is enough. Make sure its round head on the edge is downward when putting back.



Anole™ Profile

No cutting is advised, otherwise the metal inside will get rusted.

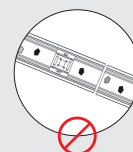
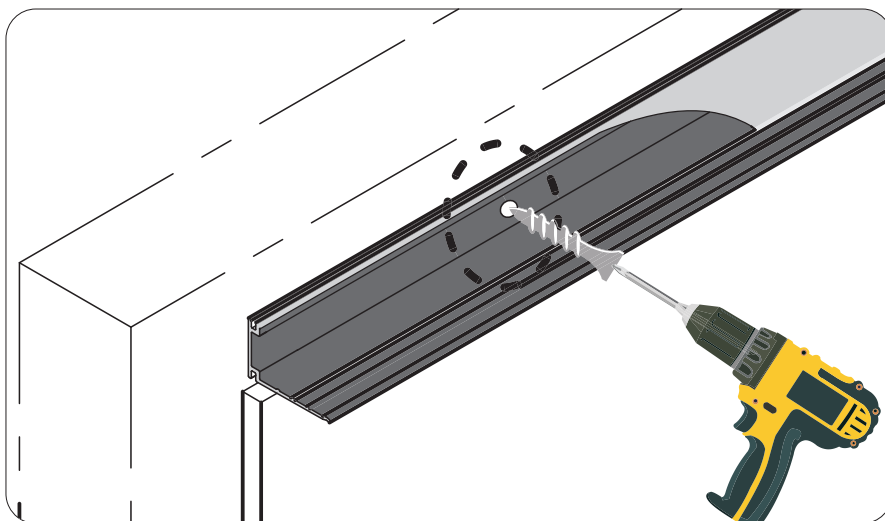


Round Head

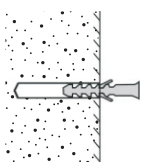
FXN 1617F FLEXIBLE NEON

Profile Installation

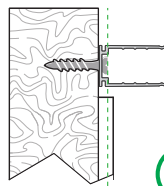
Aluminum Profile



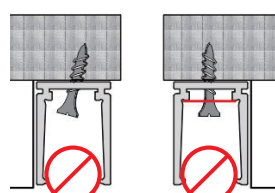
Make sure no debris in the profile before installation to avoid the light housing being impaled and cause water ingress.



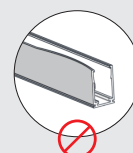
Place the rubber expansion bolt to assist with the screw fixation if the mounting surface is rigid.



Install the screw into position and ensure the screw head is in line with the base of profile.

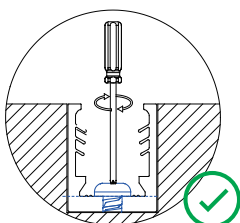


Make sure no bulges on the slot to avoid the damage on the light and water ingress.

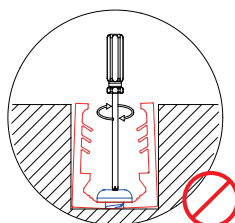


Do not use the seriously deformed profile.

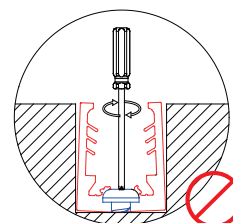
Bendable Anole Profile



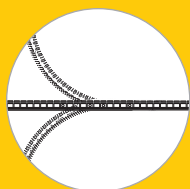
Make sure the screw is driven in place.



Do not overly tighten the screw as it might crush the silicone housing of the Anole™ profile.



Do not overly tighten the screw as it might deform the inside structure of the Anole™ profile.

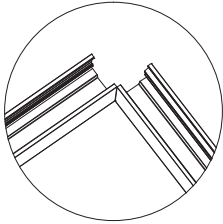


It's recommended to mount in place at a time when using the bendable profile in case of any break due to the frequent repeated shaping.

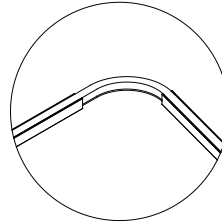
FXN 1617F FLEXIBLE NEON

Profile Jointing

Profile Jointing For Right Angle



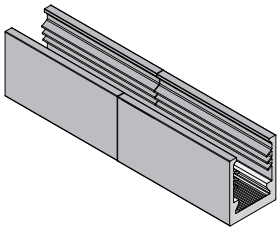
The profiles can be jointed to a right angle only if there are two pieces of lights connected to be a right angle.



For the curve shaping of light, make sure to leave enough space to separate profiles in between or use the bendable profile instead.

Profile Jointing For Straight Line

Bendable Anole Profile

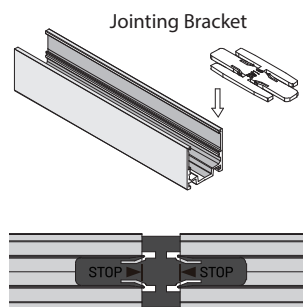


Space is not needed between Anole™ profiles

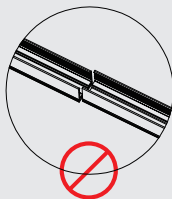
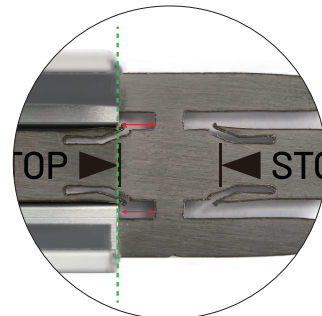
Aluminum Profile Jointing



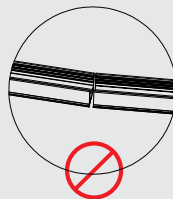
Please reserve around 5mm for profile joint to enable enough space for contraction and expansion.



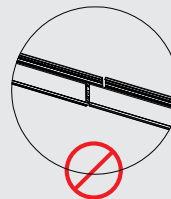
Please do not push the joint bracket all the way, leave some space as the picture shows for contraction and expansion.



Angular Misalignment



Parallel Vertical Misalignment



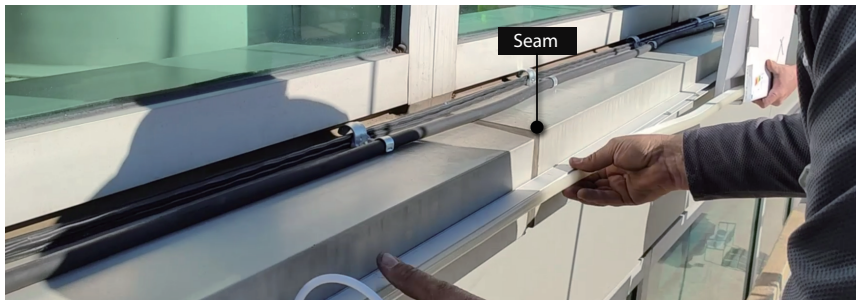
Parallel Horizontal Misalignment

Above wrong misalignments will make the light improperly bent, and lead to the wrinkle or fracture on PCB.

FXN 1617F FLEXIBLE NEON

Profile Jointing

Joint Structure On Mounting Surface



If the mounting surface is with joint structure, please choose any of below solutions for installation to avoid some damage caused by contraction and expansion.

Solution 1:

Make sure the mounting profile goes across the seam and fix screws on both sides of the seam.

Side View

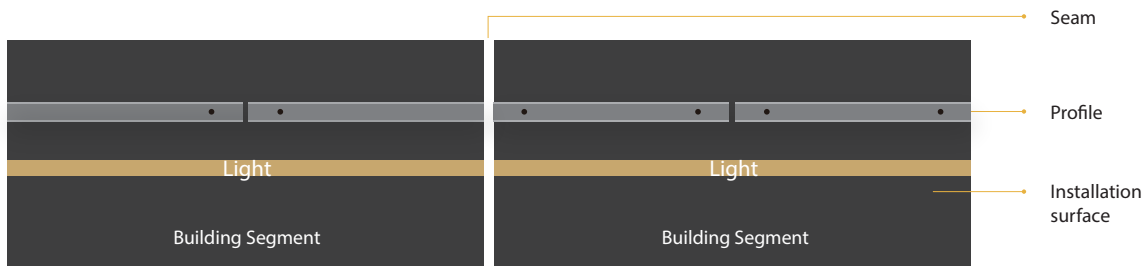


Top View



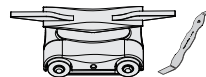
Solution 2:

Make sure the light extends as long as the building segment, and the profile ends at the seam.

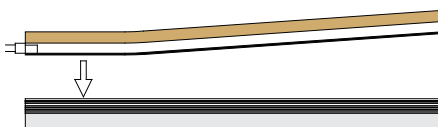


Installation – Light Installation

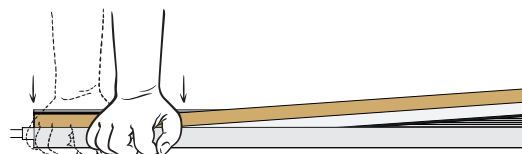
It's not recommended to install the light repeatedly, otherwise the light inside might be damaged.



Note: if you have bought the Mounting & Demounting tool to help installation, please refer to its user manual.



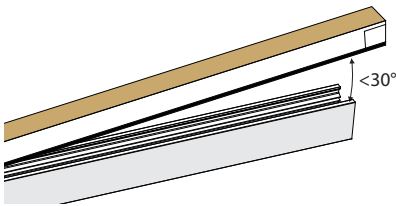
Start installing with one end of the light. Make sure the light fits into the profile vertically.



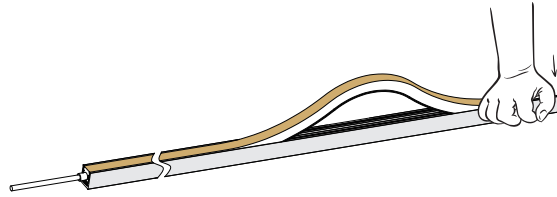
Press the light all the way into the profile by the palm instead of the fingers.

FXN 1617F FLEXIBLE NEON

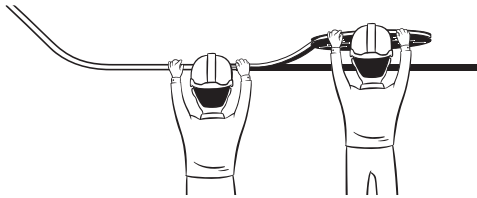
Installation – Light Installation



Make sure the angle between the light and profile is not bigger than 30°, otherwise inside PCB might be damaged.

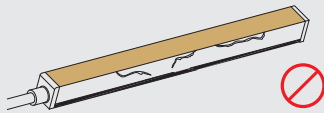


Install the light from the other end of the profile when there is 2 meters left. This helps to align the light with the profile.

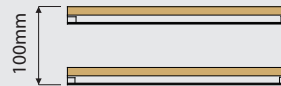


When the light is over 2m, make sure somebody helps to lift the light, in case the heavy weight of light itself generates too small bending angle or twisting, which may damage inside PCB.

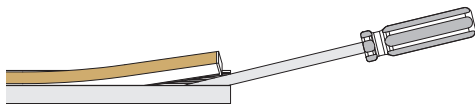
Make sure the light body is not scratched during installation, otherwise the light housing will be impaled and cause water ingress.



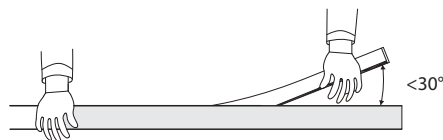
Please keep at least 10cm apart for the parallel installation of light, otherwise it may cause the overheating and lead to the damage on housing material and electronic components.



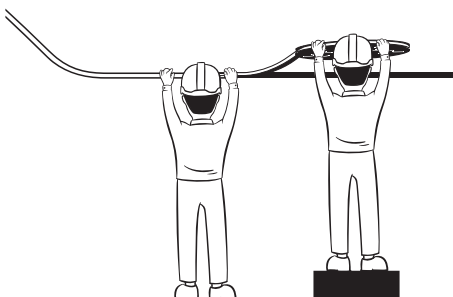
Installation – Light Uninstallation



Prepare a screwdriver, and put the screwdriver at the bottom of light.
Move the screwdriver and unclench the light upwardly.
Be careful the angle between the light and profile should not be bigger than 30°.



Once the end of light is out, hold both sides of light by hand and pull it out along the profile slowly and orderly.
Make sure the angle between the light and profile is not bigger than 30°, otherwise inside PCB might be damaged.

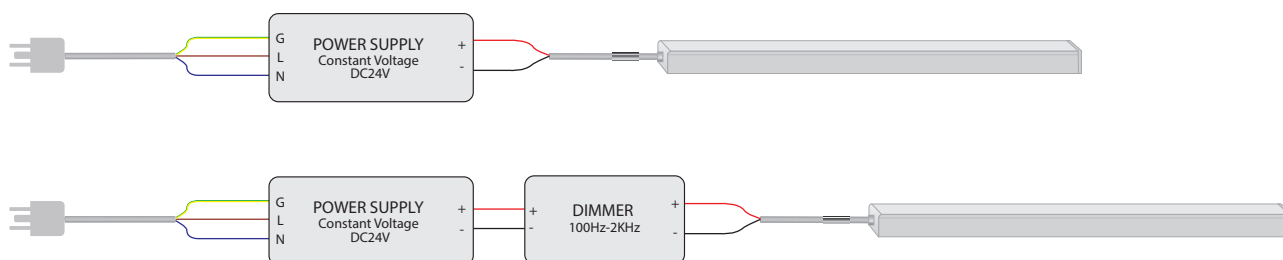


When the light is over 2m, make sure somebody helps to lift and roll up the light, in case the heavy weight of light itself generates too small bending angle or twisting, which may damage inside PCB.

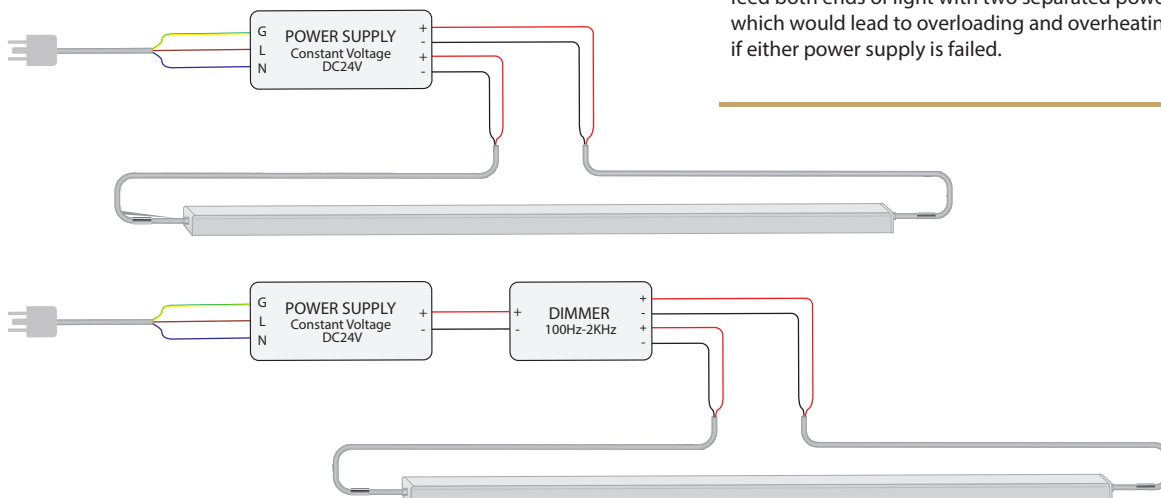
FXN 1617F FLEXIBLE NEON

Installation – Wiring Diagram

Single-end Feed



Double-end Feed



Please ensure the polarity connection is correct on both ends, as short circuit might occur if powering the light from both ends with reverse polarity. It is not recommended to feed both ends of light with two separated power supplies, which would lead to overloading and overheating problem if either power supply is failed.