

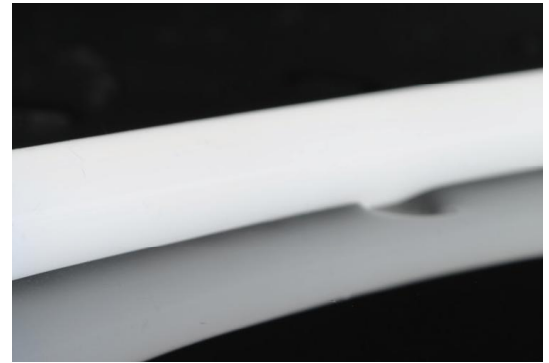
SPECIFICATION TOP BEND NEON

NS-R16 24V IP67

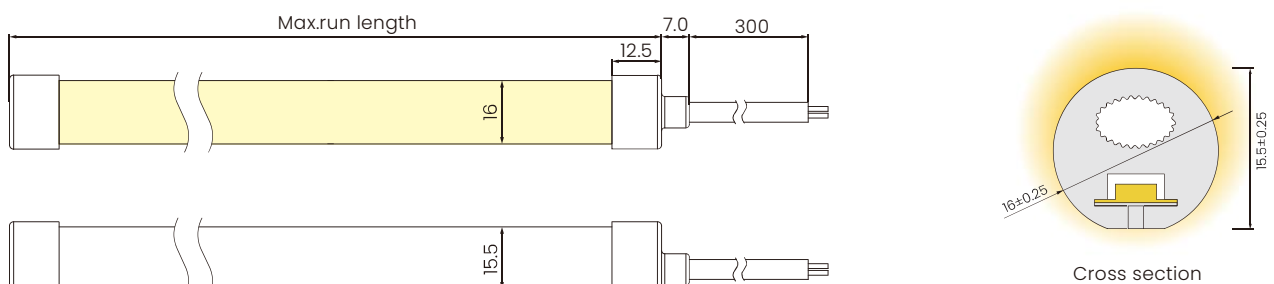


Features

- 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;
- 3-5 years warranty, working life ≥ 50000 hours.



Dimensions (Unit: mm)



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

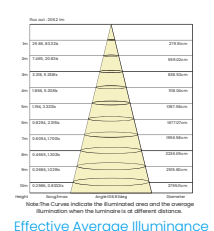
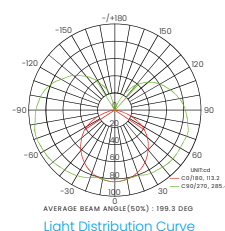
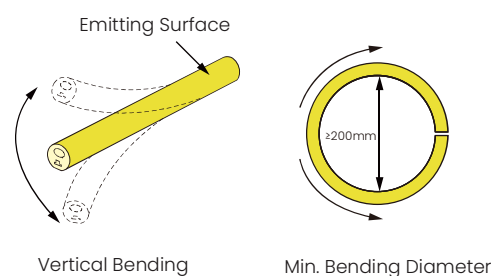
Power Ratings

Power(w/m)	10
Efficacy (lm/w) @4000K	70
Max Ambient Temperature	45°C

Due to production and component tolerances, light output and electrical power may vary by up to $\pm 10\%$.

Length Standard

Length Range (M)	Final Length Silicone end cap	Tolerance (mm)
0M<Neon Strip(L)≤5M	L+4.5	±7
5M<Neon Strip(L)≤10M	L+4.5	±10
10M<Neon Strip(L)≤15M	L+4.5	±13
15M<Neon Strip(L)≤17M	L+4.5	±16



Note: The above data is based on a 24 V, 10 W/m, single-color product at 4000 K. For IES files for other versions, contact our sales team.

Single Color: Model NS-R16V24-CCx-A

CCT(K)	CRI	Voltage	Power(W)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
2100±150	≥90	DC24V	10	560	56	50	13	CC
2400±150	≥90	DC24V	10	590	59	50	13	CC
2700±150	≥90	DC24V	10	660	66	50	13	CC
3000±150	≥90	DC24V	10	650	65	50	13	CC
3500±200	≥90	DC24V	10	630	63	50	13	CC
4000 ⁺⁴⁰⁰ ₋₂₀₀	≥90	DC24V	10	700	70	50	13	CC
5000 ⁺⁵⁰⁰ ₋₃₀₀	≥90	DC24V	10	730	73	50	13	CC
6500±500	≥90	DC24V	10	730	73	50	13	CC
Red	--	DC24V	10	310	31	50	17	CC
Green	--	DC24V	10	780	78	50	13	CC
Blue	--	DC24V	10	160	16	50	13	CC
Yellow	--	DC24V	10	240	24	50	17	CC
Pink	--	DC24V	10	330	33	50	13	CC

Tunable White-SMD3014: Model NS-R16V24-Ca-A

CCT(K)	CRI	Voltage	Power(W)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
2700±150	≥90	DC24V	5	365	73	50	5	CV
6500±500	≥90	DC24V	5	375	75	50	5	CV
2700+6500	≥90	DC24V	10	730	73	50	5	CV

RGB: Model NS-R16V24-Crgb-A

CCT(K)	CRI	Voltage	Power(W)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	3.3	75	23	50	5	CV
G	--	DC24V	3.3	231	70	50	5	CV
B	--	DC24V	3.3	46	14	50	5	CV
RGB	--	DC24V	10	350	35	50	5	CV

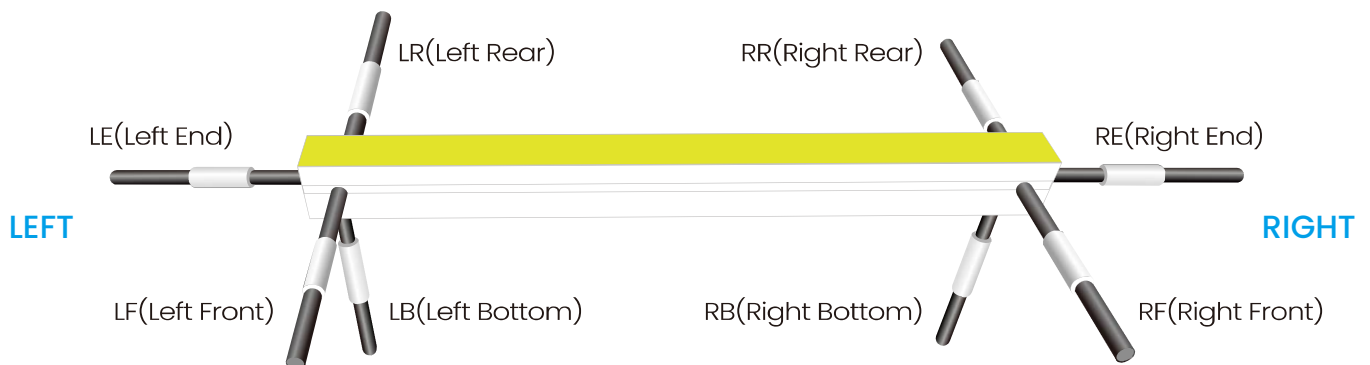
RGB Pixel SPI: Model NS-R16V24-Crgb-WS2811-10P-A

CCT(K)	CRI	Voltage	Power(W)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	Pixel (PCS)	IC Model
R	--	DC24V	4.8	69	14.4	100	5	10	WS2811
G	--	DC24V	4.8	219	45.6	100	5	10	WS2811
B	--	DC24V	4.8	41	8.5	100	5	10	WS2811
RGB	--	DC24V	12.5	294	23.5	100	5	10	WS2811

- Maximum run length refers to the maximum length powered from one end using the standard 30 cm 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 constant-current LED dimmer should be **less than 2 kHz**, and PWM output can control the LED strip.

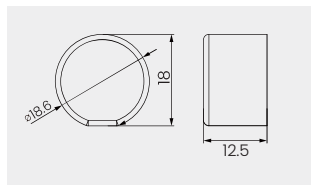
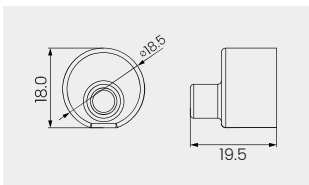
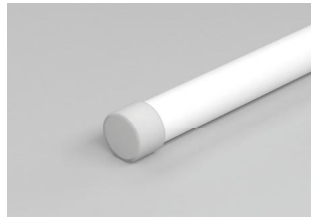
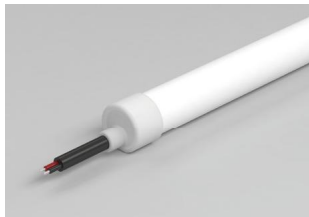
Cable Entry Directions

Note: Only LE (Left End) and RE (Right End) cable entry directions are available for this model.



Cable Entry and End Cap Options (Unit: mm)

Silicone end cap (IP67)



Front Cable Entry

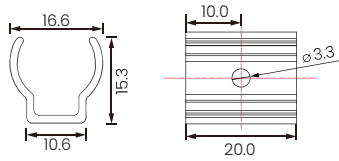
Closed End cap

Cables and Connectors

Cable Type	Schematic Diagram	Specification	Core	Electrical Properties
PVC Cable		OD: 5.0 mm / Conductor: 20 AWG		Red V+ / Black V-
		OD: 5.0 mm / Conductor: 20 AWG		Brown V+ / White W / Yellow WW
		OD: 5.5 mm / Conductor: 20 AWG		Black V+ / Blue B / Green G / Red R
Waterproof Connector with PVC Cable		OD: 5.0 mm / Conductor: 20 AWG M12 Male/Female Connector		Red V+ / Black V-
		OD: 5.0 mm / Conductor: 20 AWG M12 Male/Female Connector		Brown V+ / White W / Yellow WW
		OD: 5.0 mm / Conductor: 20 AWG M12 Male/Female Connector		SPI: Red V+, Green DI/DO, Black V-
		OD: 5.5 mm / Conductor: 20 AWG M12 Male/Female Connector		Black V+ / Blue B / Green G / Red R

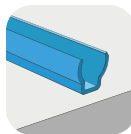
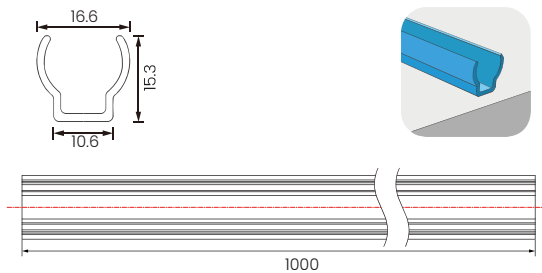
Installation Accessories

PC Clip



Name	PC Clip
Dimension:	20x16.6x15.3mm
Accessories:	Screw M3x16 (SUS304)

PC Profile



Name	PC Profile
Dimension:	1000x16.6x15.3mm
Accessories:	Screw M3x16 (SUS304)

Cutting Mark

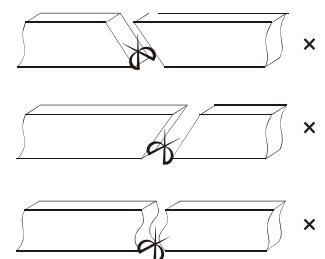


Cutting Mark

Note:
The bottom of the LED strip has a transparent window. The black mark indicates the cutting position.



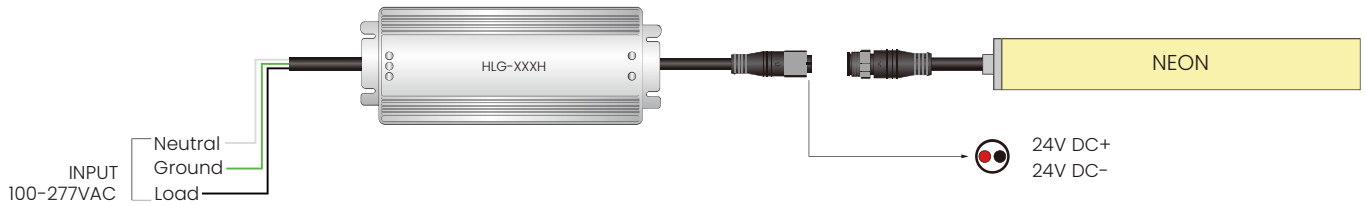
Use a professional cutting tool to cut vertically at the cutting mark.



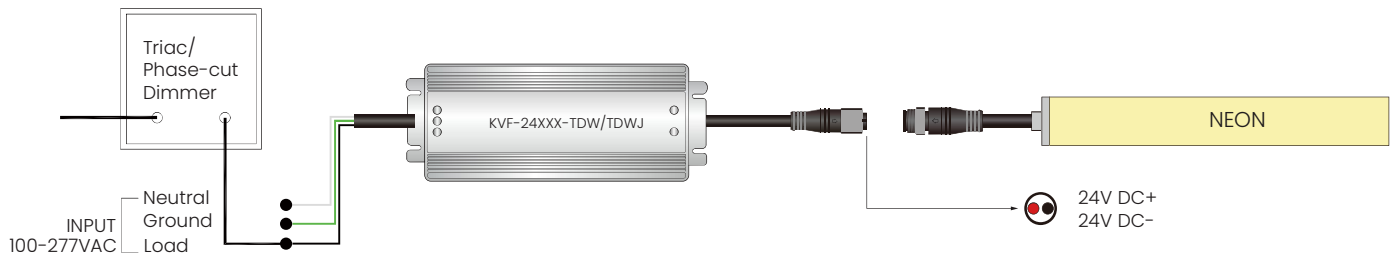
Do not cut at an oblique angle or along a curved section.

Single Color Connection Diagram

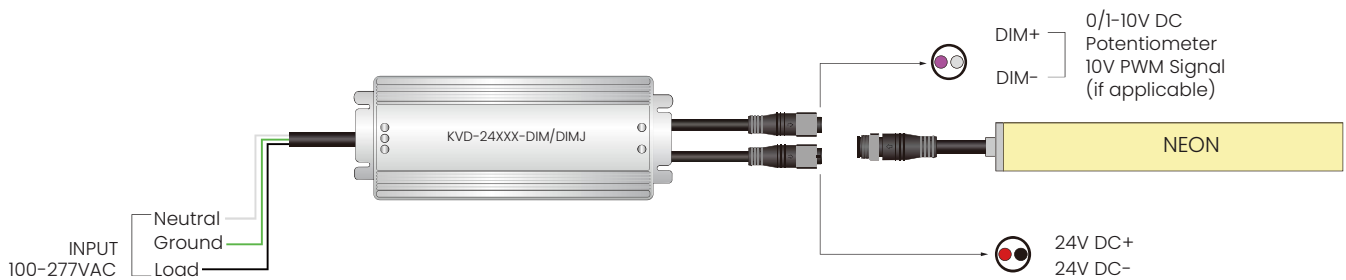
Non-dimmable



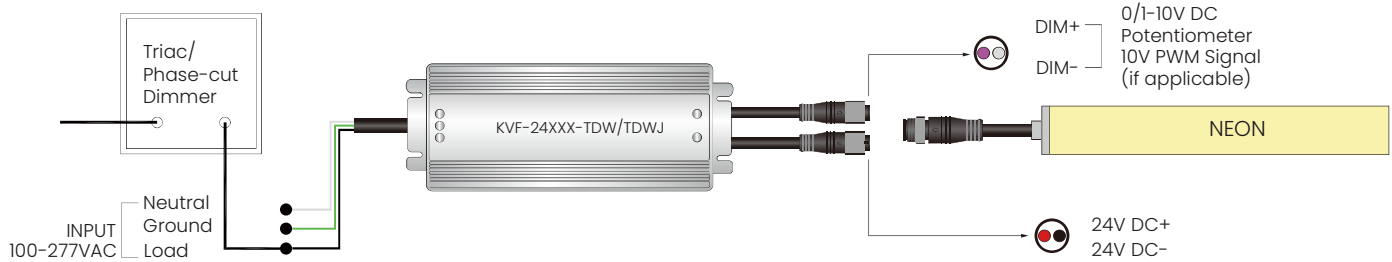
Phase-Cut / TRIAC Dimming



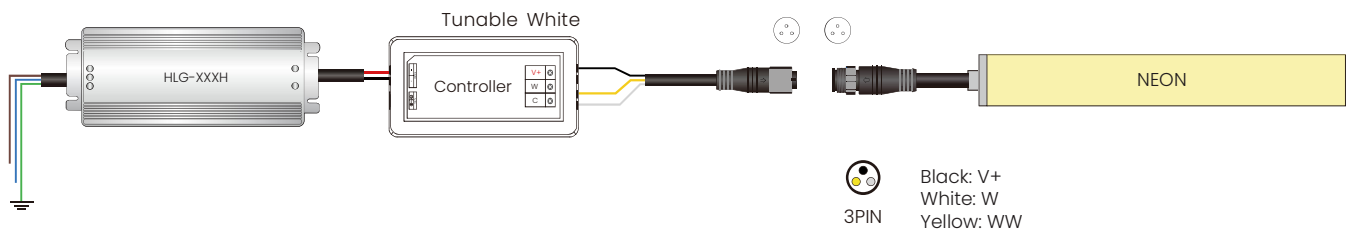
4-in-1 Dimming(0-10V/1-10V/Potentiometer/10V PWM)



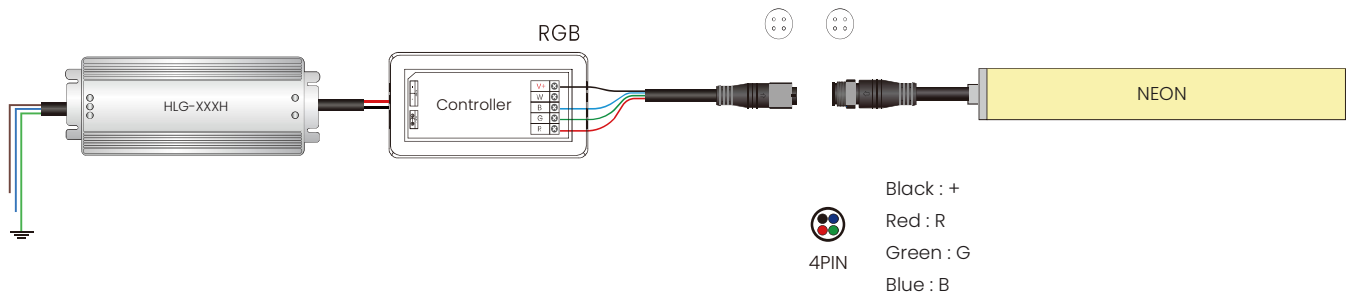
5-in-1 Dimming (Triac/0-10V/1-10V/Potentiometer/10V PWM)



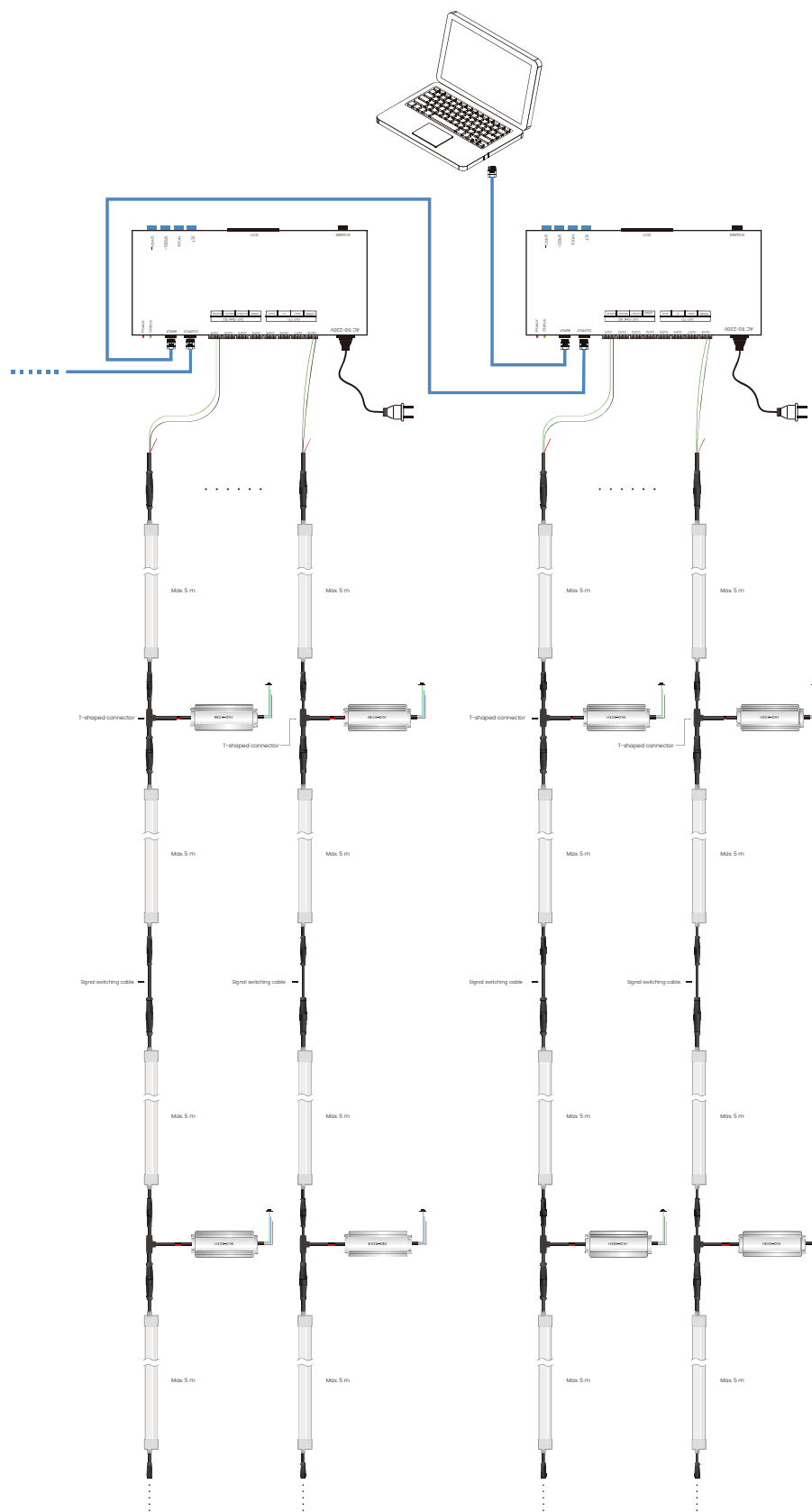
Tunable White Connection Diagram



RGB Connection Diagram

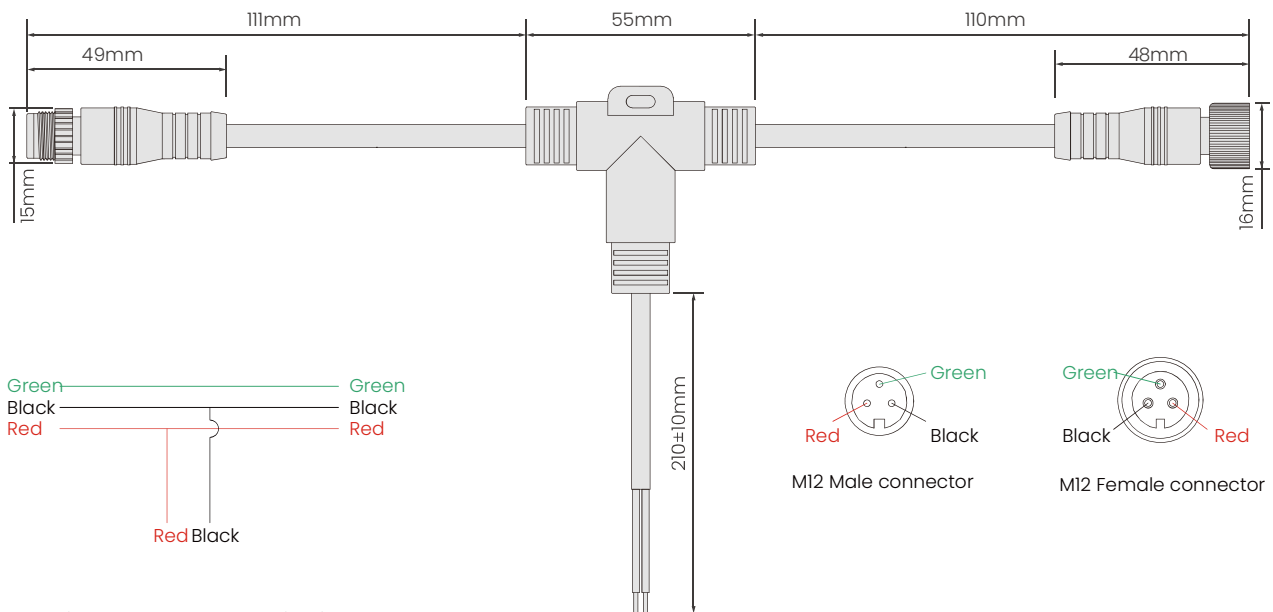


SPI Connection Diagram



SPI Accessories

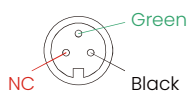
T-type 3 pin connector



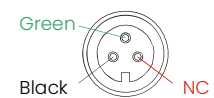
Function: Connects LED strips in parallel and passes the signal through.



Signal switching cable



M12 Male connector



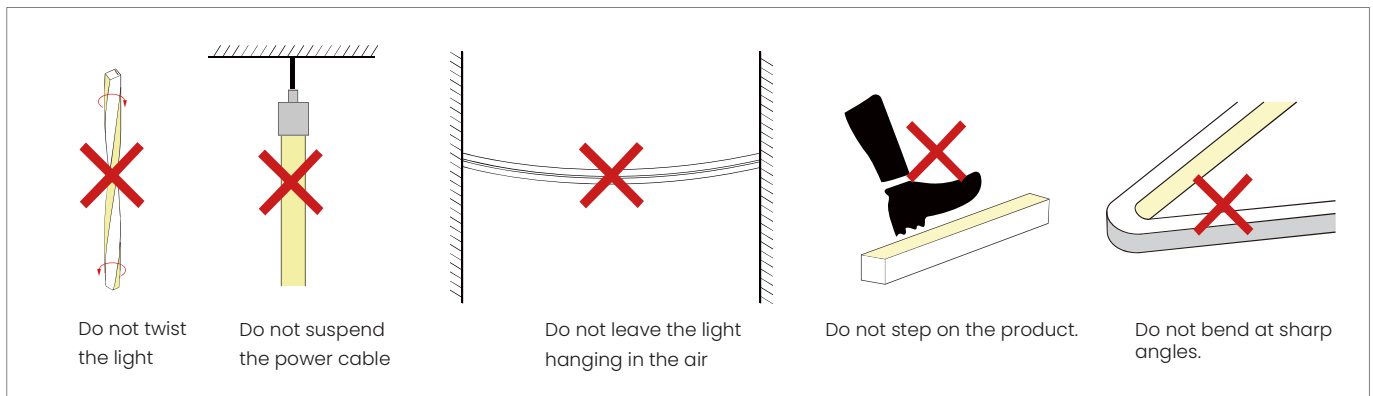
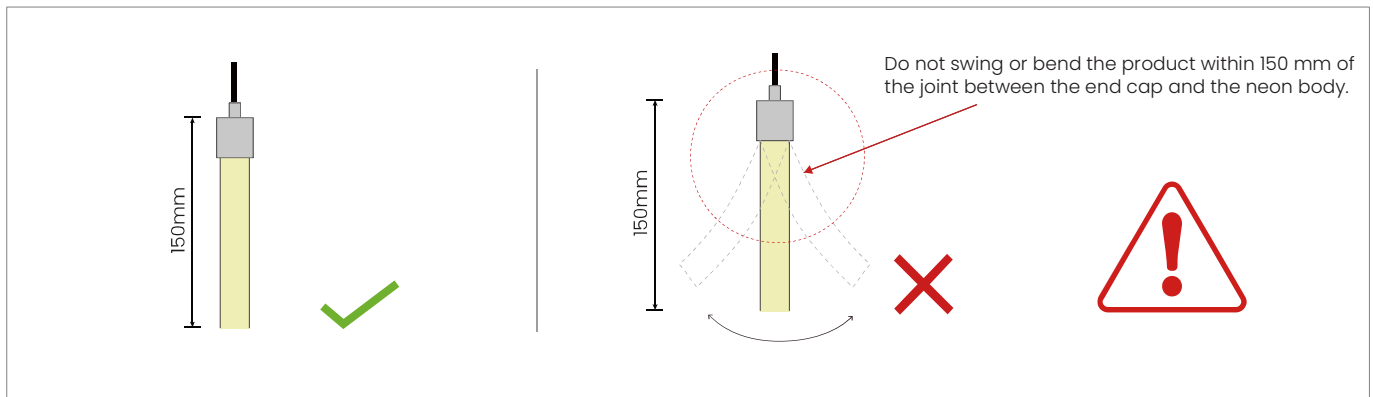
M12 Female connector

Black Black
Green Green
NC NC

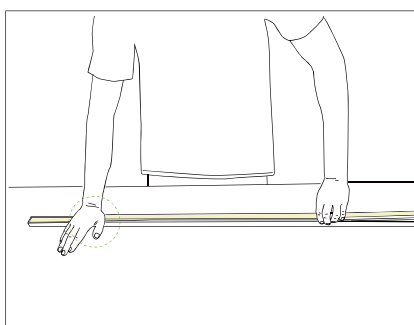
Function:

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

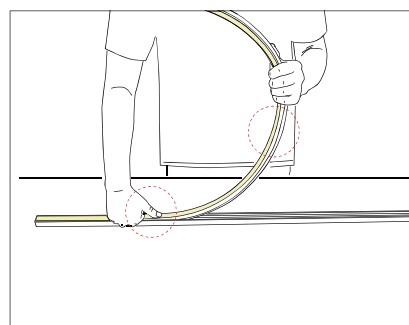
Installation Precautions



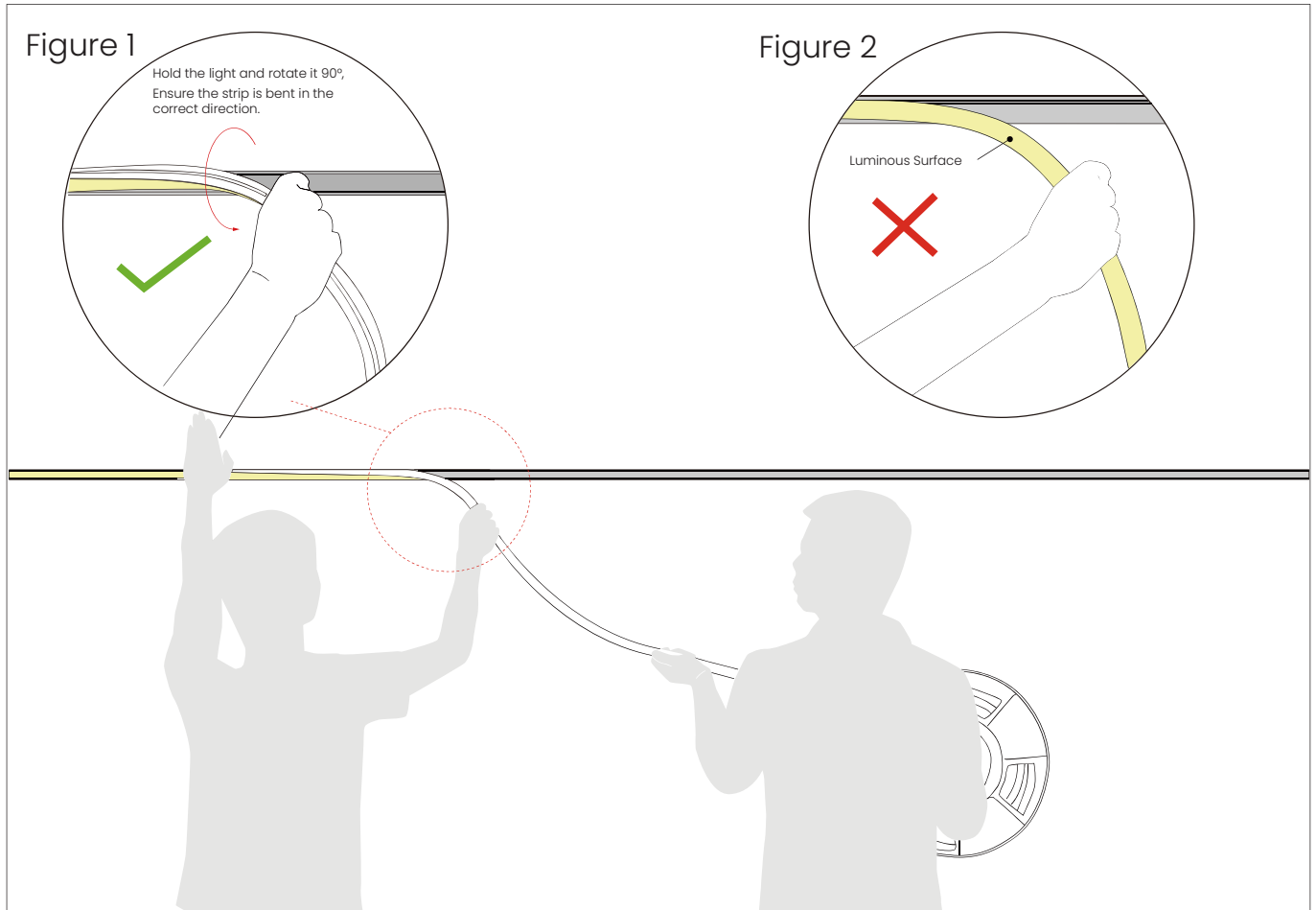
Insert into the Profile



- 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.

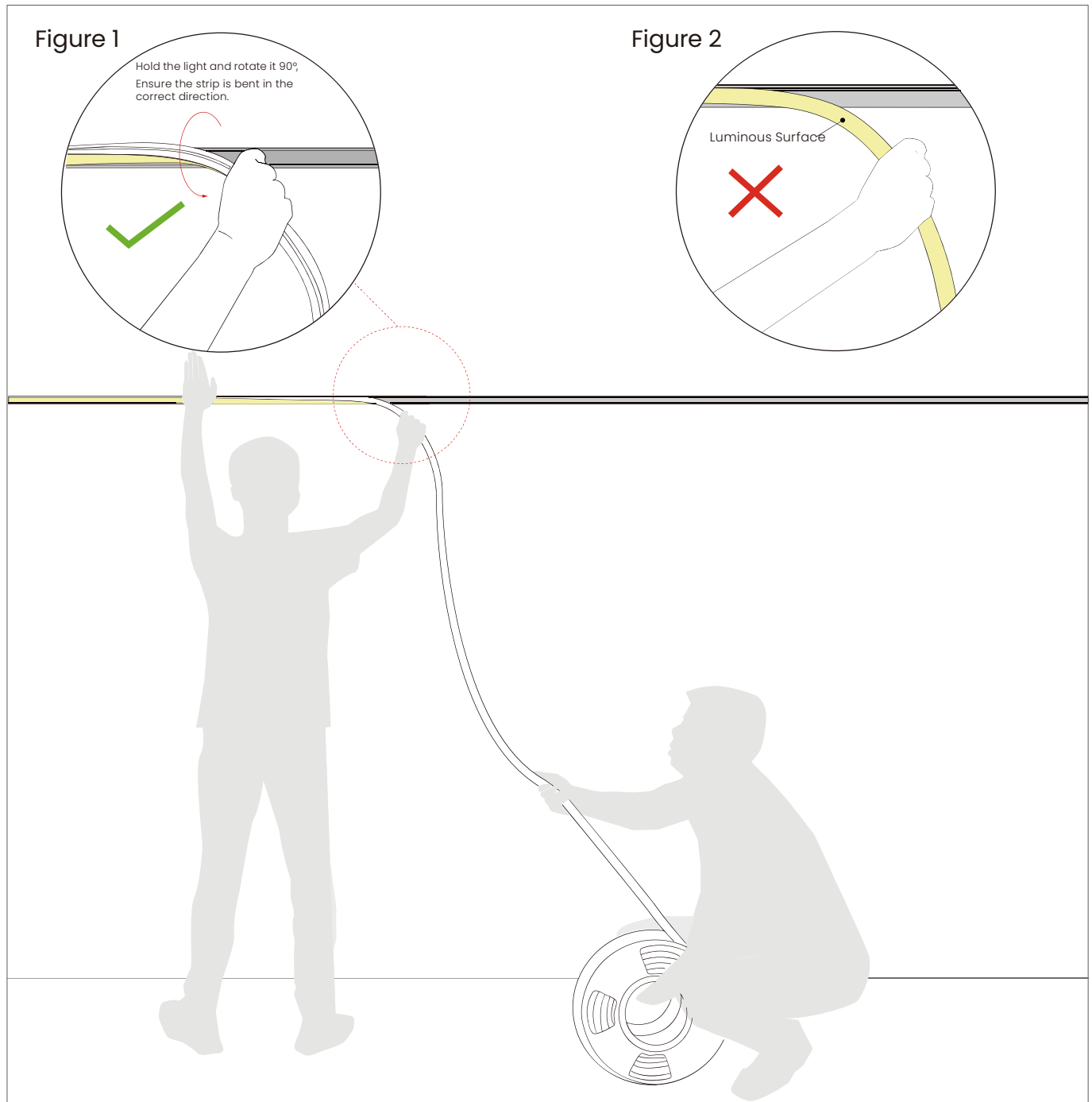
Installation Precautions – Side Mounted (If the length of the light is more **than 2** meters, two people must work together to install it.)**1. Installer:**

- Press the light with the palm of the left hand to slowly load it into the slot. Use your right hand to guide the strip so it bends downward in the correct direction. See Figure 1.
- Do not bend the luminous surface to the side. See Figure 2.

2. Assistant:

- Cooperate with the installer to lift the reel of the light, and then slowly feed the strip to the 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.)

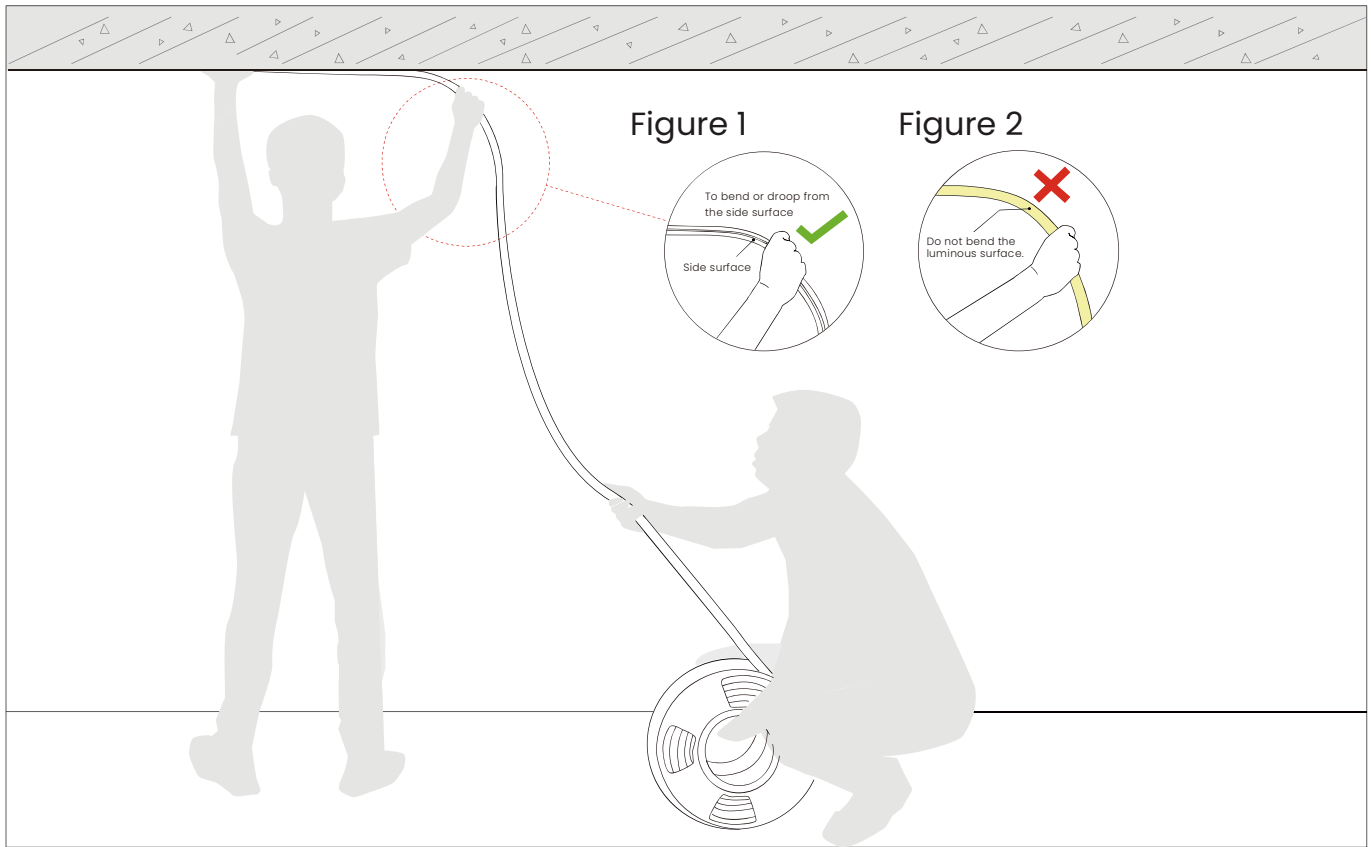


1. Installer:

- Press the light with the palm of the left hand to slowly load it into the slot. Use your right hand to guide the strip so it bends downward in the correct direction. See Figure 1.
- Do not bend the luminous surface to the side. See Figure 2.

2. Assistant:

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

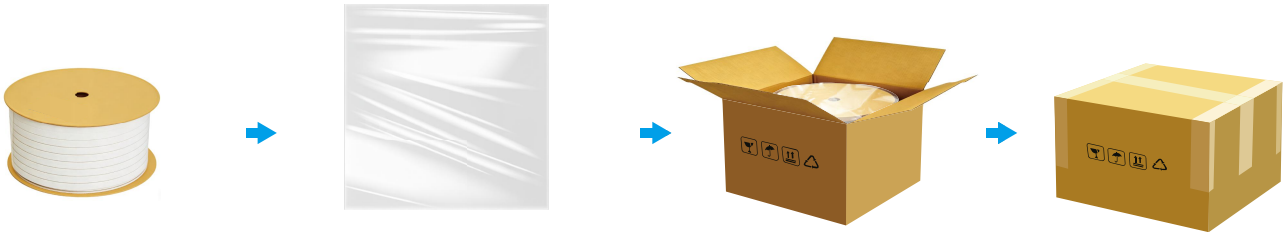
Installation Precautions – Top Mounted (If the length of the light is more than 2 meters, two people must work together to install it.)**1. Installer:**

- Press the light with the palm of the left hand to slowly load it into the slot. Straighten the light with your right hand so that it droops naturally. See Figure 1.

2. Assistant:

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

Packaging Information



Standard Packaging: White carton with paper reel inside.

Model	Qty/Roll(m)	Rolls/Carton	Carton Size	Net Weight	Gross Weight
NS-R16 24V IP67	5m	10	42 x 43 x 31 cm	11.5 kg/carton	13.0 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 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, reserve at least 20% power-supply headroom.
- ※ 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 overbend 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 products differ structurally, products of different sizes may appear slightly different in color even at the same CCT.

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.