

SPECIFICATION

UL676 IP68

SIDE BEND NEON

NW-S1617 24V IP68



Features

- Advanced sealing tech, integrated molding process for IP68 protection and 5m underwater depth.
- Made from chlorine-resistant silicone formula, Chlorine resistance $\leq 5\text{PPM}$, has better corrosion resistance, ideal for swimming pools.
- Unique light distribution structure provides uniform illumination with no transparent window, ensuring no light leakage.
- Certified UL676 for U.S. /Canadian underwater lamp application.
- Available in a smooth matte finish for superior dust resistance.
- 3 years warranty, long-life LED > 50,000 hrs.

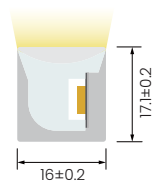
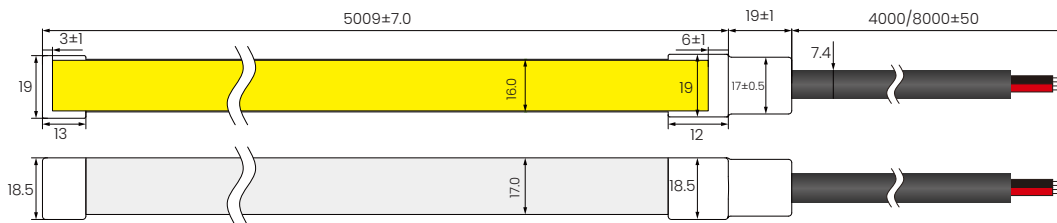


18000K
21000K
24000K
27000K
30000K
35000K
40000K
50000K
55000K



Dimensions(Unit:mm)

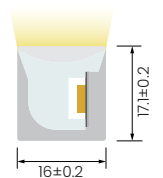
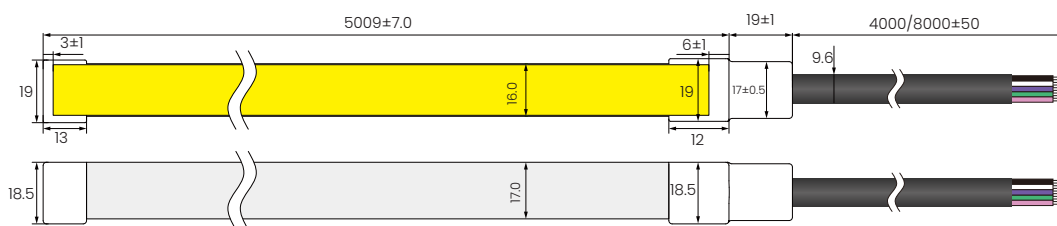
Single Color



Cross section

Wire specifications:
SJOW2*18AWG
(USA:4M / Canada:8M)

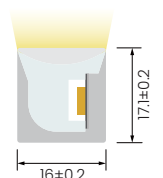
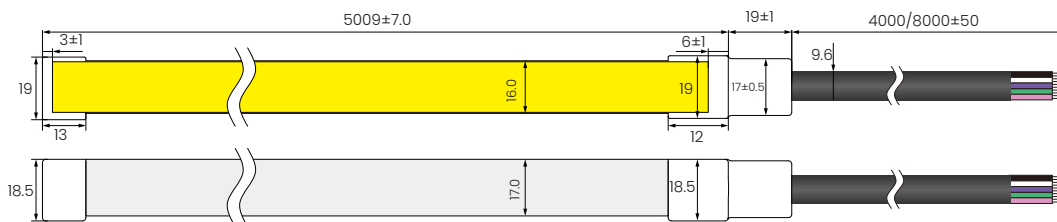
RGBW



Cross section

Wire specifications:
SJOW2*18AWG
(USA:4M / Canada:8M)

RGBW Pixel



Cross section

Wire specifications:
SJOW2*18AWG
(USA:4M / Canada:8M)

General Parameters

Voltage	DC24V
LED Solder-Point Temperature	Max. 65°C
Storage Temperature	-25°C~ 60°C
Ambient Temperature	Min.-25°C, Max (Table below)
CRI	see parameter tables

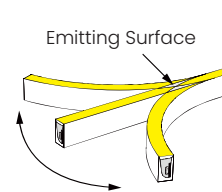
Power Ratings

Power(w/m)	5	10	15
Efficacy(lm/w)@4000K	79.9	77	74.6
Max Ambient Temperature	55°C	45°C	35°C

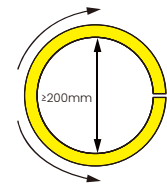
Due to the tolerance of the production and electrical components, output value and electrical power can vary up to 10%.

Length Standard

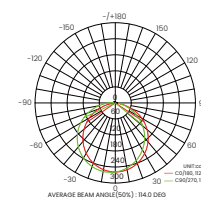
Length Range (M)	Final Length(mm) Integral end cap	Tolerance (mm)
0M<Neon Strip(L)≤5M	L+9	±7
5M<Neon Strip(L)≤10M	L+9	±10
10M<Neon Strip(L)≤15M	L+9	±13



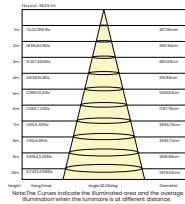
Horizontal Bending



Min. Bending Diameter



Light Distribution Curve



Effective Average Illuminance

Note: The above data is based on 24V, 10W/M, single colour with 4000k colour temperature. If you need IES files for other types, please contact our sales department.

Single Color : Model NW-S1617V24IP68S-Cx-E

CCT(K)	SDCM	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
1800K±150	--	≥90	DC24V	5	278	55.6	50	10	CV
				10	530	53.0	50	7	CV
				15	758	50.5	50	5	CV
2100K±150	--	≥90	DC24V	5	310	61.9	50	10	CV
				10	590	59.0	50	7	CV
				15	844	56.3	50	5	CV
2400K±150	--	≥90	DC24V	5	329	65.8	50	10	CV
				10	630	63.0	50	7	CV
				15	909	60.6	50	5	CV
2700K	≤3	≥90	DC24V	5	355	71.0	50	10	CV
				10	673	67.3	50	7	CV
				15	965	64.4	50	5	CV
3000K	≤3	≥90	DC24V	5	375	75.0	50	10	CV
				10	712	71.2	50	7	CV
				15	1022	68.1	50	5	CV
3500K	≤3	≥90	DC24V	5	390	78.1	50	10	CV
				10	747	74.7	50	7	CV
				15	1080	72.0	50	5	CV
4000K	≤3	≥90	DC24V	5	400	79.9	50	10	CV
				10	770	77.0	50	7	CV
				15	1119	74.6	50	5	CV
5000K	≤4	≥90	DC24V	5	402	80.3	50	10	CV
				10	772	77.2	50	7	CV
				15	1118	74.5	50	5	CV
6500K	≤5	≥90	DC24V	5	410	82.1	50	10	CV
				10	791	79.1	50	7	CV
				15	1148	76.6	50	5	CV
Red	--	--	DC24V	5	147	29.4	50	15	CV
				10	295	29.5	50	9	CV
				15	435	29.0	50	7	CV
Green	--	--	DC24V	5	438	87.5	50	12	CV
				10	727	72.7	50	9	CV
				15	939	62.6	50	7	CV
Blue	--	--	DC24V	5	78	15.6	50	8	CV
				10	148	14.8	50	6	CV
				15	206	13.7	50	5	CV
Yellow	--	--	DC24V	5	120	24.0	50	13	CV
				10	246	24.6	50	8	CV
				15	351	23.4	50	7	CV
Orange	--	--	DC24V	5	149	29.7	50	13	CV
				10	322	32.2	50	9	CV
				15	488	32.5	50	7	CV
Pink	--	--	DC24V	5	330	65.9	50	10	CV
				10	633	63.3	50	6	CV
				15	916	61.1	50	5	CV

RGBW : Model NW-S1617V24IP68S-Crgbwx-E

CCT(K)	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	3.7	65	17.4	62.5	5	CV
G	--	DC24V	3.7	180	47.9	62.5	5	CV
B	--	DC24V	3.7	51	13.5	62.5	5	CV
W:2700K±150	≥80	DC24V	3.7	195	51.9	62.5	5	CV
RGBW	--	DC24V	15	485	32.3	62.5	5	CV

CCT(K)	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	3.7	65	17.4	62.5	5	CV
G	--	DC24V	3.7	180	47.9	62.5	5	CV
B	--	DC24V	3.7	51	13.5	62.5	5	CV
W:3000K±150	≥80	DC24V	3.7	213	56.9	62.5	5	CV
RGBW	--	DC24V	15	507	33.8	62.5	5	CV

CCT(K)	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	3.7	65	17.4	62.5	5	CV
G	--	DC24V	3.7	180	47.9	62.5	5	CV
B	--	DC24V	3.7	51	13.5	62.5	5	CV
W:4000K ⁺⁴⁰⁰ ₋₂₀₀	≥80	DC24V	3.7	217	57.9	62.5	5	CV
RGBW	--	DC24V	15	509	33.9	62.5	5	CV

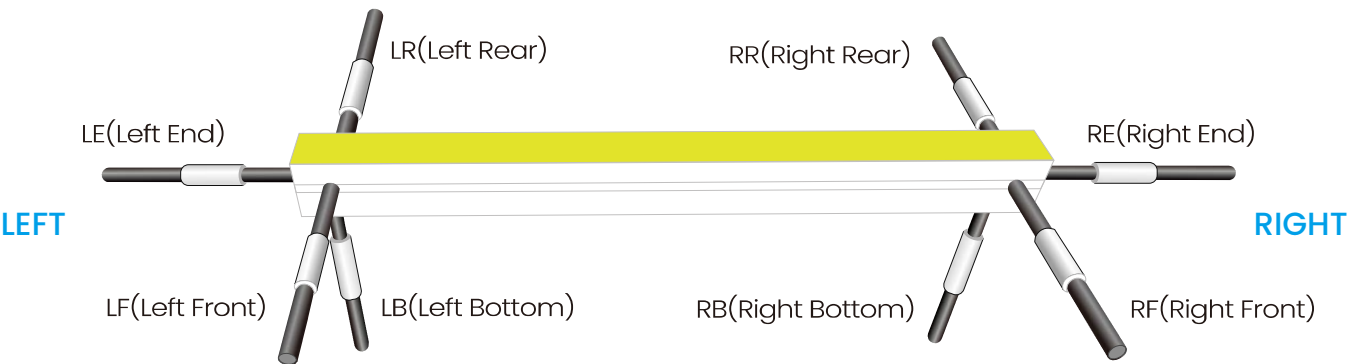
CCT(K)	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	3.7	78	20.8	62.5	5	CV
G	--	DC24V	3.7	192	51.3	62.5	5	CV
B	--	DC24V	3.7	55	14.7	62.5	5	CV
W:6500K±500	≥80	DC24V	3.7	219	58.5	62.5	5	CV
RGBW	--	DC24V	15	509	33.9	62.5	5	CV

RGBW Pixel DMX512 : Model NW-S1617V24IP68S-Crgbwx-UCS512C1L-8P-E

CCT(K)	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	Pixel(PCS)	ICModel
R	--	DC24V	5	46	9.2	125	7	8	UCS512C1L
G	--	DC24V	5	127	25.3	125	7	8	UCS512C1L
B	--	DC24V	5	37	7.4	125	7	8	UCS512C1L
W:4000K ⁺⁴⁰⁰ ₋₂₀₀	≥80	DC24V	5	153	30.5	125	7	8	UCS512C1L
RGBW	--	DC24V	15	363	24.2	125	7	8	UCS512C1L

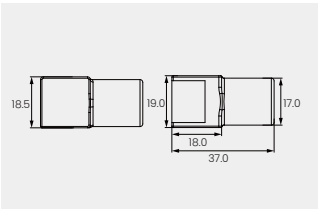
- Maximum run length refers to the maximum length powered from one end using the standard 4000mm cable.
- The specified color temperature refers to the finished product.
- The values shown are typical. Due to production and component tolerances, light output and electrical power may vary by up to ±10%.
- All products can be dimmed; The dimmer voltage must match the rated voltage of the LED strip.
- The output frequency of the dimmer of the constant-current led light should be less than 2K Hz , and the output PWM can control the led light.

Cable Entry Directions

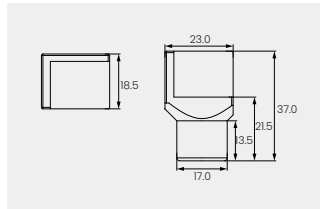


Cable Entry and End Cap Options (Unit: mm)

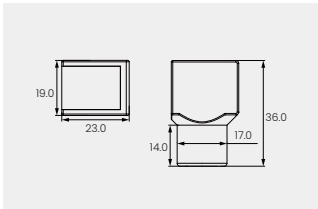
Integral End Cap (IP68)



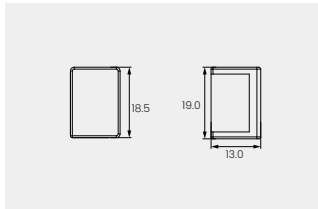
Front Cable Entry



Side Cable Entry



Bottom Cable Entry



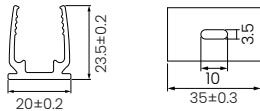
Closed End cap

Cables and Connectors

Cable Type	Schematic Diagram	Specification	Core	Electrical Properties
SJOW Rubber cable		OD: 7.4 mm / Inner core: 18AWG	● ●	Single color: Red V+ / Black V-
		OD: 9.6 mm / Inner core: 18AWG	● ○ ● ●	RGBW: Black V+ / White W / Purple B / Green G / Pink R
		OD: 9.6 mm / Inner core: 18AWG	● ● ● ○ ●	DMX512: Pink V+ / Green PI / PO / Purple A / White B / Black GND

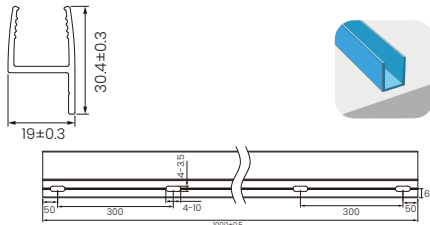
Installation Accessories

PC Clip



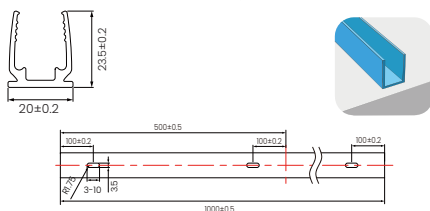
Name	PC Clip
Dimension:	35x20x23.5mm
Accessories:	M3 × 16 mm (SUS304)

PC Profile



Name	PC Profile
Dimension:	1000(±0.5)x19x30.4mm
Accessories:	M3 × 16 mm (SUS304)

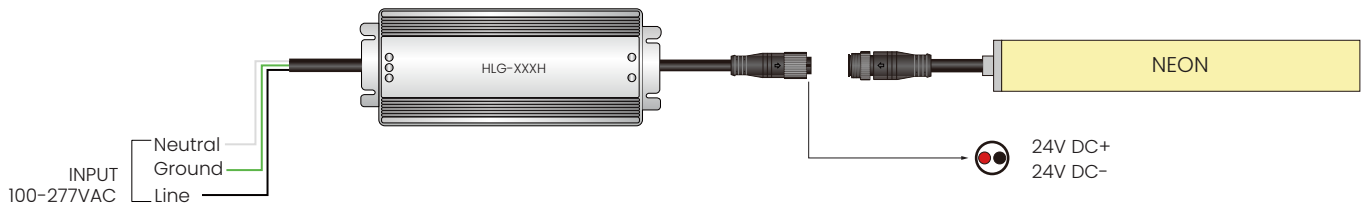
PC Profile



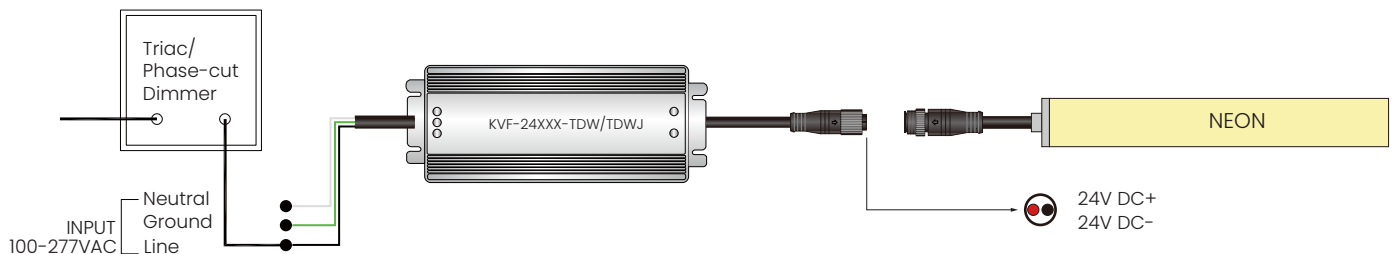
Name	PC Profile
Dimension:	1000(±0.5)x20x23.5mm
Accessories:	M3 × 16 mm (SUS304)

Single Color Connection Diagram

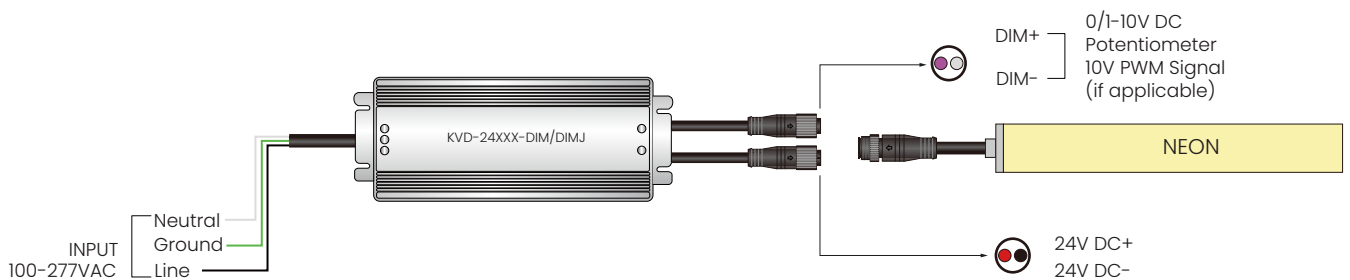
Non-dimmable



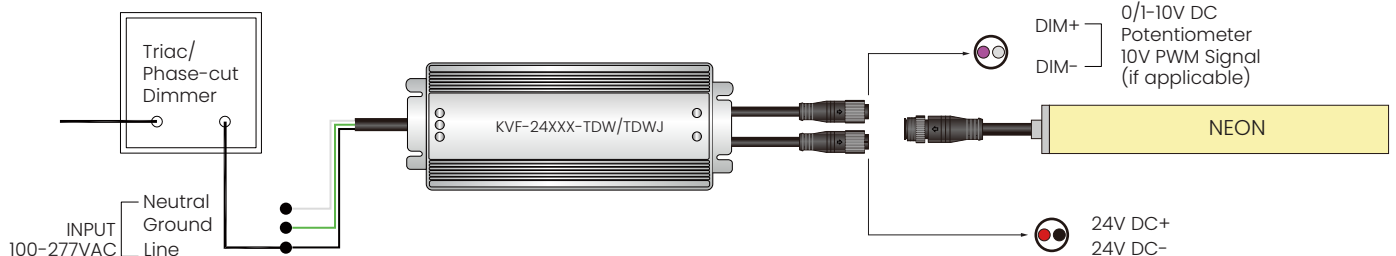
Phase-Cut / TRIAC Dimming



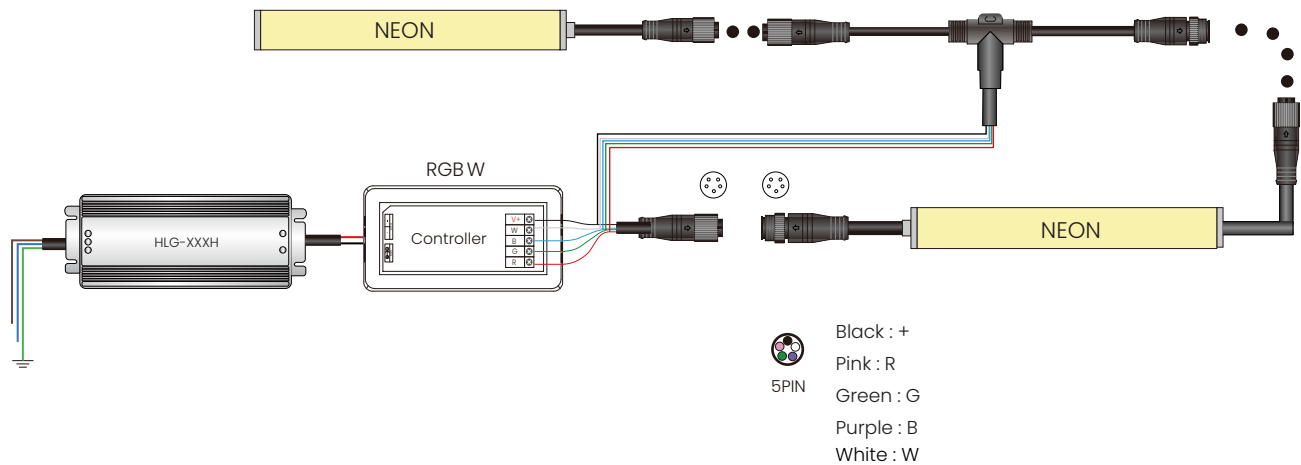
4-in-1 Dimming(0-10V/1-10V/Potentiometer/10V PWM)



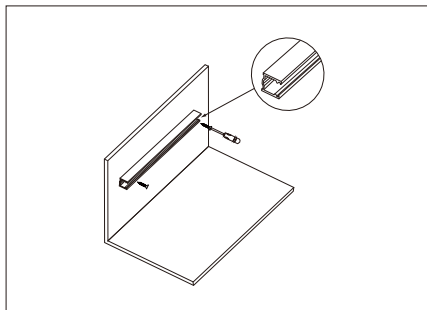
5-in-1 Dimming (Triac/0-10V/1-10V/Potentiometer/10V PWM)



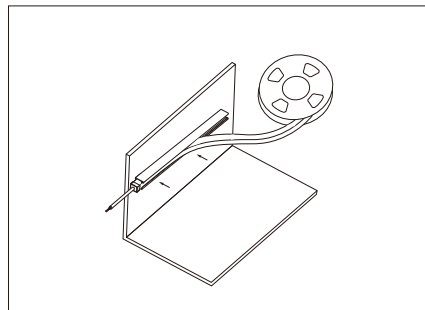
RGBW Connection Diagram



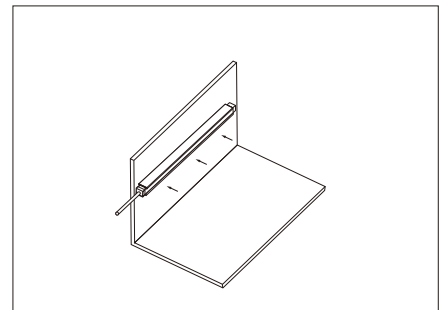
Profile Installation



1. Taking out the profile and screw(screw not included), use the screw driver fix the profile to the installed area.

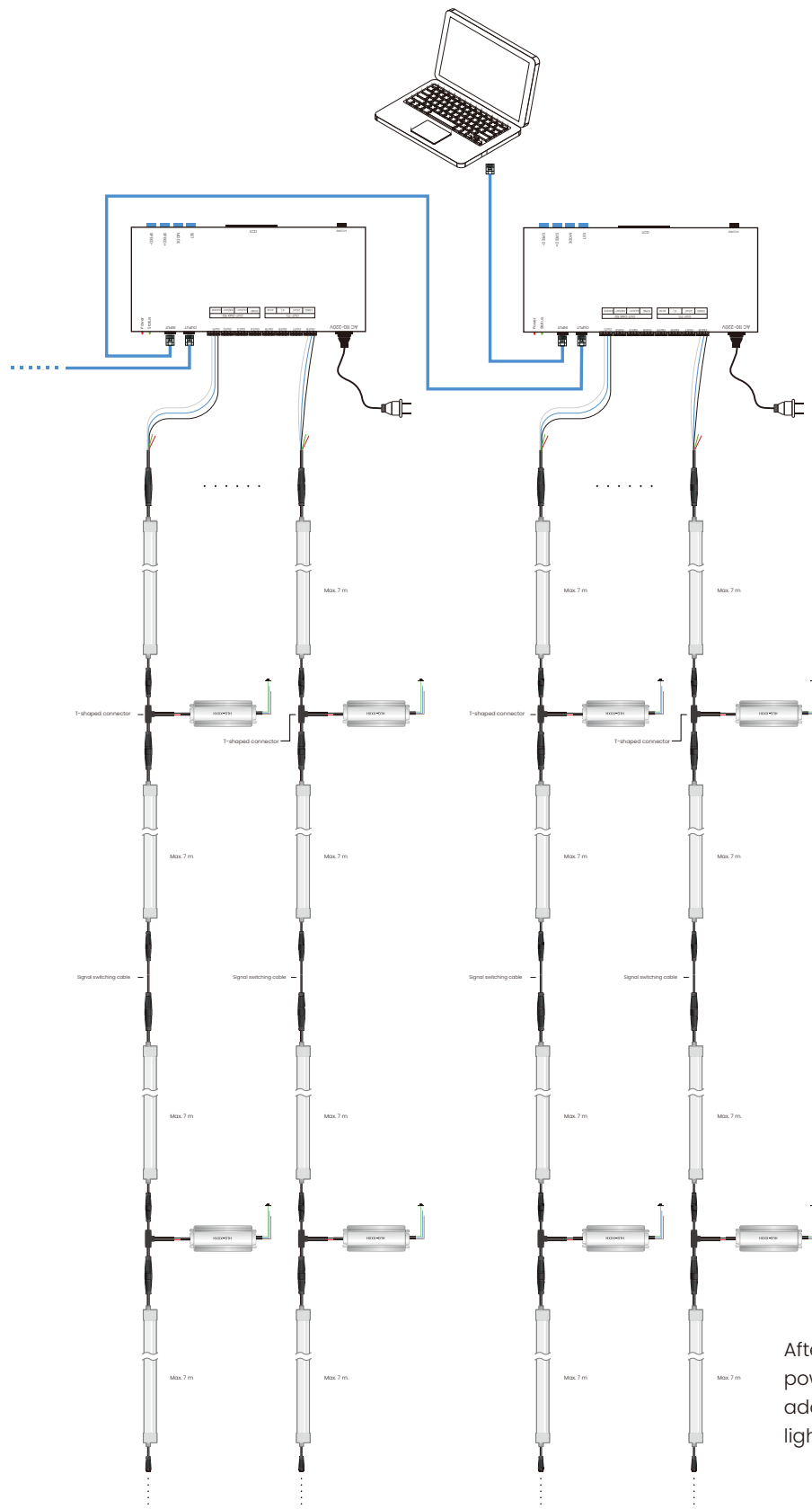


2. Fixing the strip into the profile. No bending sharply and twisting in the process.



3. Fixing well and connect the DC driver and turn on the power supply.

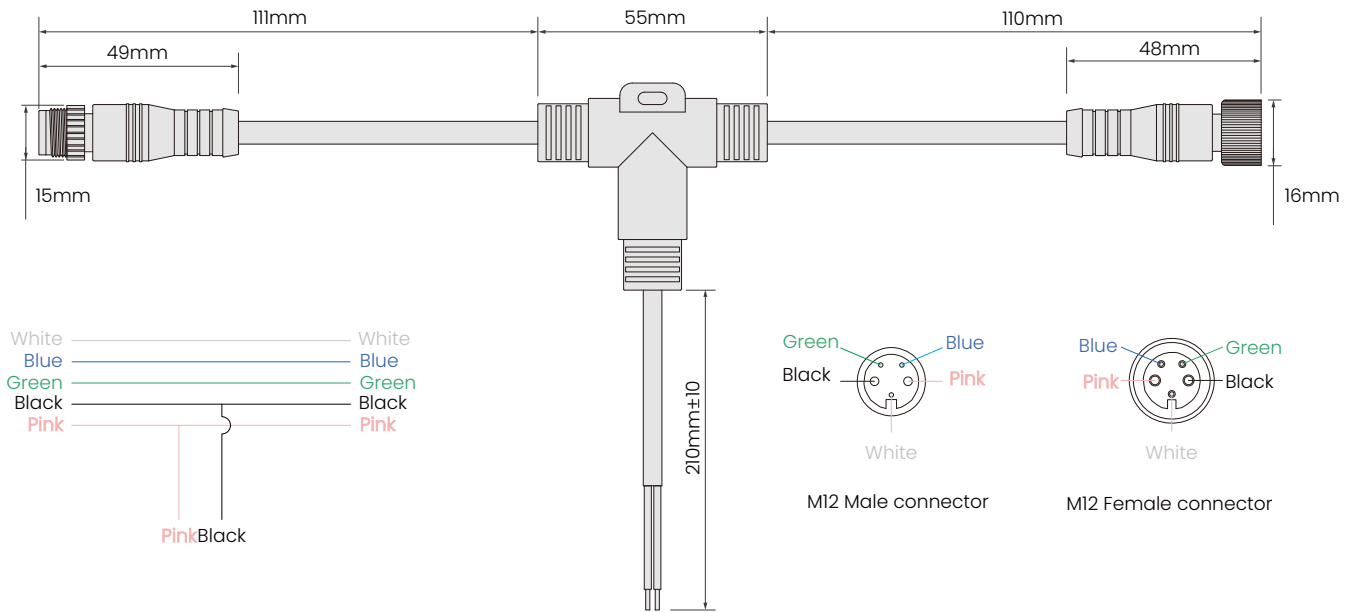
DMX512 Connection Diagram



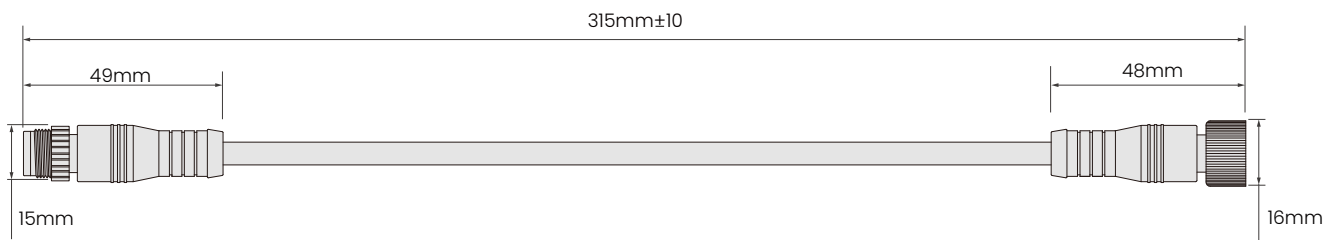
After the LED strip is connected to the signal and power wires, use a controller or address encoder to address the strip. The controller can then run the lighting effects.

DMX512 Accessories

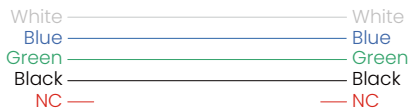
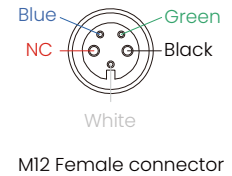
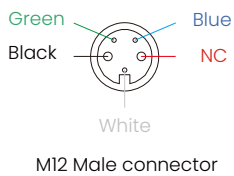
T-type 3 channel connector



Function: Connects LED strips in parallel and passes the signal through.

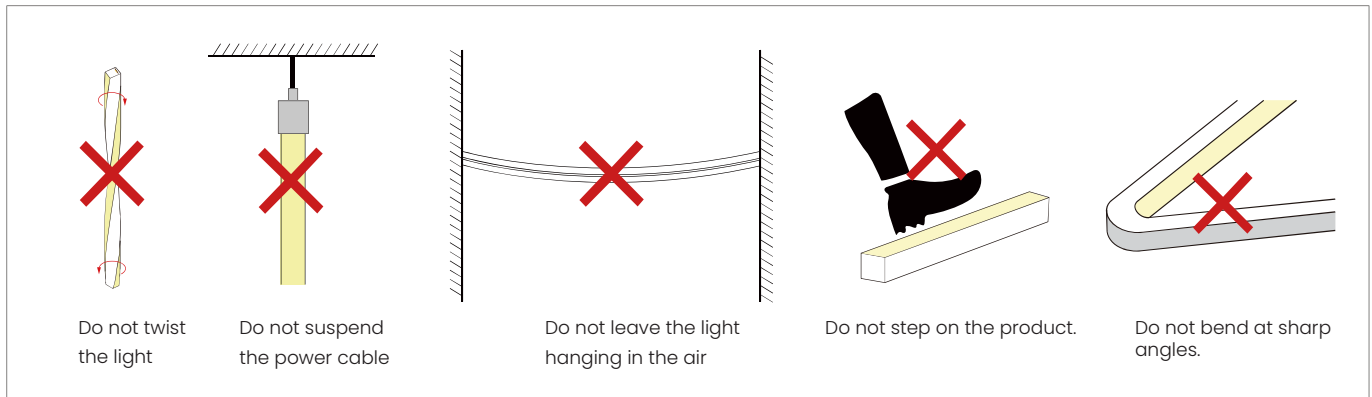
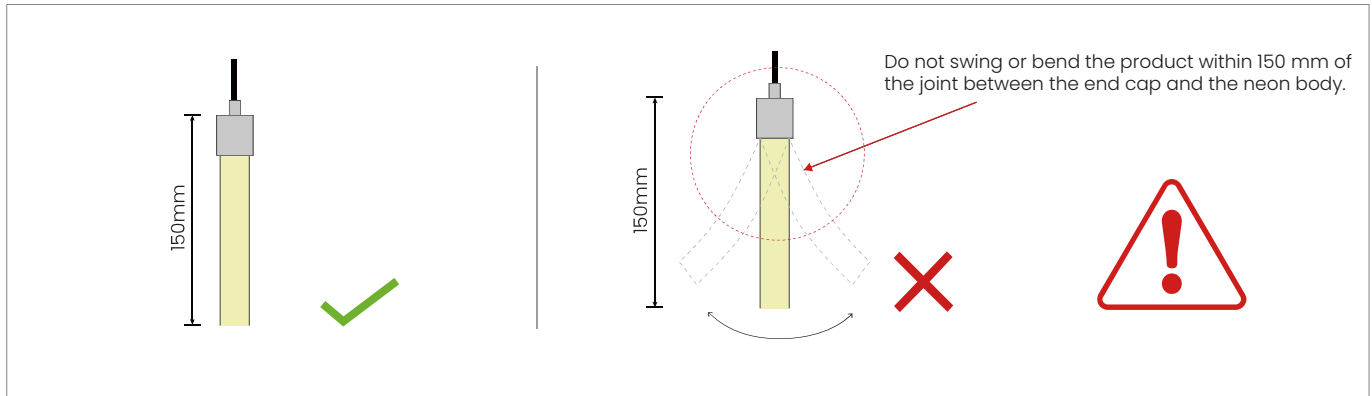


Signal-Switching Cable

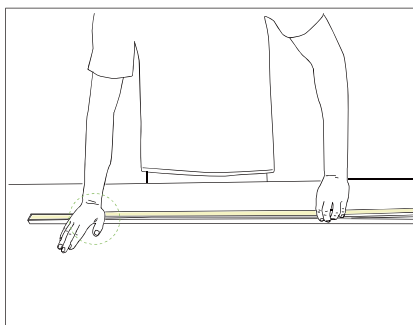


Function:
Keeps the signal cable connected in series and disconnects the positive terminal to prevent two power supplies from being connected in parallel.

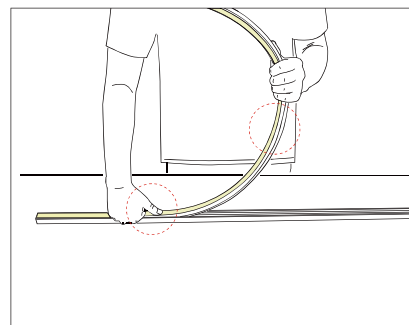
Installation Precautions



Insert into the Profile

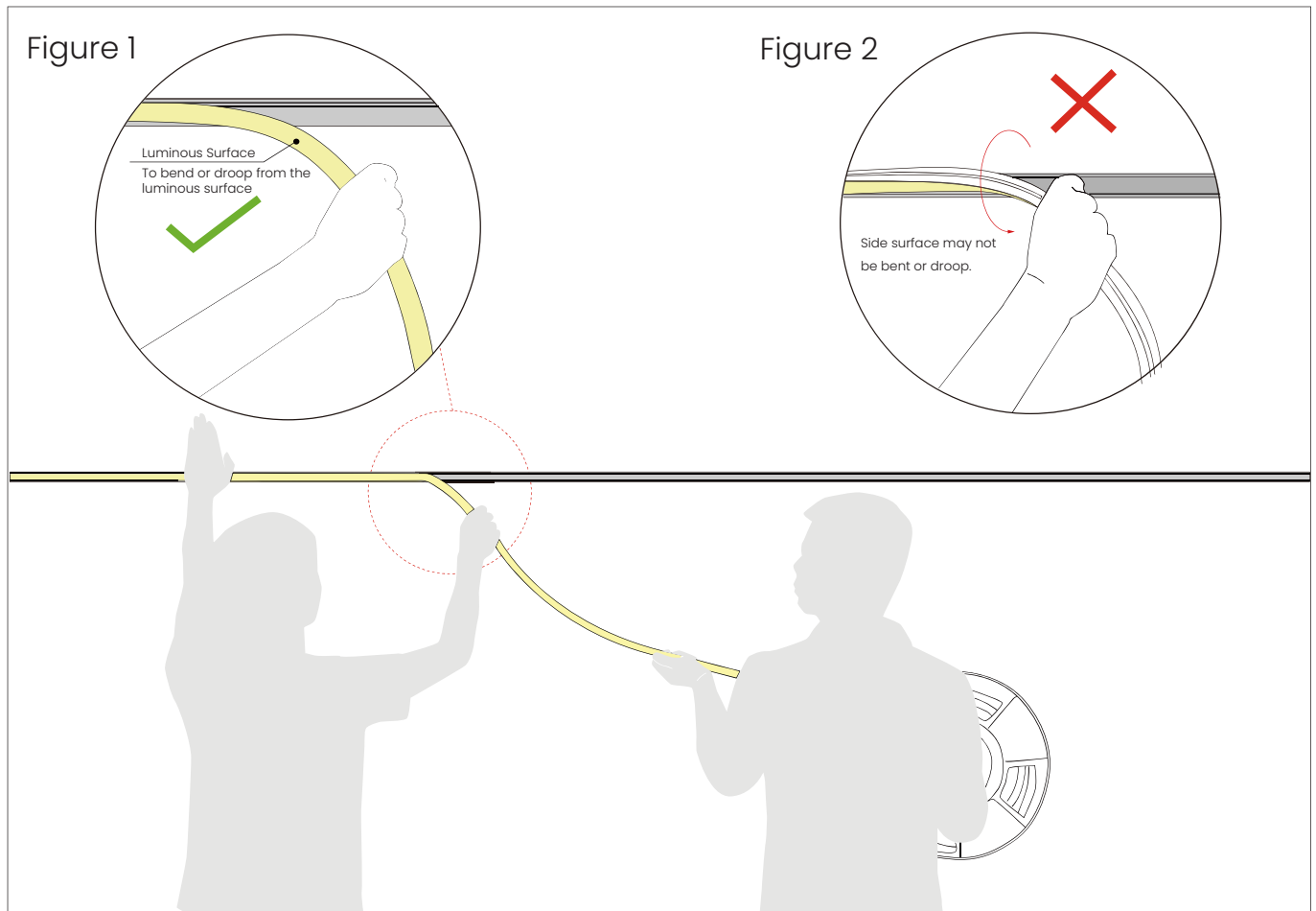


- Use your palm to slowly press the LED strip into the channel, then gently straighten it along the channel.
- Try to keep the led strip in a flat state during the installation process.



- Do not press the LED strip with one finger; this may damage internal components.
- 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 people must work together to install it.)



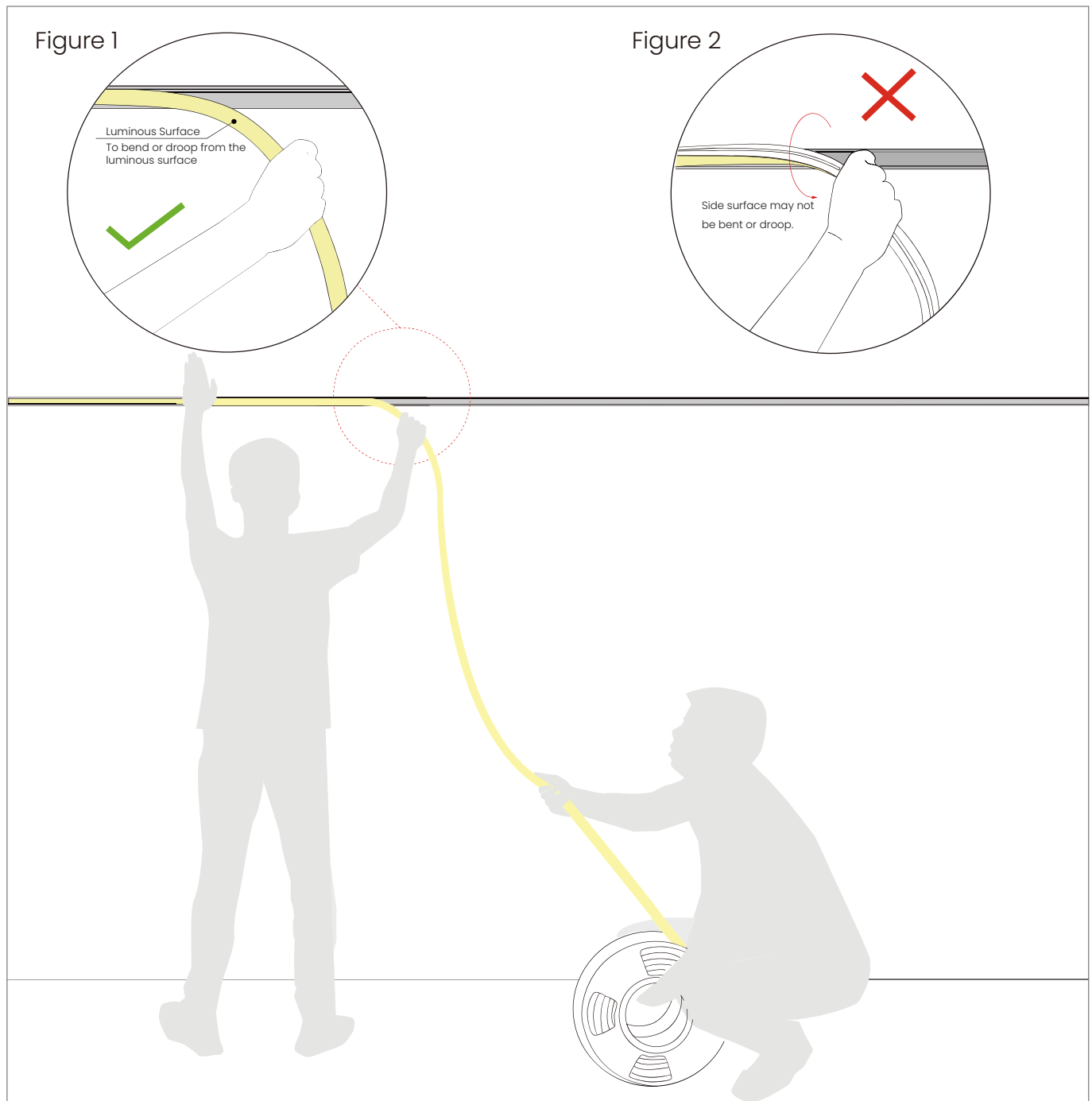
1. Installer:

- 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 people must work together to install it.)



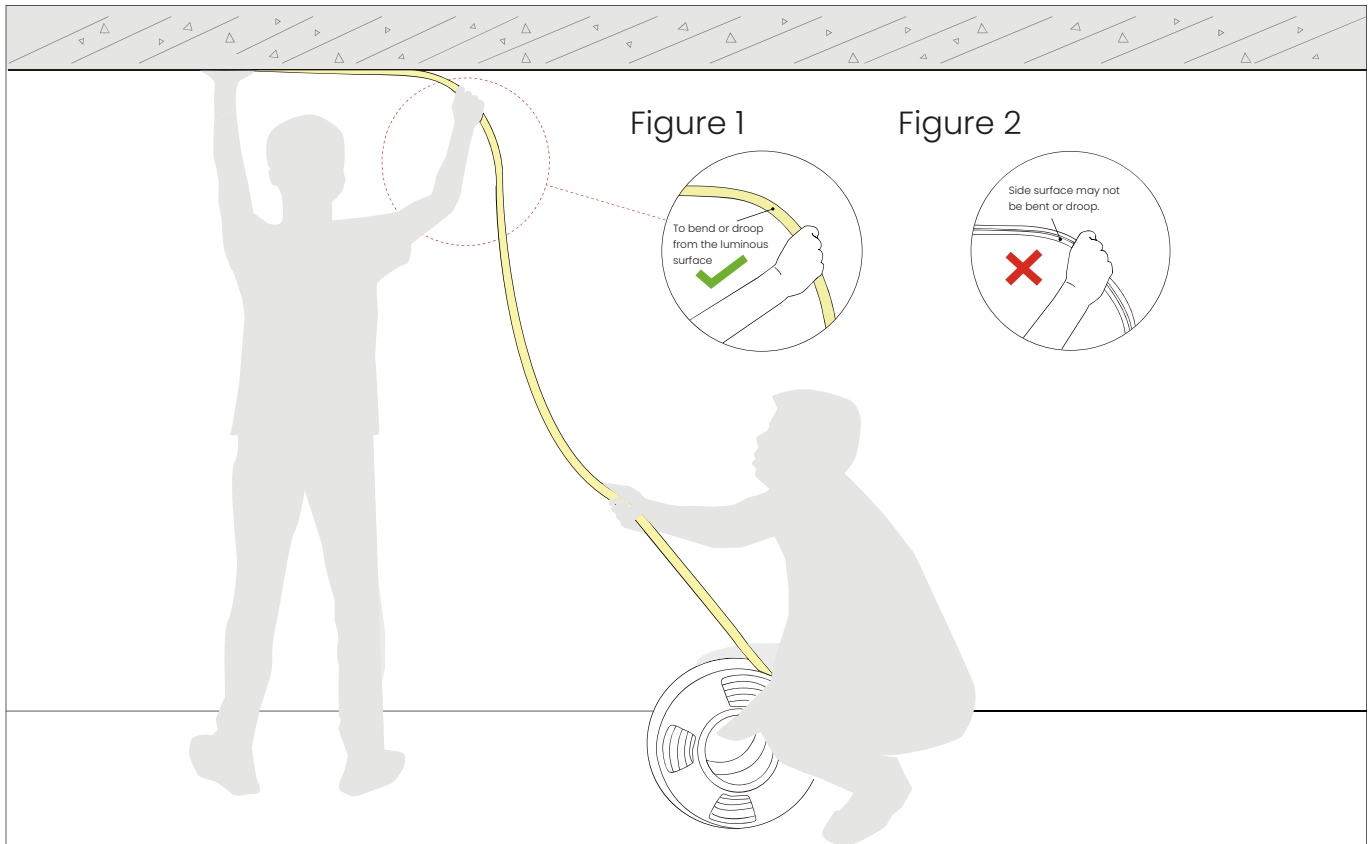
1. Installer:

- 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 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 people 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.

Packaging Information



Standard Packaging: White carton with paper reel inside.

Model	Qty/Roll(m)	Rolls/Carton	Carton Size	Net Weight	Gross Weight
NW-S1617 24V IP68	5m	8	41 x 41 x 26 cm	11.8 kg/carton	13.2 kg/carton
NW-S1617 24V IP68	10m	3	41 x 41 x 26 cm	8.9 kg/carton	10.1 kg/carton
NW-S1617 24V IP68	15m	2	41 x 41 x 26 cm	11.8 kg/carton	12.8 kg/carton

For reference only. Final packing information shall be subject to actual shipment.

Notes

Cable size at the power-supply output depends on the total load current and cable length. Select the cable according to the table below.

Light Current	Cable Specification								
	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 power of UL676 neon strip cannot exceed 15W per meter; the maximum power of one single strip cannot exceed 100W.
- ※ The unused light should be sealed with the packaging bag to avoid prolonged exposure.
- ※ Use a 24 V DC isolated constant-voltage power supply with ripple below 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 reverse polarity, 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 may cause overload, overheating, 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.
- ※ Installation, disassembly, and maintenance must be performed by qualified personnel only.
- ※ Do not use any acidic 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 versions are factory-customized only. User cutting or processing may compromise IP68 protection.
- ※ Because of the difference in structure, even if the same color temperature value, products of different sizes may appear slightly different in color.

Tests showed that formaldehyde and benzene compounds can cause yellowing of silicone. In newly decorated interiors, epoxy floor paint, wall paint, wallpaper adhesive, decoration materials, and new furniture may release formaldehyde and benzene compounds. It is recommended to remove these substances first, or ventilate the area for a period before installing the silicone neon light, to avoid affecting the silicone body.