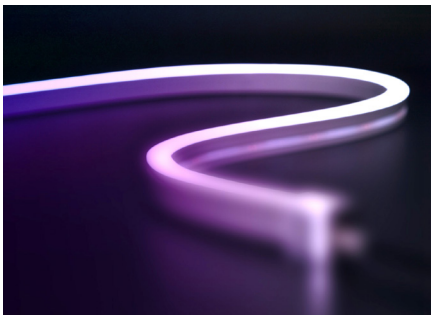
Product specification

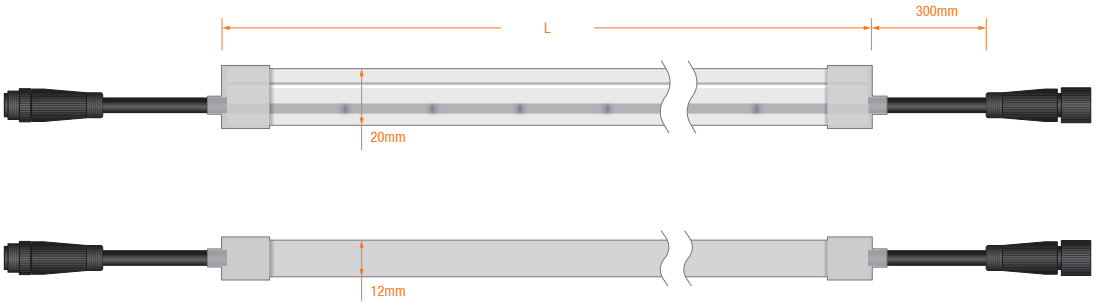
12x20mm DMX512 Pixel RGB/RGBW LED Strip

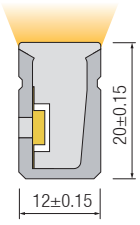


It is made of Dow Chemical SILASTIC™ ET-7021 silicone rubber, which provides high transparency and high strength;Environmental protection grade silicone material, integrated extrusion molding process;Unique optical light distribution structure design, uniform lighting surface and no shadow;IP67 protection level, salt solution resistance, acids & alkalis and UV resistance;Excellent toughness, simple and stylish appearance, delicate and unique. 3 years warranty, working life ⩾ 30000 hours;

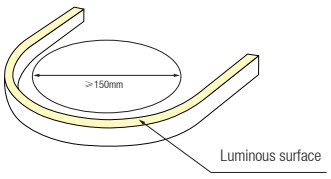
- Compatible with DMX512(1990) protocol.
- Adopting RS485 signal trunk and signal differential transmission mode to ensure stronger ablility of anti-interference and longer transmission distance.
- Automatically addressing with editor.

Dimension structure

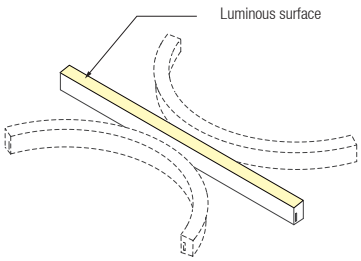




Unit: mm
Cross section



Min Bending diameter



Bend horizontal only

Parameter

(ex part #) CIP-12x20-PIXEL-RGB12W-DC24V

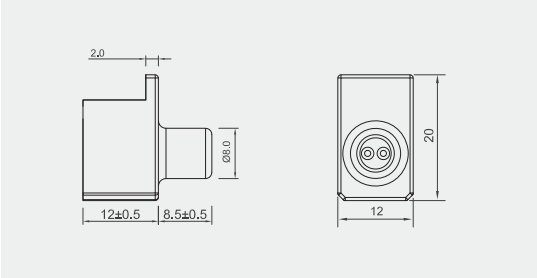
Voltage(V)	DC24V
power(W/M)	RGB:12W / RGBW:15W
Unit Cut	125mm
Minim cuttable length	5M
IP Gard	IP67
Gray Scale	256
Working Temperature	-25℃ -- 45℃
Pixel （pix/M）	8
Control Mode	DMX512
Lumen / m	R:31 G:92 B:17.5 RGB:138 R:23 G:70 B:19 W:83 RGBW:190

Length Standard

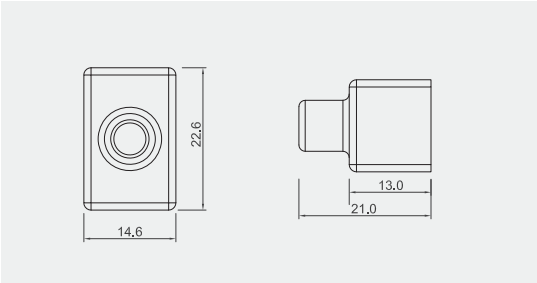
Length Range (M)	Final Length		Tolerance
	Integral end cap	Silicone end cap	
0M<Neon Strip⩽5M	L+6	L+8	±7

CIP Lighting 803-766-0243 info@ciplighting.com www.ciplighting.com

Various End Caps



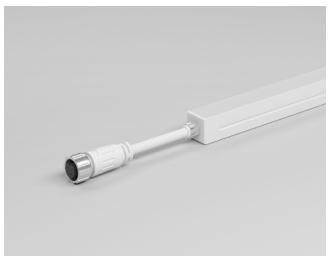
Integral end cap



Silicone end cap

Cable Entry (Use three kinds of entry cable,to meet the different installing request)

Integral end cap



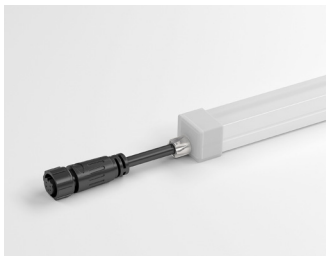
(IFC) Front Cable Entry

(ISC) Side Cable Entry

(IBC) Bottom Cable Entry

(IEC) Closed end cap

Silicone end cap



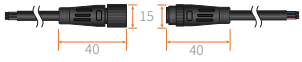
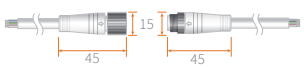
(SFC) Front Cable Entry

(SSC)Side Cable Entry

(SBC) Bottom Cable Entry

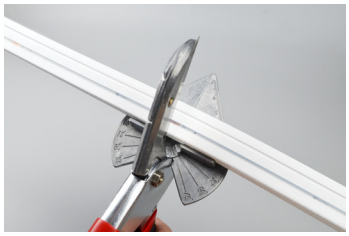
(SEC) Closed end cap

Cable

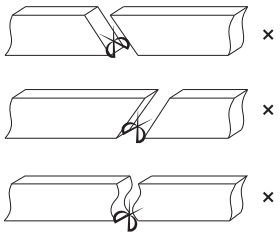
Cable Type	Schematic Diagram	Specification	Core	Electrical Properties
PVC Cable		OD：5.5mm / Inner core：22AWG	●○●●●	Red V+、Green PI/PO、Blue AI/AO、White BI/BO、Black V-
Waterproof Connector with PVC Cable		OD：5.5mm /Inner core：22AWG M12Male / Female connecto	●○●●●	Red V+、Green PI/PO、Blue AI/AO、White BI/BO、Black V-
Silicone Cable		OD：6.0mm / Inner core：20AWG	●○●●●	Red V+、Green PI/PO、Blue AI/AO、White BI/BO、Black V-
Waterproof Connector with Silicone Cable		OD：6.0mm /Inner core：20AWG M12Male / Female connecto	●○●●●	Red V+、Green PI/PO、Blue AI/AO、White BI/BO、Black V-

Cutting Mark

Remark:
The bottom of the led strip has transparent window, the black marker is the cutting position



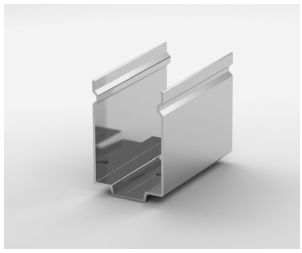
Use professional scissors
to cut vertically at the cutting mark

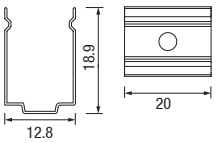


Please don't free cut and cut into an oblique angle or cambered section.

Mounting Way

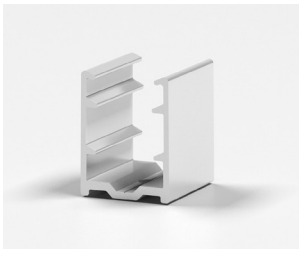
(MC) Mounting Clips

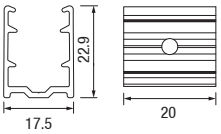




Dimension:
20x12.8x18.9mm
Accessories:
Screw M3x15mm

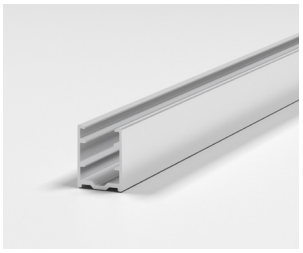
(AMC) Aluminium Mounting clips

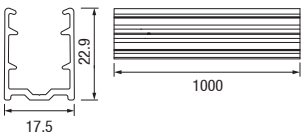




Dimension:
20x17.5x22.9mm
Accessories:
Screw M3x15mm

(AP) Aluminium Profile



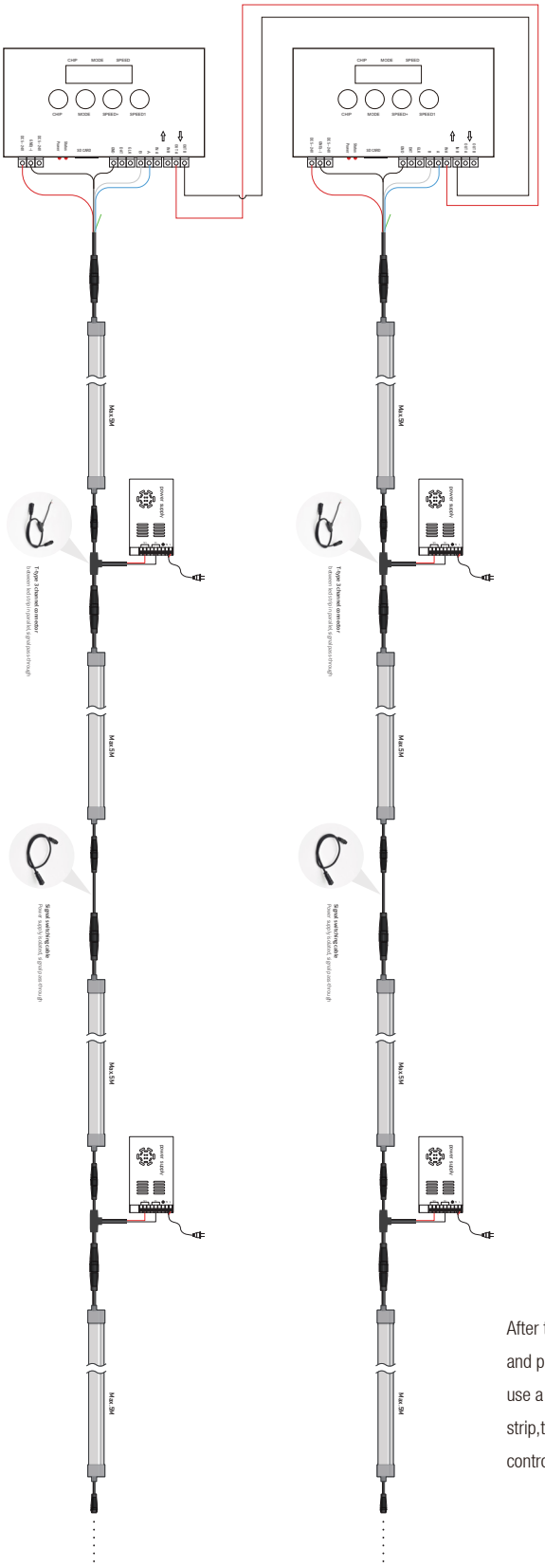


Dimension:
1000(±5)x17.5x22.9mm
Accessories:
Screw M3x15mm

(SUS) Suspension Installation

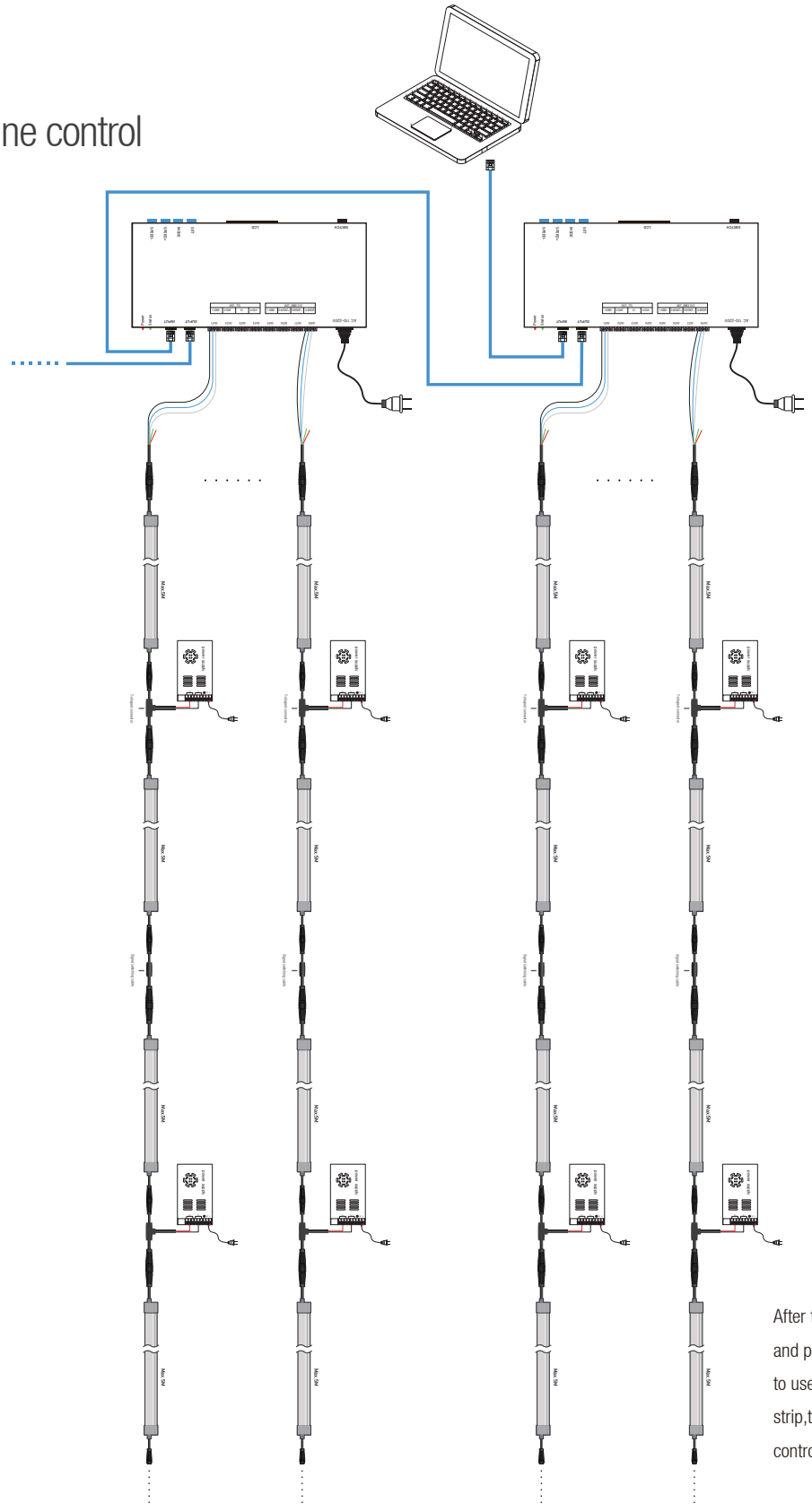
•Use with the profile

Offline control



After the led strip is connected to the signal wire and power supply wire correctly, it is necessary to use a special addresser to address the led strip,then the controller / console can run the control effect program.

Online control



After the led strip is connected to the signal wire and power supply wire correctly, it is necessary to use a special addresser to address the led strip,then the controller / console can run the control effect program.

Addressing Instructions

The addressing operation is an operation that needs to be performed when the power is turned on for the first time after the wiring of led strip is completed; There is no need to address the led strip without changing the connection order of the led strip.
The led strip and the addressing device are connected according to the corresponding relationship in the following table:

Wire order of led strip input	Addressing device's port
blue	A
white	B
black	GND

Using the K–1000C

The controller integrates control and addressing, and can only be automatically addressed backward to 512 channels from the default starting channel value 001. After addressing is completed, switch to the controller mode, you can automatically run the control effect program without power off. The operation is as follows:

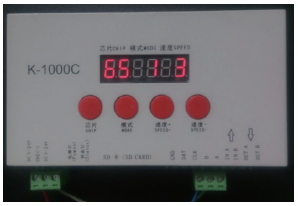
❶ After the led strip and the controller are properly connected with the signal and power cable, power on

❷ After the controller is started, firstly hold down the "CHIP" button, then press the "MODE" button at the same time, the controller shows "61 XX XX", Release two buttons at the same time to enter the led strip's addressing interface, as shown below:

❸ Press the "CHIP" button to adjust the displayed value of the first and second digits to "65", the last digit needs to be kept at "3" (if it is other numbers, can adjust the SPEED + / SPEED- two buttons), as follows Figure:

❹ Press the "MODE" button to start addressing the led strip, the controller shows "A A A", as shown below:

❺ Wait for the completion of addressing, and show"65 1 3",as shown in the figure below

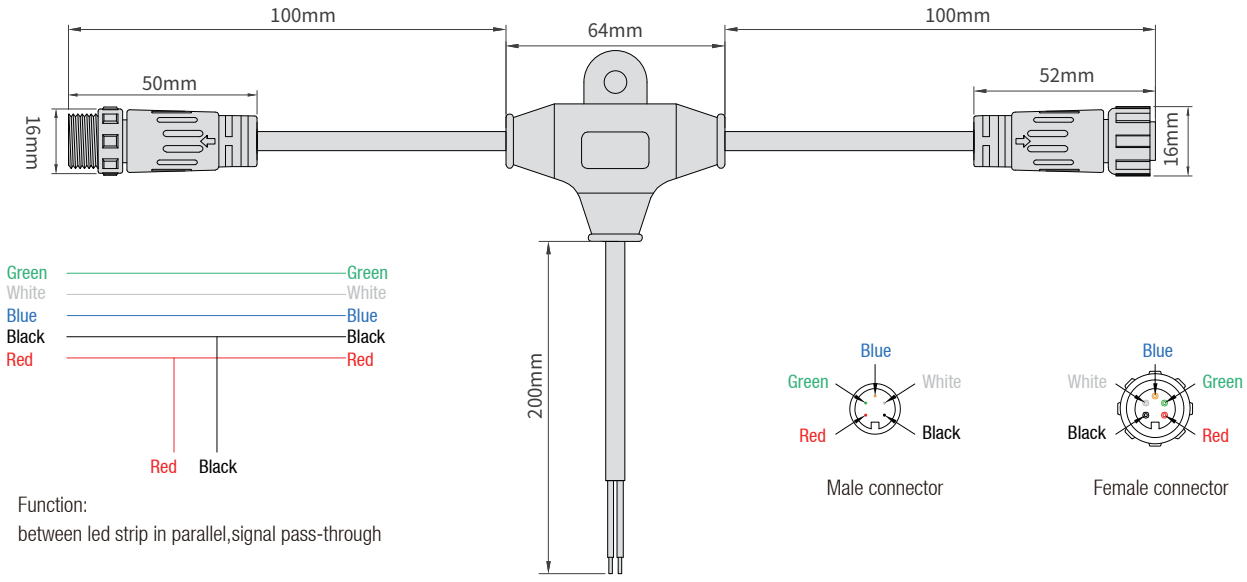


❻ Firstly press the "CHIP" button and then press the "MODE" button to exit the addressing mode and enter the controller mode, as shown in the following figure.

❼ The display of the first and second digits of the controller must be "10". If it is other numbers, the led strip cannot be controlled normally. Adjust the "CHIP" button to select the displayed values of these two digits.

❽ In the program broadcast mode, you can change the broadcast speed by adjusting the "SPEED +" and "SPEED-" buttons; If there are multiple programs in the SD card, you can select the program you need to play through the "MODE" button.

T–type 3 channel connector

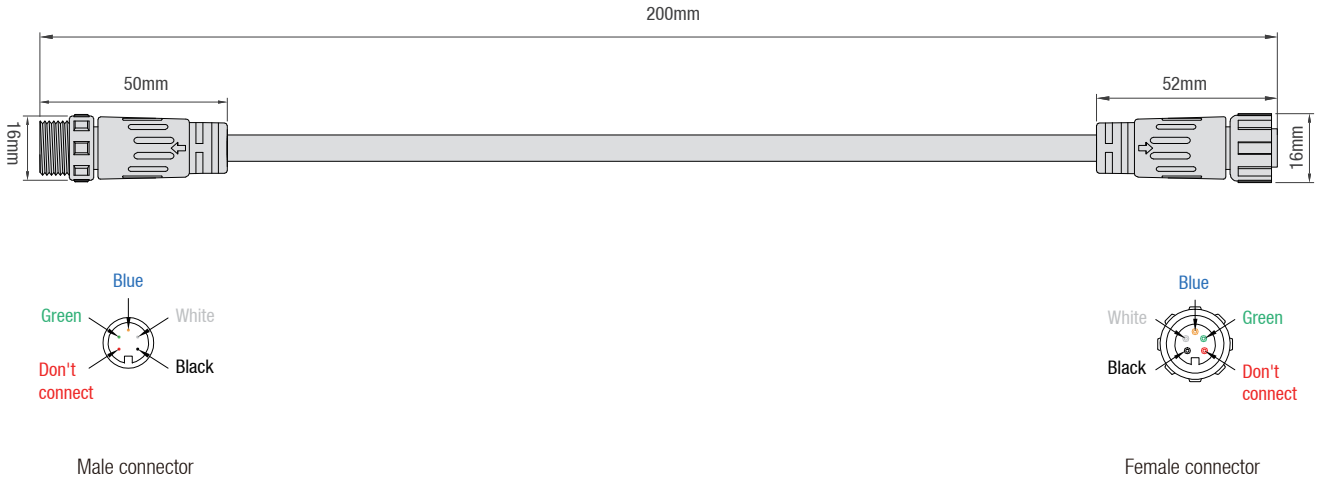


Male connector

Female connector

Function:
between led strip in parallel,signal pass-through

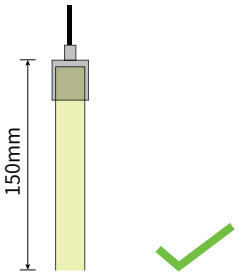
Signal switching cable

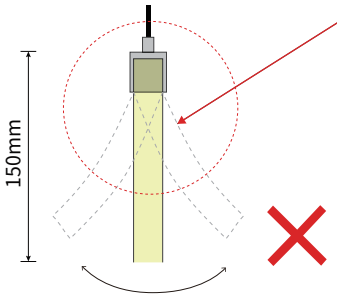


Male connector

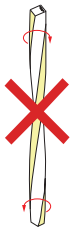
Female connector

Installation Precautions

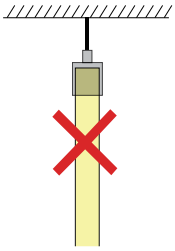




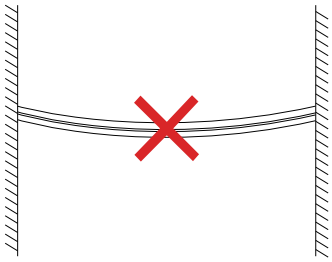
Do not shake left and right within 150mm of the end cap and led neon'body.



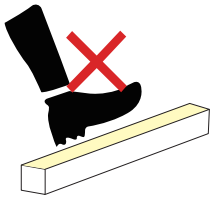
Do not twist the light



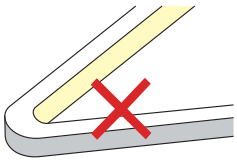
Do not suspend the power cable



Do not leave the light hanging in the air

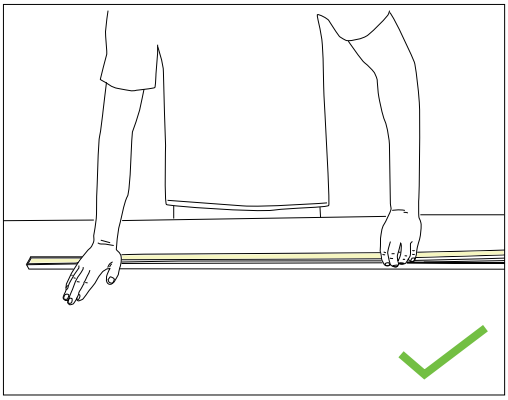


Prohibit trample

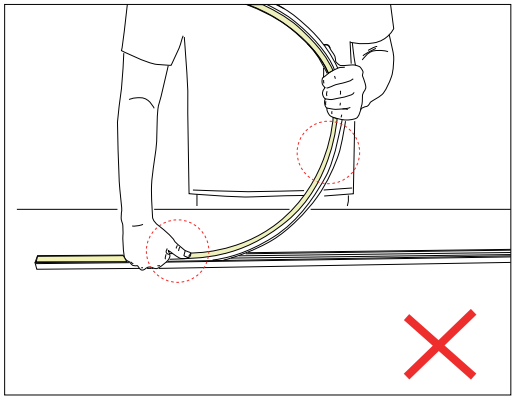


Small Angle bending is prohibited

Put it in the profile

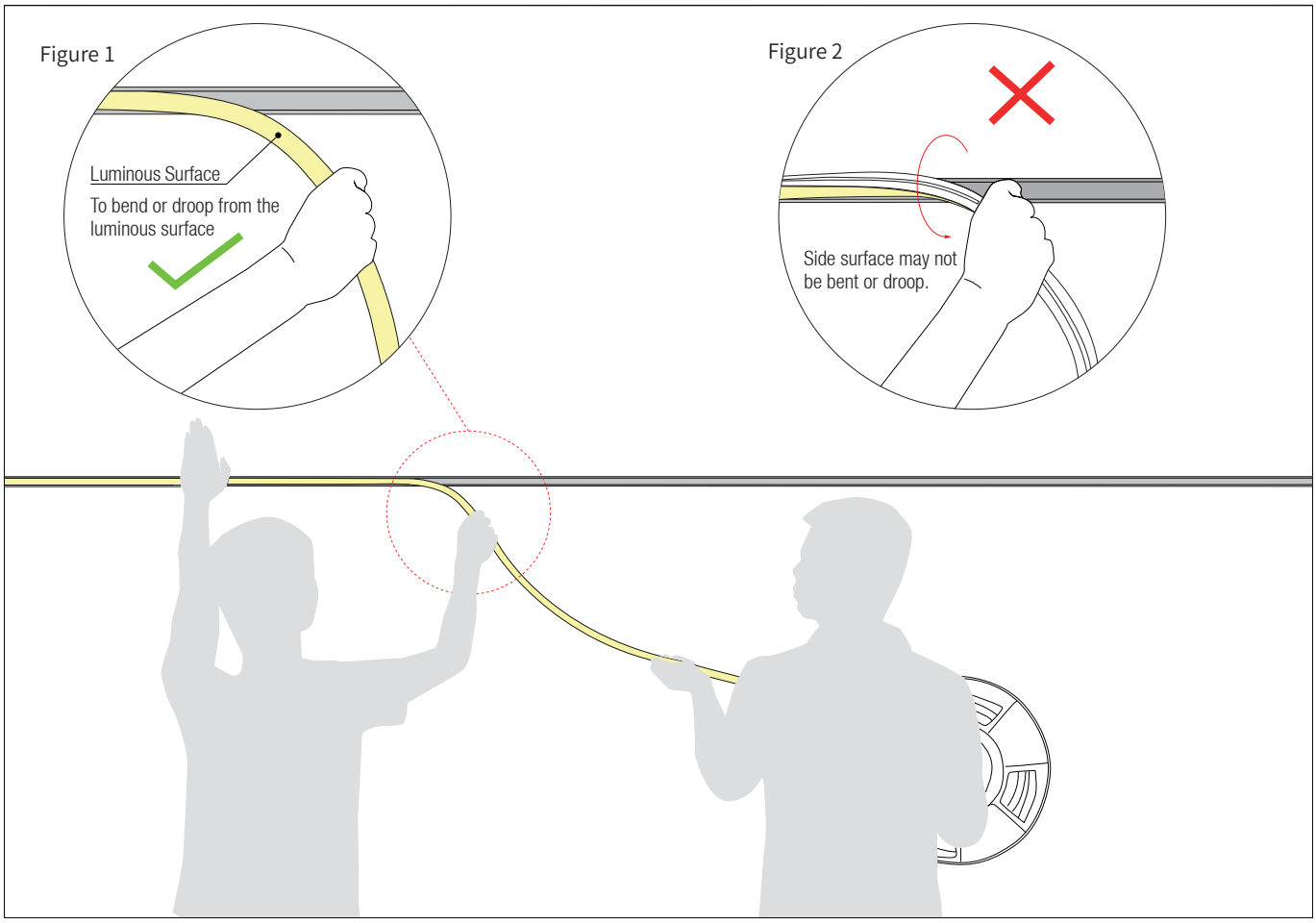


- Please press the led strip with your palm to slowly insert the led strip into the groove, and gently straighten the led strip above the groove with your right hand.
- Try to keep the led strip in a flat state during the installation process.



- Do not press the led strip with a single finger, it is easy to damage the internal parts of the led strip.
- The bent arc of the led strip should not be too large during installation.

Installation Precautions —— Side Mounted (If the length of the light is more than 2 meters, two persons must work together to install it.)



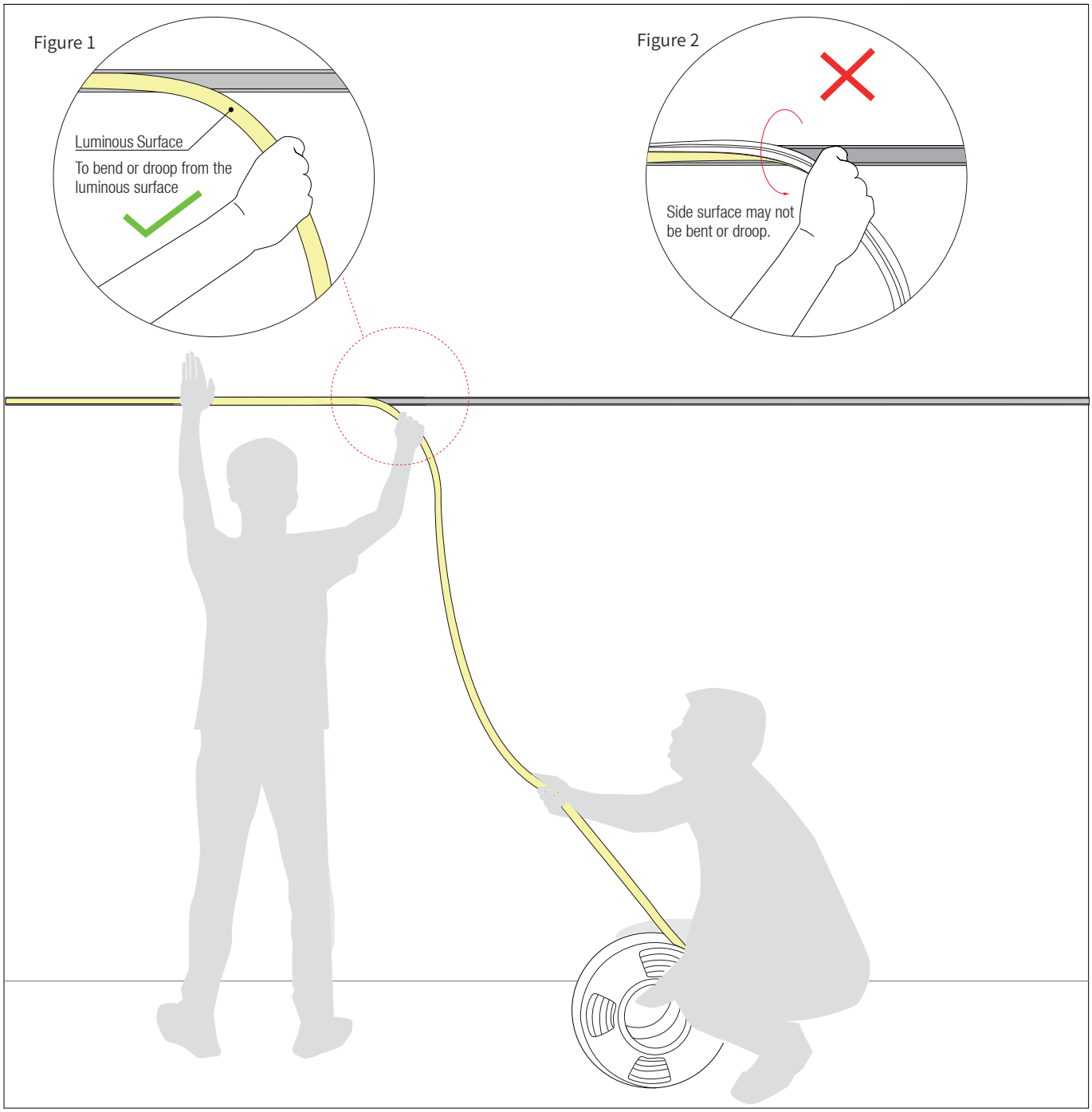
1.Installer:

- Press the light with the palm of the left hand to slowly load it into the slot. Straighten the light with right hand so that it droop it in the direction of your hand. See Figure 1.
- Side surface may not be bent or droop , See Figure 2.

2. Assistant:

-Cooperate with the installer to lift the reel of the light, and then slowly deliver the light to installer. Do not pull or twist the light during the installation.

Installation Precautions —— Side Mounted (If the length of the light is more than 5 meters, two persons must work together to install it.)



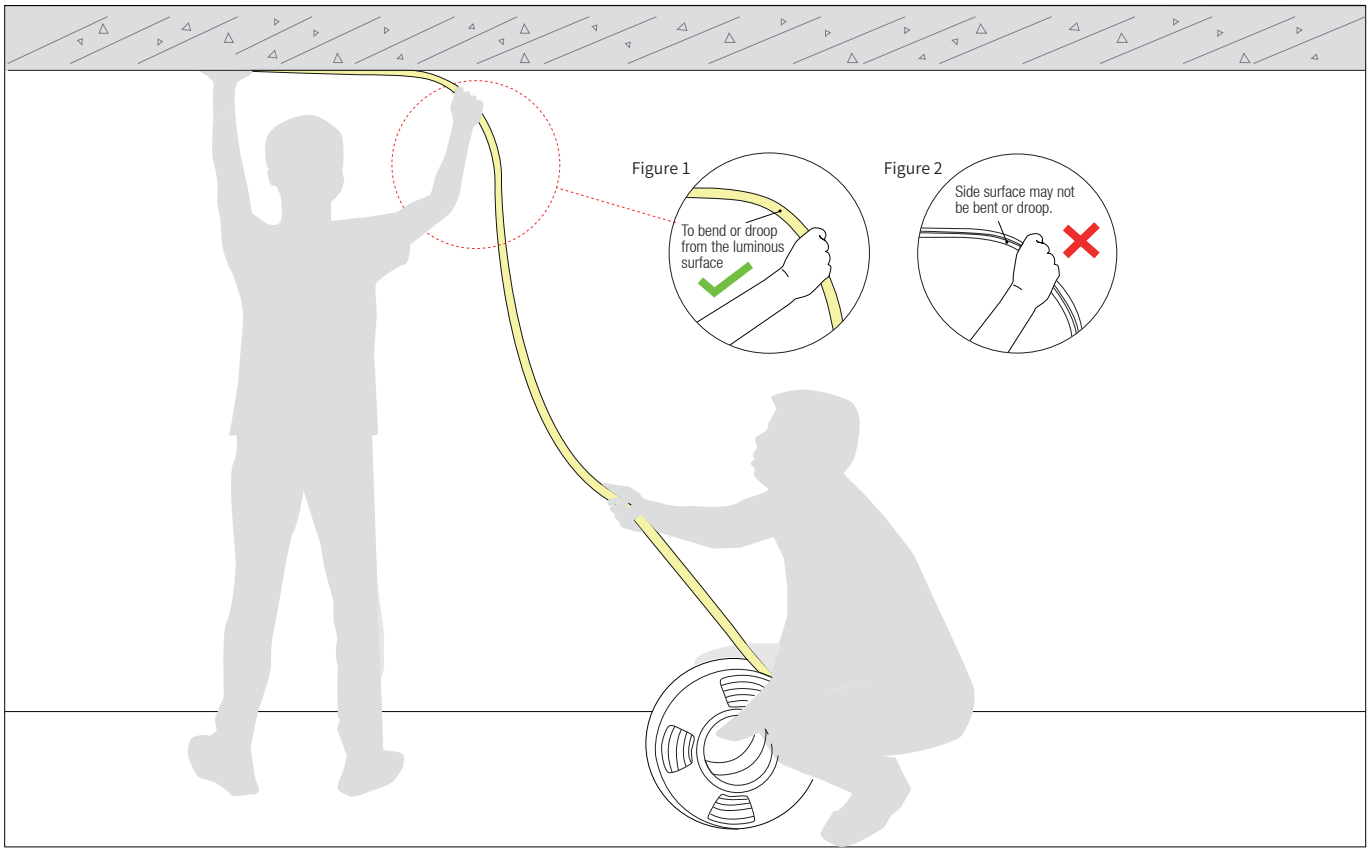
1.Installer:

- Press the light with the palm of the left hand to slowly load it into the slot. Straighten the light with right hand so that it droop it in the direction of your hand. See Figure 1.
- Side surface may not be bent or droop , See Figure 2.

2.Assistant:

- Cooperate with the installer to slowly deliver the light to installer. Do not pull or twist the light during the installation.

Installation Precautions —— Top Mounted (If the length of the light is more than 2 meters, two persons must work together to install it.)



1.Installer:

- Press the light with the palm of the left hand to slowly load it into the slot. Straighten the light with right hand, hold it and rotate it 90° to droop it in the direction of your hand.See Figure 1.
- Side surface may not be bent or droop，See Figure 2.

2.Assistant:

- Cooperate with the installer to slowly deliver the light to installer. Do not pull or twist the light during the installation.

Notes

The selection of the cable specification at the output end of the power supply,
it depends on the total current of the load and the length of the cable. It is recommended to select according to the following table:

Current of the light	Specifications of the cable								
	L=1M	L=2M	L=4M	L=6M	L=8M	L=10M	L=12M	L=14M	L=16M
1A	AWG26	AWG23	AWG21	AWG18	AWG18	AWG17	AWG16	AWG15	AWG15
2A	AWG23	AWG21	AWG18	AWG16	AWG15	AWG14	AWG13	AWG12	AWG12
3A	AWG22	AWG18	AWG16	AWG14	AWG13	AWG12	AWG11	AWG11	AWG10
4A	AWG21	AWG18	AWG15	AWG13	AWG12	AWG11	AWG10	AWG9	AWG9
5A	AWG20	AWG17	AWG14	AWG12	AWG11	AWG10	AWG9	AWG9	AWG8
6A	AWG18	AWG16	AWG13	AWG11	AWG10	AWG9	AWG8	AWG8	AWG7
7A	AWG18	AWG15	AWG12	AWG11	AWG9	AWG8	AWG8	AWG7	AWG6
8A	AWG17	AWG15	AWG12	AWG10	AWG9	AWG8	AWG7	AWG7	AWG6
9A	AWG17	AWG14	AWG11	AWG10	AWG8	AWG7	AWG7	AWG6	AWG5
10A	AWG16	AWG14	AWG11	AWG9	AWG8	AWG7	AWG6	AWG6	AWG5

※The unused light should be sealed with the packaging bag to avoid prolonged exposure.
※Please use DC24V isolated constant voltage power supply with ripple voltage less than 5%. Using other types of power supply may damage the light or cause other safety risks.
※In practical application, 20% allowance should be reserved for power supply to ensure the stability of power supply.
※It is recommended that professionals connect the power supply. Do not connect the power supply with live power to avoid electric shock.
※Please confirm whether the voltage of the power supply is consistent with the voltage of the light; Pay attention to the positive and negative poles of the power cord, do not connect wrong, so as not to cause product damage;
※ When multiple power supplies are used, ensure that the positive poles of the power supply are not connected in parallel. Otherwise, the power supply system may be unstable or damaged after long-term operation.
※ If the actual application length exceeds the specified length, it will lead to overload, heating and uneven brightness of the light.
※ During installation, please do not scratch, twist, or bend the light irregularly. Otherwise, the light may be damaged beyond repair.
※ To ensure the life and reliability of the light, please do not over bend the light, which will damage the product itself.
※ To protect your eyes, please avoid staring at the glowing surface of the light for a long time.
※ Non-professionals are forbidden to install, disassemble and maintain the product.
※ Do not use any acid or alkaline adhesive to fix the light (including but not limited to glass glue, etc.)
※ IP67 products are not suitable for long-term immersion in water; IP68 products are only customized by the factory. After cutting and processing by users themselves, there is a risk that IP68 protection level cannot be reached
※ Because of the difference in structure, even if the same color temperature value, different sizes of light will look slightly different colors. Please confirm it before use.

Tests showed that methanol and benzenes will have yellowing effects on silicone.
In the newly decorated interior environment, epoxy floor paint, wall paint, wallpaper adhesive, various decoration materials or new furniture, they are likely to release of methanol and benzenes.
It is recommended to remove methanol and benzenes first, or ventilate for a period of time in the newly decorated interior environment before install the silicone neon light, to avoid affecting the silicone body.