

OPERATION  
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Before Installation

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-  Wrong operation, prohibited.
-  Operation with potential risk, please follow the recommendation inside if allowed.
-  Correct operation, please comply with it strictly.


Precaution

Installation Temperature


PVC	Silicone
 Ambient Installation Temperature 0 ~ 45°C / 32 ~ 113°F	 Ambient Installation Temperature -40 ~ 50°C / -40 ~ 122°F
 Max. Mounting Surface Temperature* 60°C / 140°F	 Max. Mounting Surface Temperature* 85°C / 185°F

\*Non-working state of light


Min. Bending Diameter




F22  
16\*17mm  
300mm




F15  
11.5\*21mm  
120mm




F10  
9\*18mm  
90mm




F23  
10\*10mm  
100mm



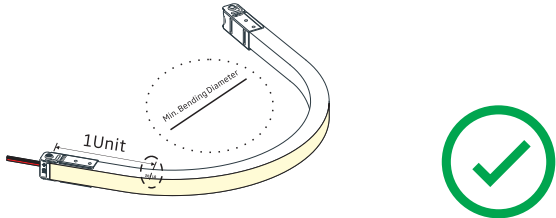
F21  
11.5\*29mm  
120mm



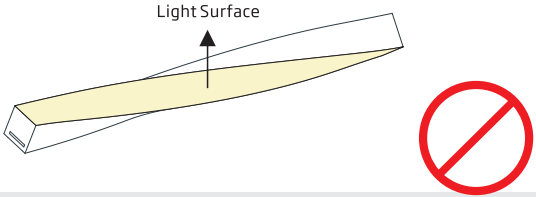
F11  
11.5\*26mm  
120mm



F16  
15.5\*6mm  
50mm



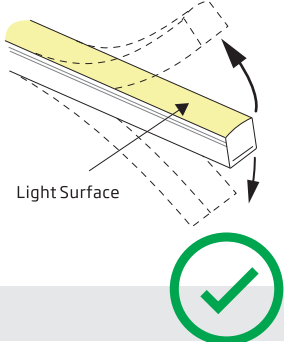

Please operate as per allowed bending diameter and avoid the bending at the first unit of light and connector, otherwise PCB and LEDs might be damaged.



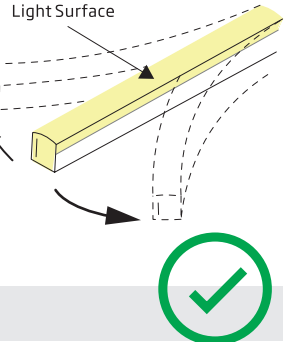

Do not twist or bend wrongly. Do not hit or pull the light hard.

Bending Direction

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.



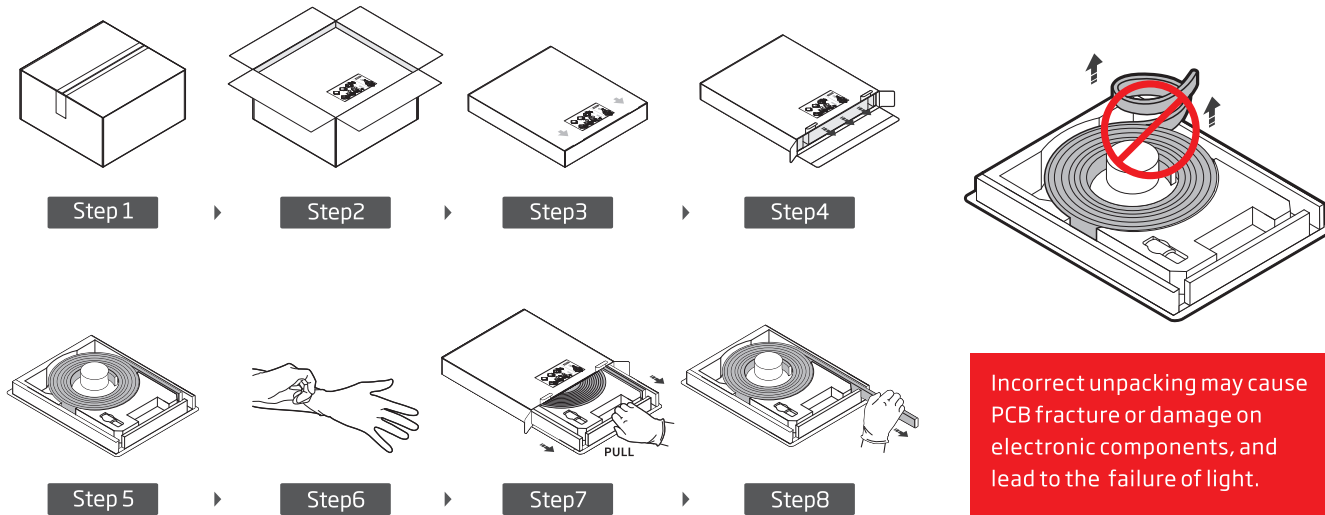
VB-Vertical Bending



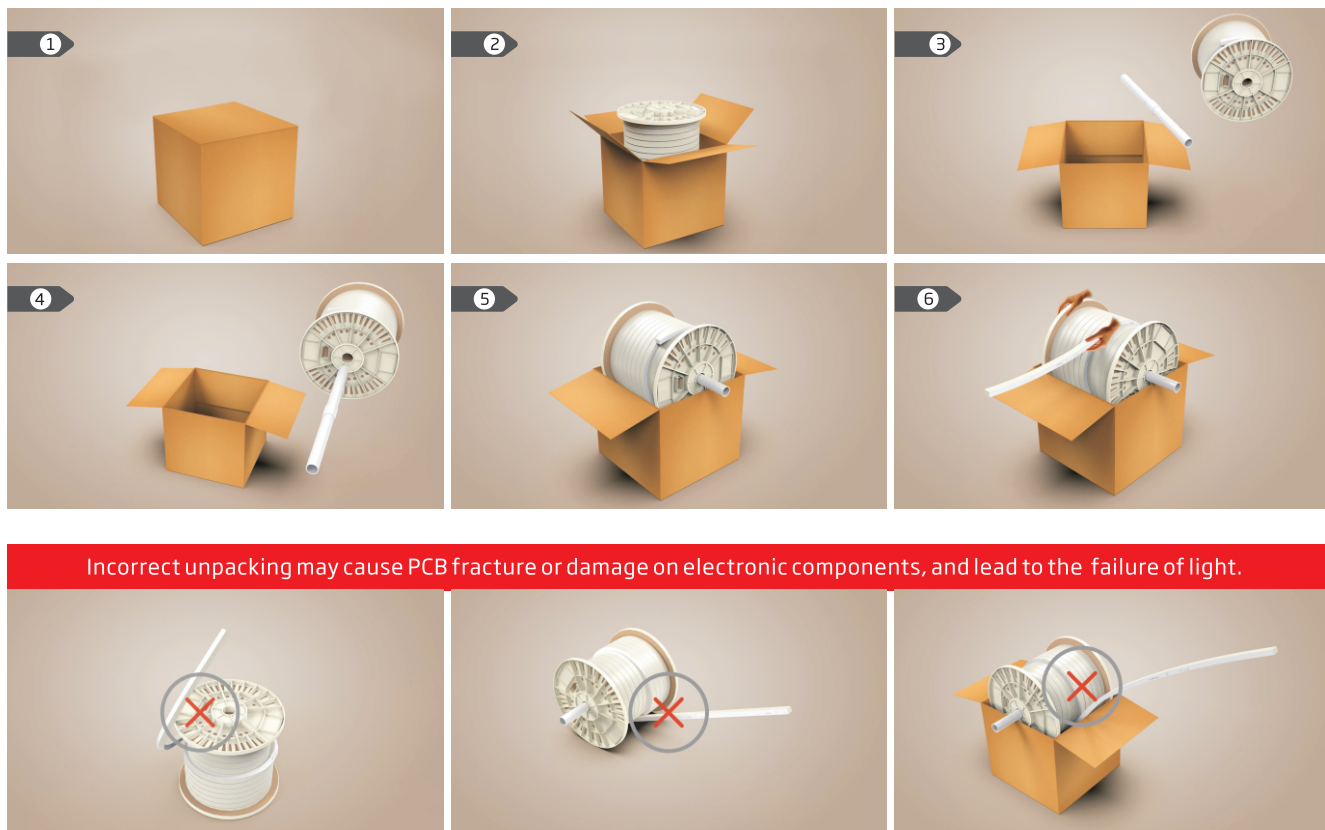
HB-Horizontal Bending

## Unpacking

### White Box Packaging



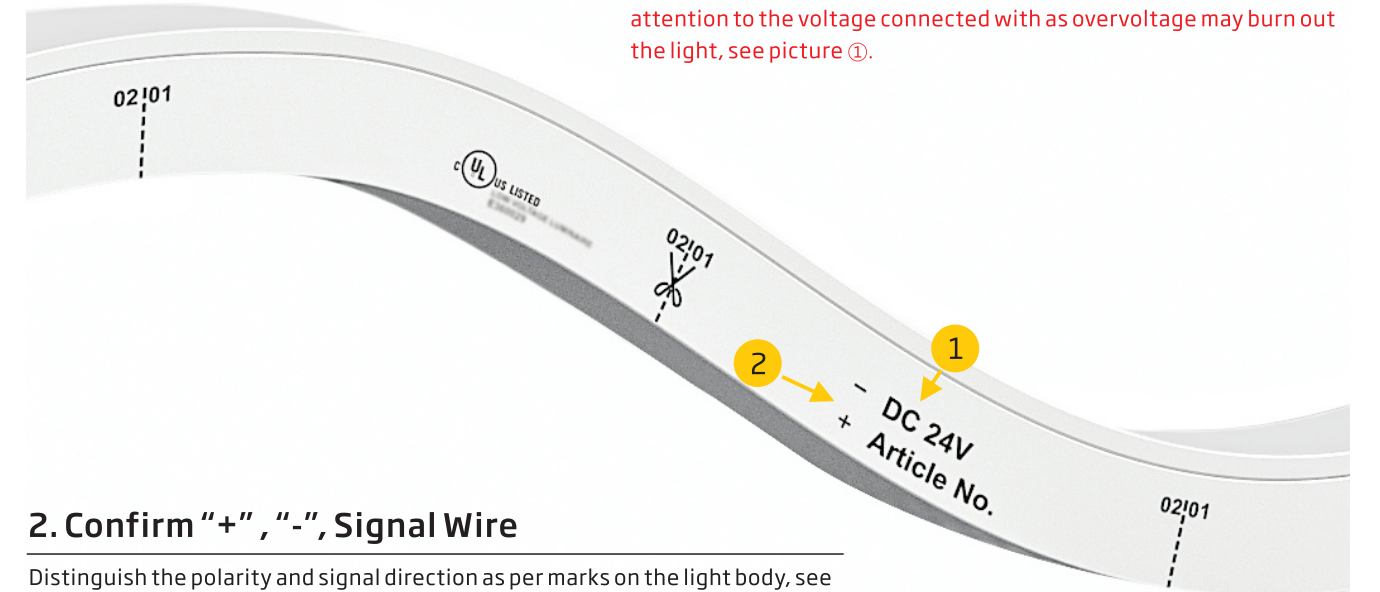
### Reel Packaging



## Lighting Test

### 1. 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.

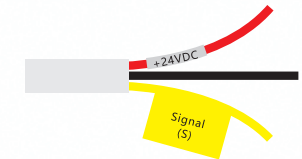


### 2. Confirm "+", "-", Signal Wire

Distinguish the polarity and signal direction as per marks on the light body, see picture ②.

Inside reverse light sources will be lighted up when connected with reverse polarity. Please switch the connection to get back to normal.

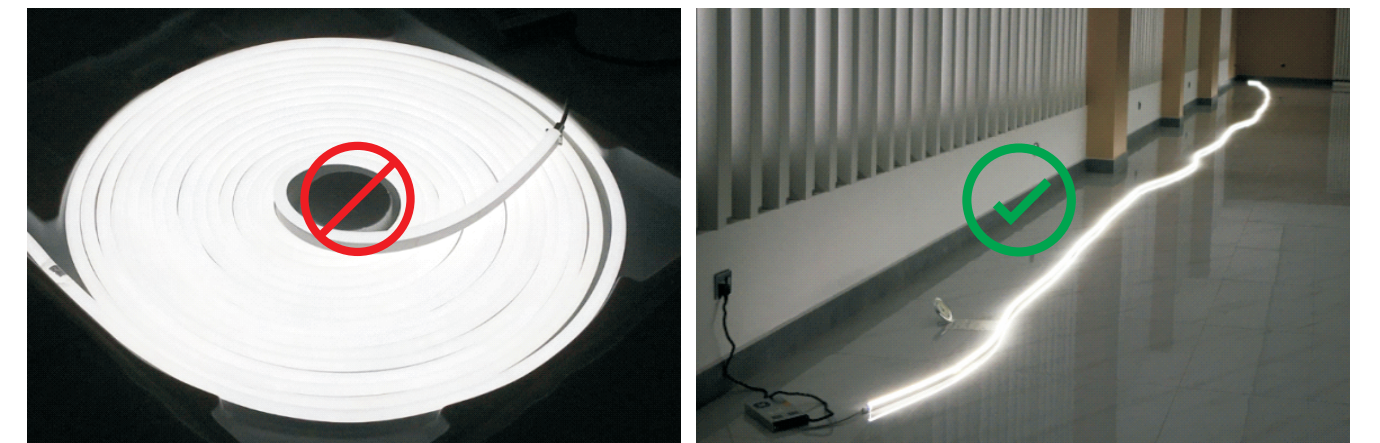
For pixel programmable products (S series), the touch of positive wire (+) and yellow signal wire are prohibited when power on, otherwise inside IC can be disabled. Please separate them as the right picture.



### 3. 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.

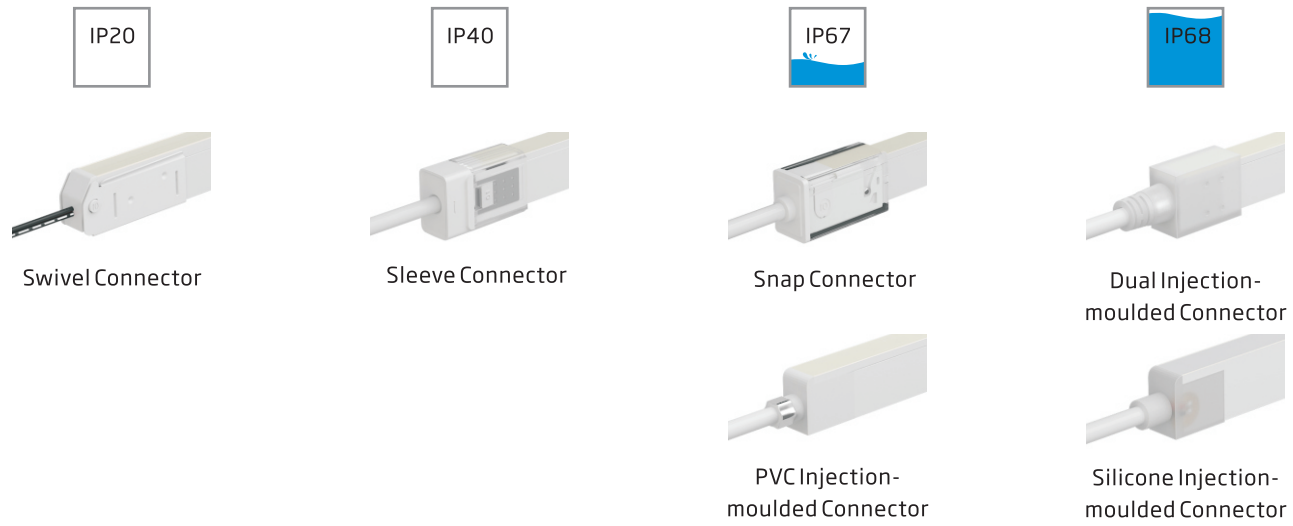


For pixel products in white, the brightness will be one-third of the normal one when power on disconnected with signal wire, while blue will be displayed when comes to pixel products in RGB or RGBW.

## Connector

### Connector Selection

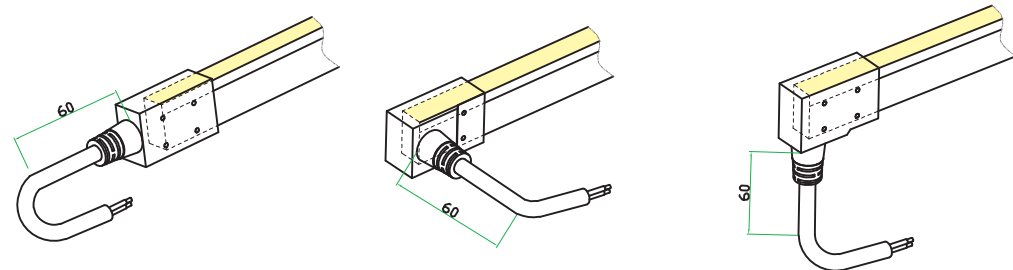
Please choose the suitable IP rated connector based on installation environments.



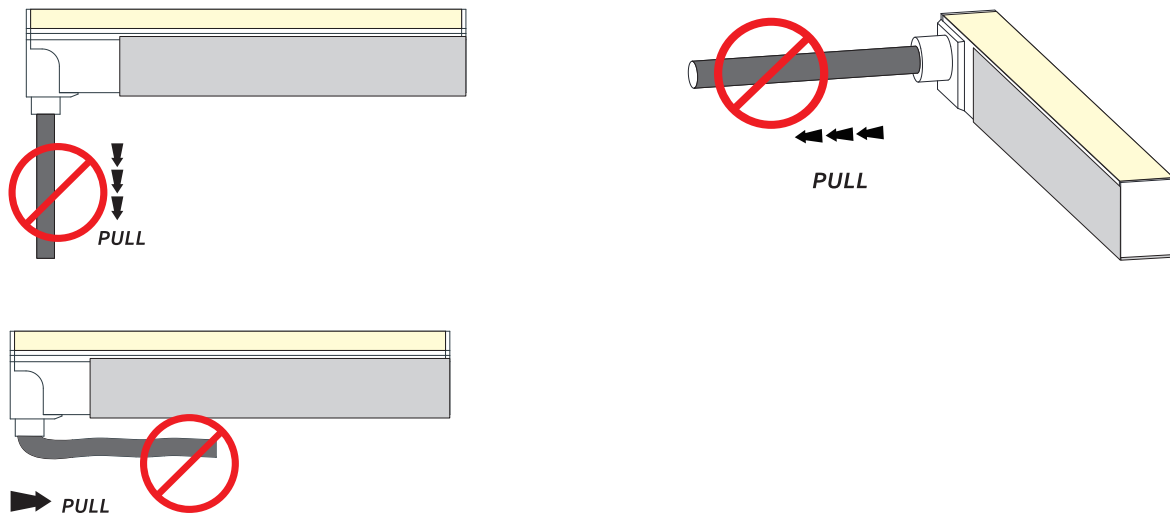
### Cable Requirement



It's recommended to keep at least 60mm cable in the natural state at the cable joint with light.

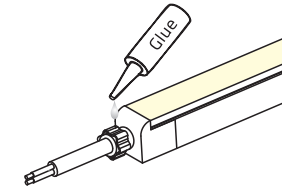


Do not pull the cable, otherwise it may disable the function of the connector and lead to water ingress.



## Connector

### Glue on Connector

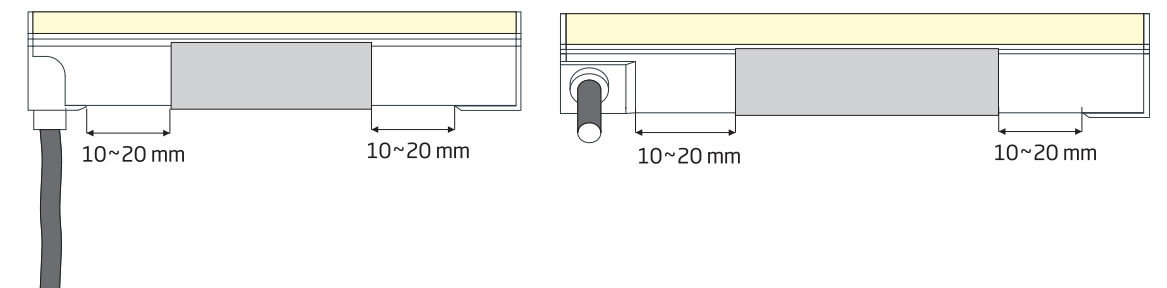
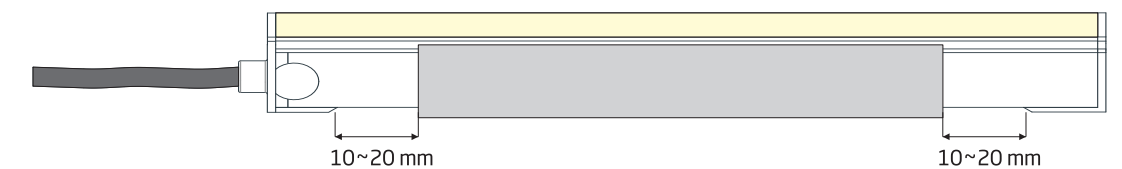
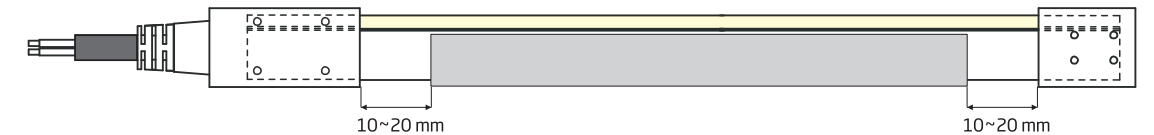


It's not recommended to glue on the space between connector and profile or mounting surface, otherwise the seam might occur at the cable joint with light due to the pulling force generated by contraction and expansion of the light and mounting surface, and then resulted in water ingress and the failure of product.

### Placement of Connector



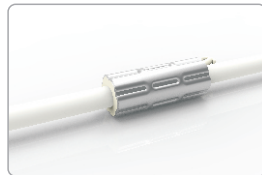
It's recommended to reserve 10~20mm distance between the connector and mounting profile, otherwise the connector might be damaged due to contraction and expansion of the light and displacement of mounting profile, and then resulted in water ingress and the failure of product.





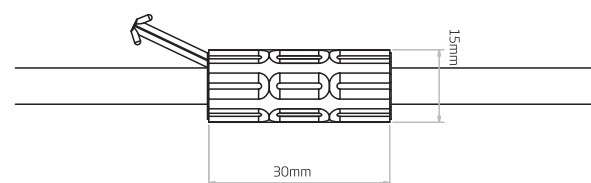
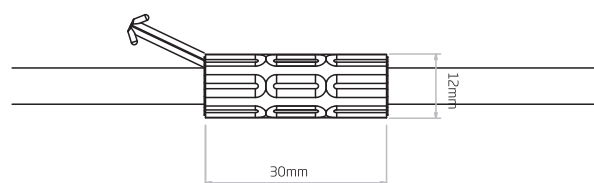
## Cable

### Anti-wicking Ferrule



1. The removal of anti-wicking ferrule will increase the risk of water ingress and void the warranty out of it.
2. For underwater application, do not immerse anti-wicking ferrule in the water.

The anti-wicking ferrule is designed to lower the risk of water ingress from the cable in case of inadequate waterproof treatment on site, waterproof performance can't solely rely on the anti-wicking ferrule of connector, waterproof treatment at cable joint is also important.



**B**

18AWG\*2

**D/S (SPI)**

18AWG\*3

**A**

22AWG\*3  
20AWG\*1

**E**

22AWG\*4  
20AWG\*1

**S (DMX)**

22AWG\*3  
20AWG\*2

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



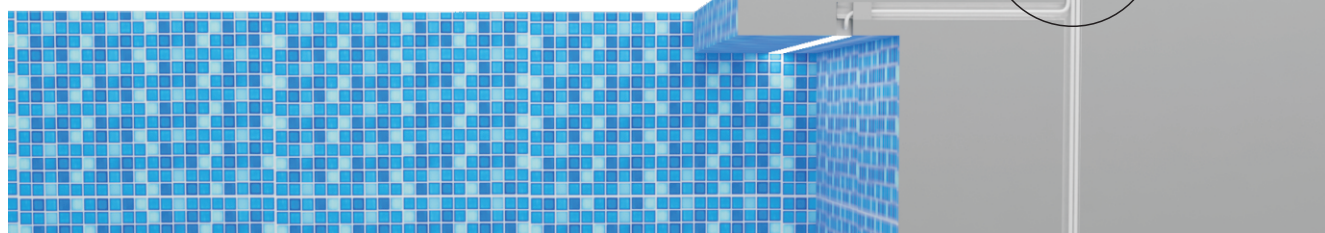
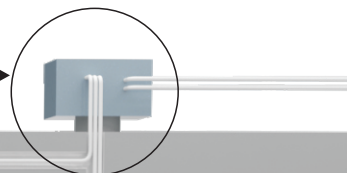
### Cable Joint



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

Wrap the cable by adhesive plaster only is not reliable, it will cause water ingress.

For underwater application, please keep the cable joint away from the wet environment, and choose IP68 rated connector.



## Light Cutting

### Tool



Use the supplied professional cutting tool.

Do not use the tool like a knife or saw, it neither has a cutting jig nor is easy to control the force when cutting, so the light can't be sealed well by the connector due to an uneven and tilted cutting surface, and water ingress may occur.

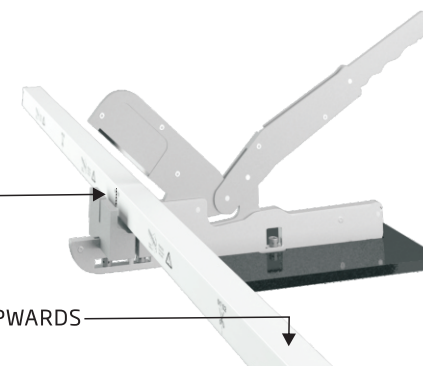
### Cutting

#### VB-Vertical Bending



Align to Cutting Line

Light Surface UPWARDS

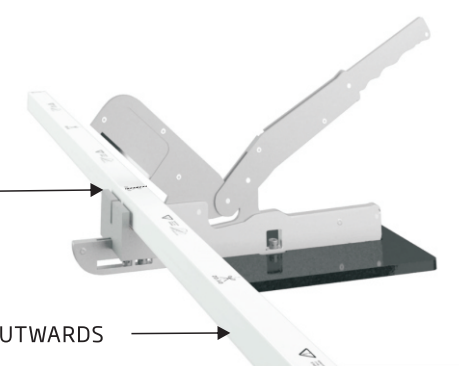


#### HB-Horizontal Bending



Align to Cutting Line

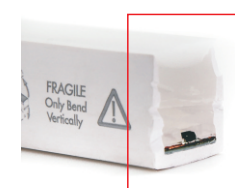
Light Surface OUTWARDS



### Cutting Surface



Smooth & Vertical Cutting Surface



The unqualified cutting surface will disable the waterproof function as the light can't be sealed well by the connector, which will cause water ingress and lead to the failure of product.



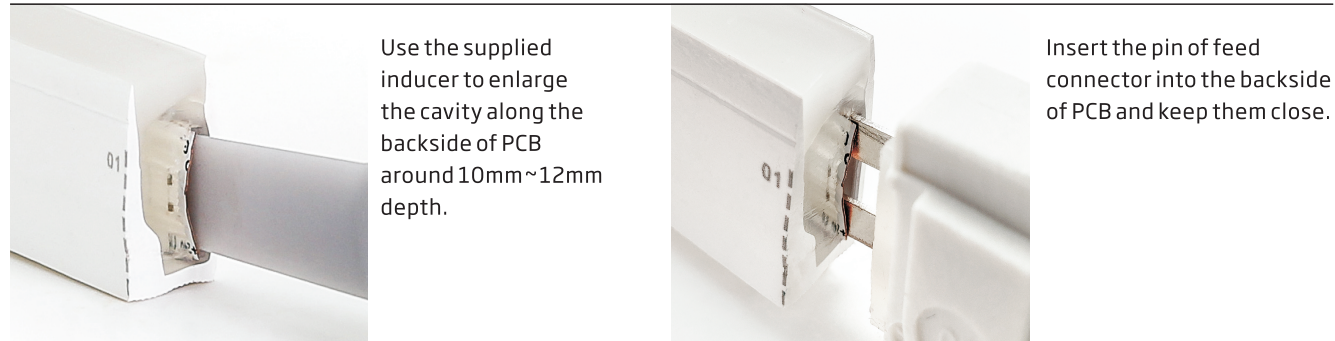
## Connector Assembly-Snap Connector (F10/F11/F15/F21/F22)

### Connector Pairing

Please choose 01 connector for 01 end of light , and choose 02 connector for 02 end of light.



### Connector Inserting



NEVER insert into the front side of PCB, it will damage light sources and electronic components inside and lead to the first unit failure of light; Loose connection of pin and PCB will disable the electrical conduction.

### Anti-skidding Clip & PC Cover

⚠ It's not recommended to assemble and disassemble repeatedly to avoid the damage on silicone gasket and lead to water ingress.



Marks at the Bottom of PC Cover

Bottom: this side should be the bottom of light.  
Arrow: slide back PC cover along its direction till it snaps and complete the whole assembly.



Align with the Edge of Light & Fit Tightly

Fit the anti-skidding clip to the bottom of light tightly and align its side with the edge of light, otherwise the connector won't be sealed well.

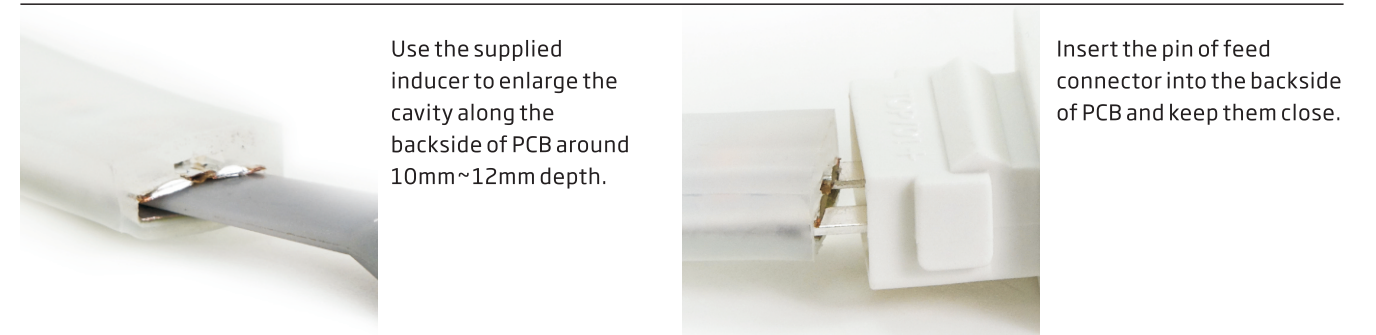
## Connector Assembly-Snap Connector (F16)

### Connector Pairing

Please choose 01 connector for 01 end of light , and choose 02 connector for 02 end of light.



### Connector Inserting



NEVER insert into the front side of PCB, it will damage light sources and electronic components inside and lead to the first unit failure of light; Loose connection of pin and PCB will disable the electrical conduction.

### Anti-skidding Clip & PC Cover

⚠ It's not recommended to assemble and disassemble repeatedly to avoid the damage on silicone gasket and lead to water ingress.



Marks at the Bottom of PC Cover

Bottom: this side should be the bottom of light.  
Arrow: slide back PC cover along its direction till it snaps and complete the whole assembly.



Align with the Edge of Light & Fit Tightly

Fit the anti-skidding clip to the bottom of light tightly and align its top with the edge of light, otherwise the connector won't be sealed well.





## Profile

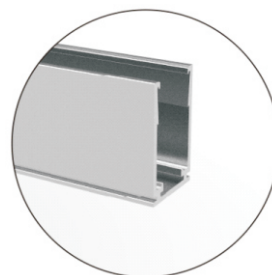
### Profile Processing

1. It's not recommended to process the profile without any protection by finishing or coating, etc.
2. If any similar 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 generated, or discuss with the manufacturer to separate the package in advance.

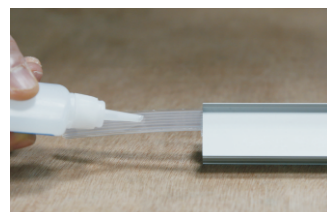
Serrate Tape



### Profile Cutting

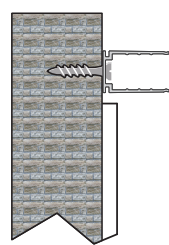
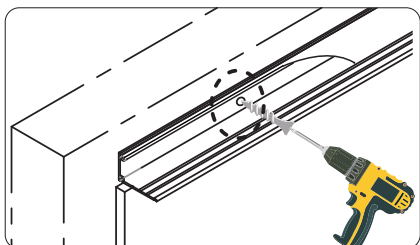


Make sure the cross-section of profile is smooth without any burrs when cutting, otherwise the light housing will be impaled and cause water ingress.

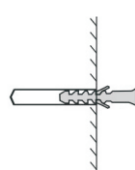


For the profiles involved serrated tape, in case of any drop of serrated tape after cutting, please insert and fix it to the profile by a few adhesive glues on its backside, 5~8mm diameter of touching area is enough. Make sure its round head on the edge is downward when putting back.

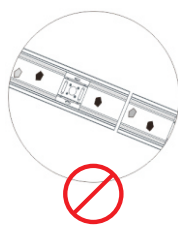
### Profile Installation



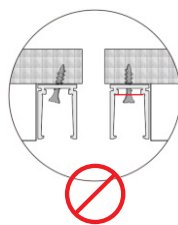
Install the screw into position and ensure the screw head is in line with or lower than the base of aluminum profile.



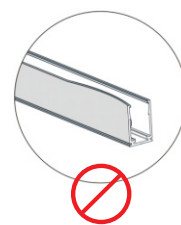
Place the rubber expansion bolt to assist with the screw fixation if the mounting surface is rigid.



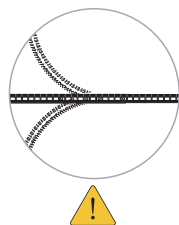
Make sure no debris in the profile before installation to avoid the light housing being impaled and cause water ingress.



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



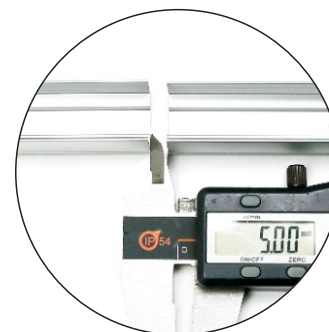
Do not use the profile deformed seriously.



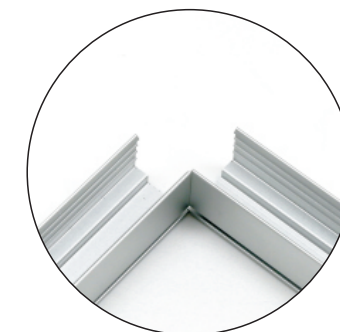
It's recommended to mount in place at a time when using the bendable aluminum profile in case of any break due to the frequent repeated shaping.

## Profile

### Profile Jointing



1. Please reserve at least 5mm for profile jointing to enable enough space for contraction and expansion.



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

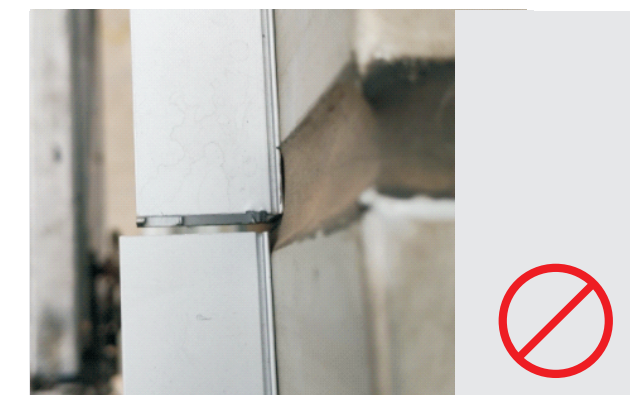
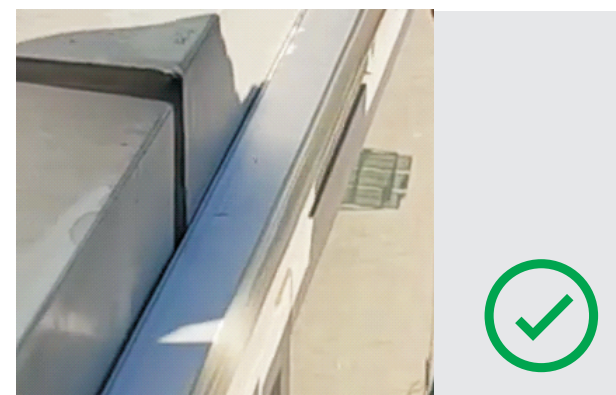


3. For the curve shaping of light, make sure to leave enough space to separate profiles in between or use the bendable profile instead.

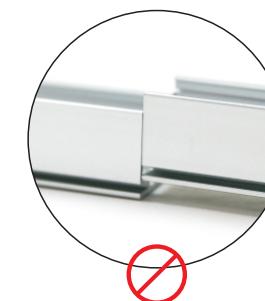
#### 4. Splice Structure on Mounting Surface

In the case of an outdoor mounting surface with the splice structure, please make sure the mounting profile goes across the gap or separate the light and profile as per the splice structure.

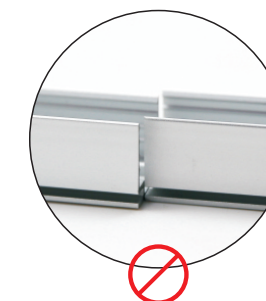
When the profile jointing lies where the mounting surface splices, contraction and expansion of the mounting surface in the long term will cause the misalignment of profiles and lights, and lead to the damage of inside PCB.



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.

## Light Installation

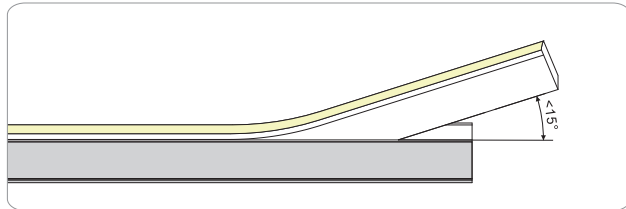
⚠ It's not recommended to install the light repeatedly, otherwise the light inside might be damaged.



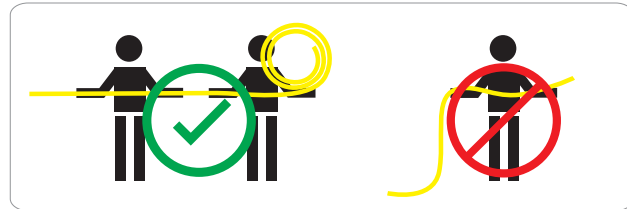
Make sure the light is fitted in vertically.



Press the light into the profile by the palm instead of the finger, otherwise it might damage inside electronic components due to the overpressure caused.

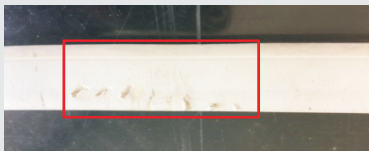
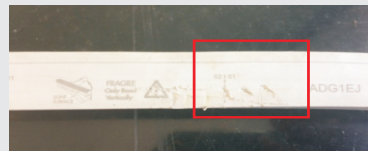


Make sure the angle between the light and profile is not bigger than 15°, otherwise inside PCB might be damaged.

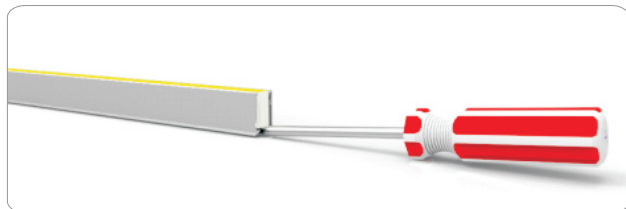


When light length > 2m, make sure somebody helps to lift the light, in case the heavy weight of light itself generates too small bending angle or twisting, which may damage inside PCB.

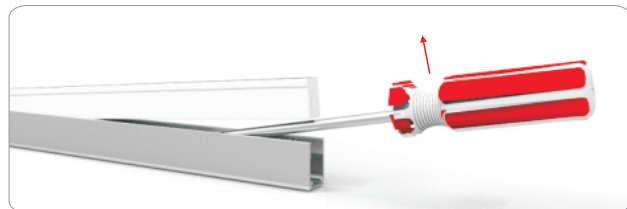
Make sure the light body is not scratched during installation, otherwise the light housing will be impaled and cause water ingression.



## Light Uninstallation



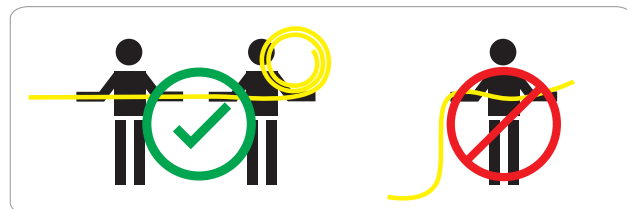
Prepare a screwdriver, and put the screwdriver at the bottom of light.



Move the screwdriver and unclench the light upwardly. Be careful the angle between the light and profile should not be bigger than 15°.



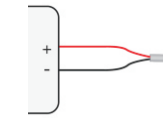
Once the end of light is out, hold both sides of light by hand and pull it out along the profile slowly and orderly. Make sure the angle between the light and profile is not bigger than 15°, otherwise inside PCB might be damaged.



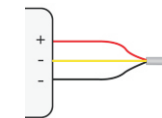
When light length > 2m, make sure somebody helps to lift the light, in case the heavy weight of light itself generates too small bending angle or twisting, which may damage inside PCB.

## A/B/D/E Series

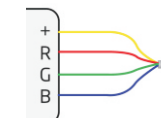
Monochrome



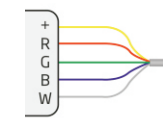
Dynamic Light



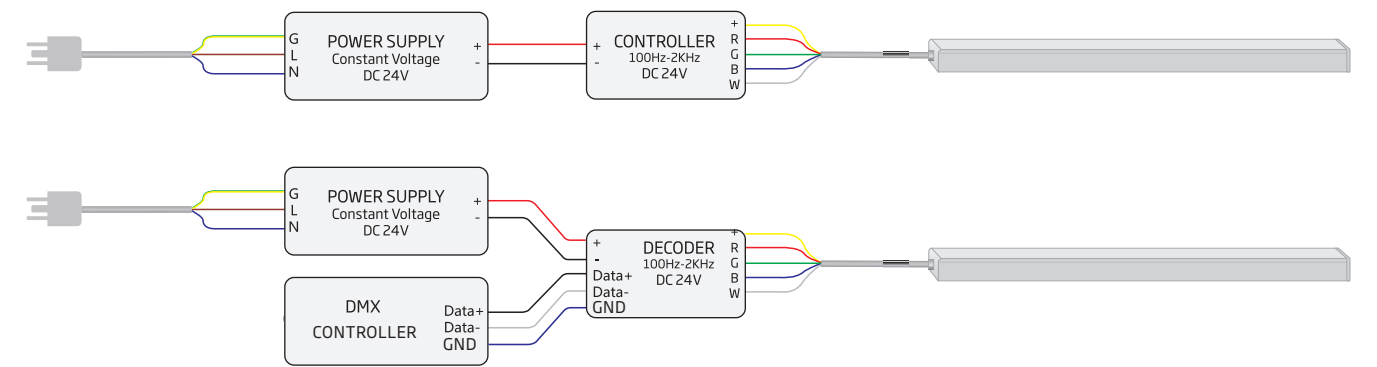
RGB



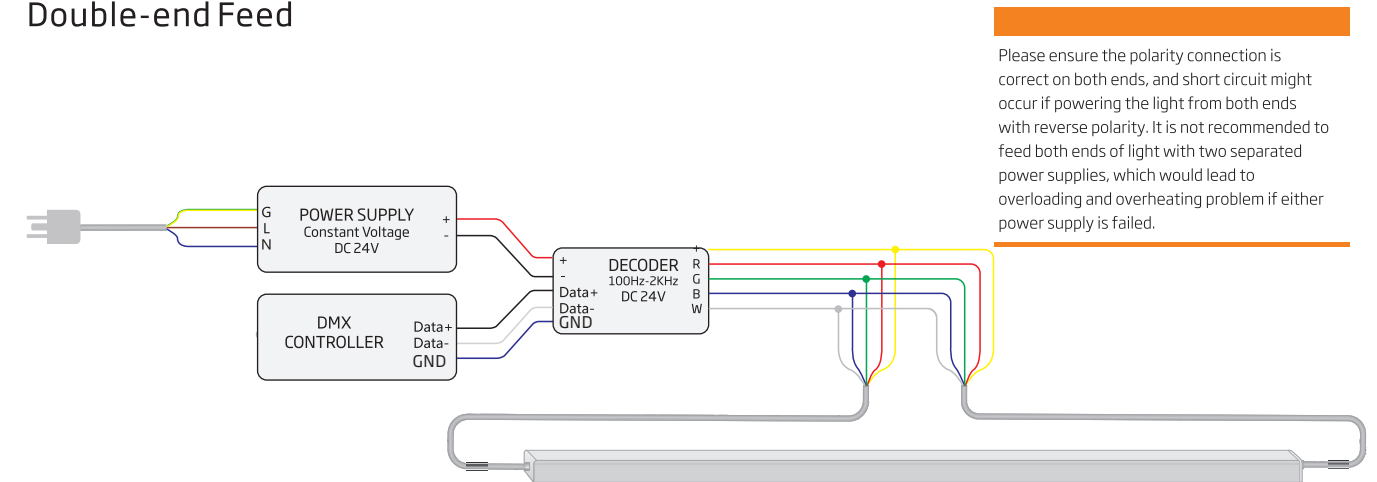
RGBW



### Single-end Feed



### Double-end Feed



Please ensure the polarity connection is correct on both ends, and 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.

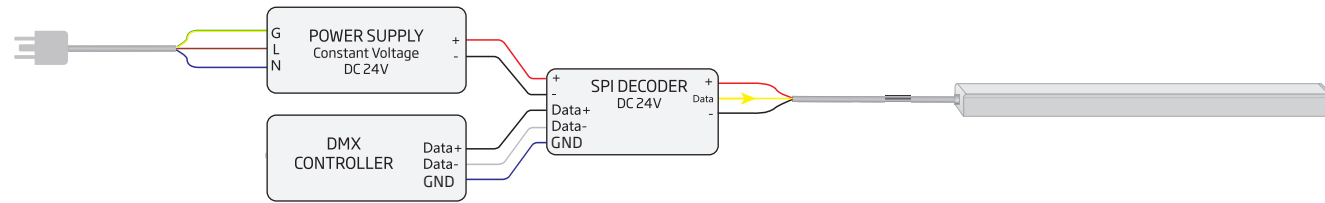
Note:

A decoder is unnecessary if the controller or dimmer can control the light directly. In this case, its connection position and way are the same as the above decoder's.

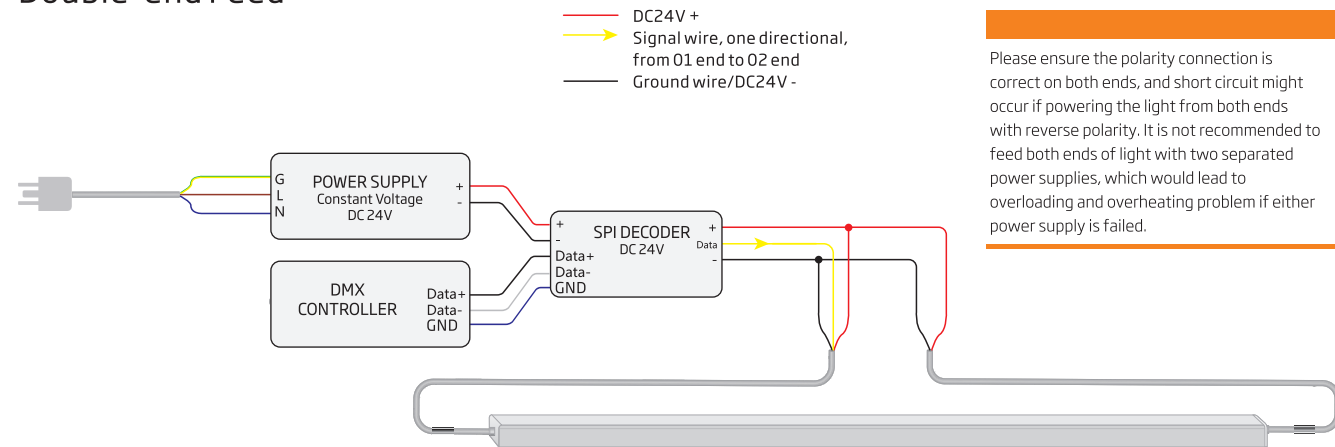


## SPI Pixel Light

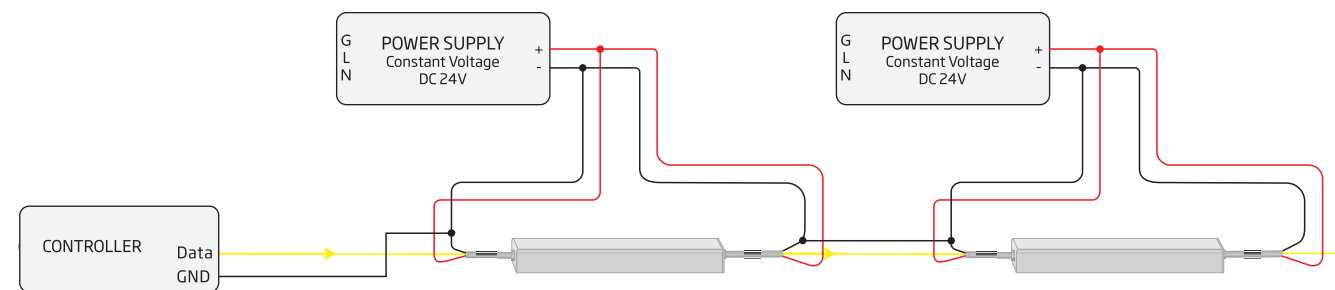
### Single-end Feed



### Double-end Feed



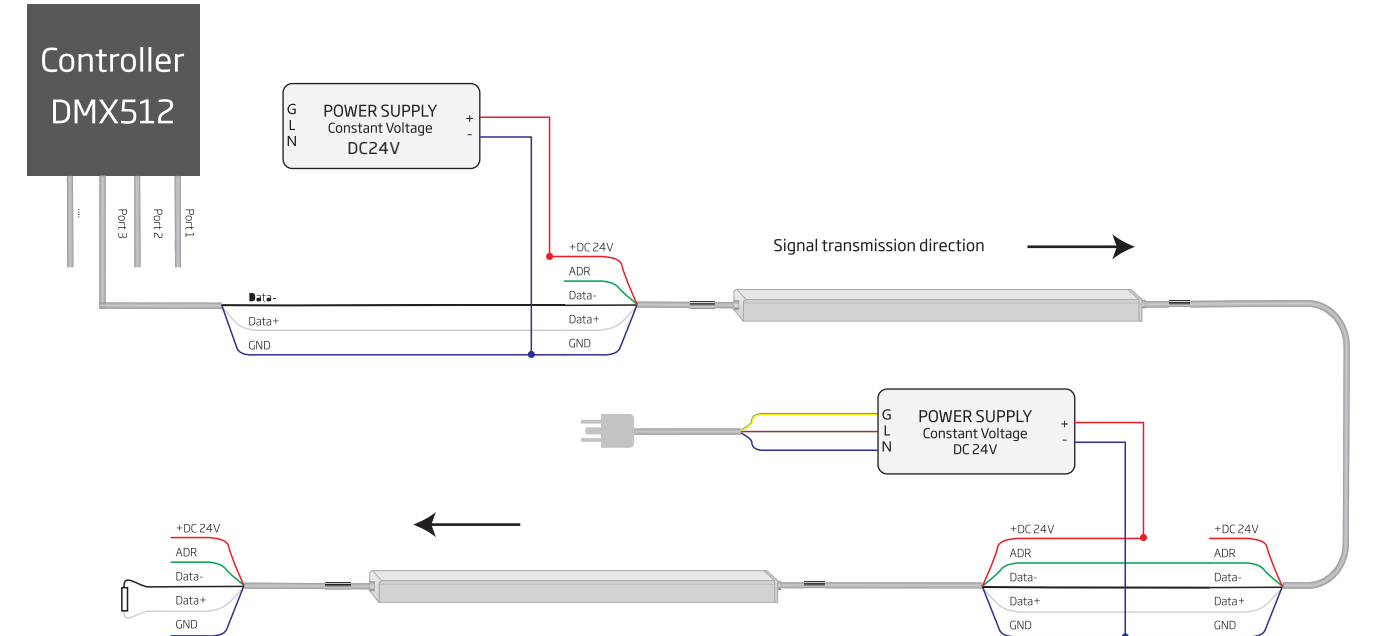
### In Series



Note:  
A decoder is unnecessary if the controller can control the light directly. In this case, its connection position and way are the same as the above decoder's.  
Please make sure the ground wire of controller and the negative wires of light are all connected well to form a current loop and carry out signal transmission.

## DMX Pixel Light

### Single-end Feed



120Ω termination resistor

### Double-end Feed

