

SPECIFICATION SIDE BEND NEON

NS-S0612 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;
- IP44/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.

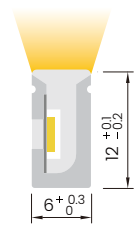
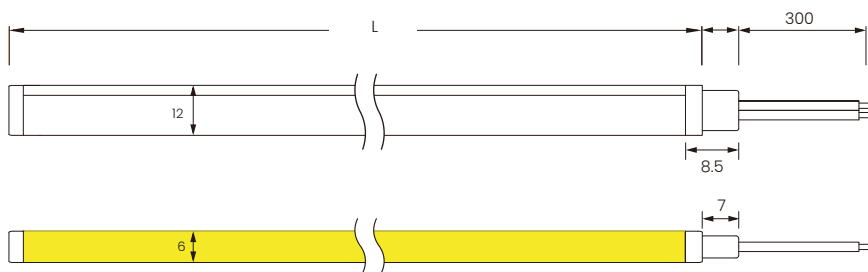


1800k
2000k
2200k
2700k
3000k
3500k
4000k
5000k
6500k

2700k
~
6500k



Dimensions(Unit:mm)



Cross section

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

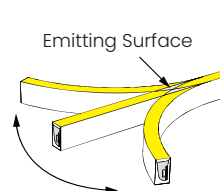
Power Ratings

Power(w/m)	5	10
Efficacy(lm/w)@4000K	40.1	38.6
Max Ambient Temperature	55°C	45°C

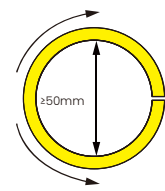
Due to production and component tolerances, light output and electrical power Can vary by up to ±10%.

Length Standard

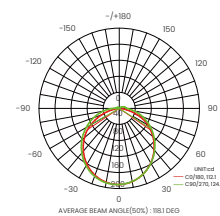
Length Range (M)	Final Length			Tolerance
	Integral end cap	Solder free end cap	Silicone end cap	
0M<Neon Strip(L)≤5M	L+4	L+32	L+5	±7
5M<Neon Strip(L)≤10M	L+4	L+32	L+5	±10
10M<Neon Strip(L)≤15M	L+4	L+32	L+5	±13
15M<Neon Strip(L)≤20M	L+4	L+32	L+5	±16
20M<Neon Strip(L)≤25M	L+4	L+32	L+5	±19



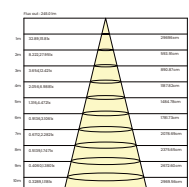
Horizontal Bending



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 NS-S0612V24-CCx-A

CCT(K)	CRI	Voltage	Power(W)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
1800K±150	≥90	DC24V	5	147	29.4	50	19	CC
			10	280	28.0	50	13	CC
2100K±150	≥90	DC24V	5	163	32.5	50	19	CC
			10	310	31.0	50	13	CC
2400K±150	≥90	DC24V	5	172	34.5	50	19	CC
			10	330	33.0	50	13	CC
2700K±150	≥90	DC24V	5	189	37.8	50	19	CC
			10	360	36.0	50	13	CC
3000K±150	≥90	DC24V	5	192	38.4	50	19	CC
			10	367	36.7	50	13	CC
3500K±200	≥90	DC24V	5	182	36.4	50	19	CC
			10	347	34.7	50	13	CC
4000K ⁺⁴⁰⁰ ₋₂₀₀	≥90	DC24V	5	200	40.1	50	19	CC
			10	386	38.6	50	13	CC
5000K ⁺⁵⁰⁰ ₋₃₀₀	≥90	DC24V	5	200	40.1	50	19	CC
			10	385	38.5	50	13	CC
6500K±500	≥90	DC24V	5	189	37.9	50	19	CC
			10	365	36.5	50	13	CC
Red	--	DC24V	5	79	15.8	50	25	CC
			10	158	15.8	50	18	CC
Green	--	DC24V	5	235	47.1	50	19	CC
			10	391	39.1	50	13	CC
Blue	--	DC24V	5	41	8.2	50	19	CC
			10	78	7.8	50	13	CC
Yellow	--	DC24V	5	58	11.6	50	25	CC
			10	119	11.9	50	18	CC
Orange	--	DC24V	5	74	14.9	50	25	CC
			10	161	16.1	50	18	CC
Pink	--	DC24V	5	166	33.2	50	19	CC
			10	319	31.9	50	13	CC

Tunable White-SMD3014 : Model NS-S0612V24-Ca-A

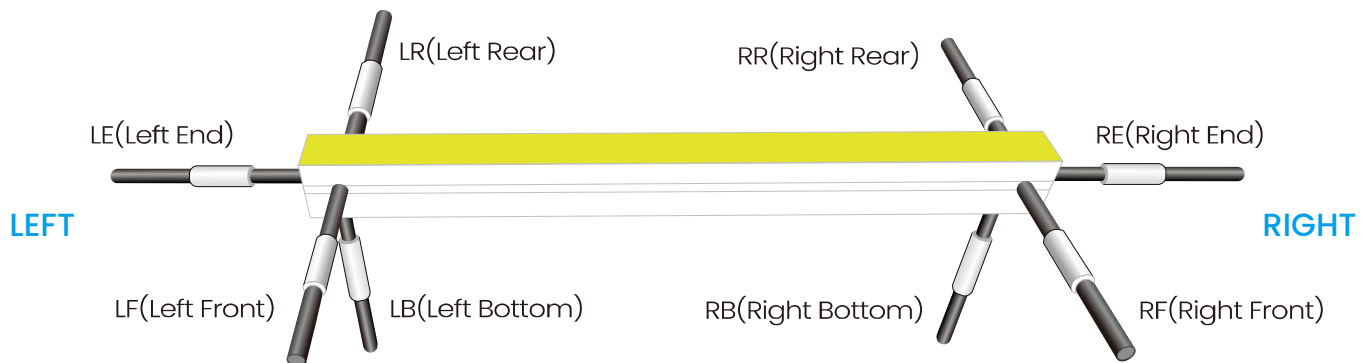
CCT(K)	CRI	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
2700K±150	≥90	DC24V	5	156	31.1	50	5	CV
6500K±500	≥90	DC24V	5	180	35.9	50	5	CV
2700K+6500K	≥90	DC24V	10	333	33.3	50	5	CV

RGB-SMD2835 : Model NS-S0612V24-Crgb-A

CCT(K)	CRI	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	3.3	32	9.8	50	5	CV
G	--	DC24V	3.3	90	27.3	50	5	CV
B	--	DC24V	3.3	15	4.5	50	5	CV
RGB	--	DC24V	10	141	14.1	50	5	CV

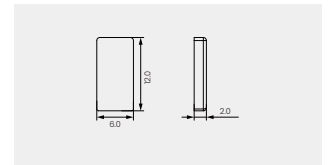
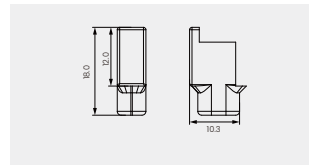
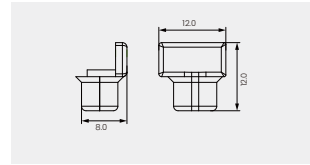
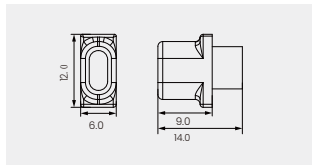
- Maximum run length refers to the maximum length powered from one end using the standard 30 cm cable.
- The specified color temperature refers to the finished product.
- The values shown are typical. Due to production and component tolerances, light output and electrical power may vary by up to $\pm 10\%$.
- 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 : Hydraulic pressing (IP67)



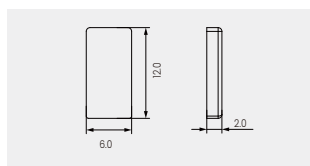
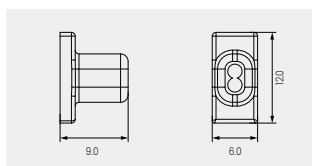
Front Cable Entry

Side Cable Entry

Bottom Cable Entry

Closed End cap

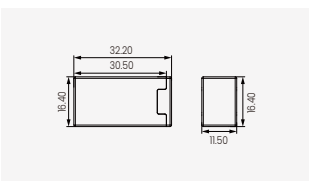
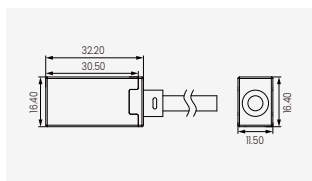
Integral End Cap : Hot pressing (IP44)



Front Cable Entry

Closed End cap

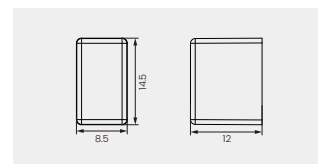
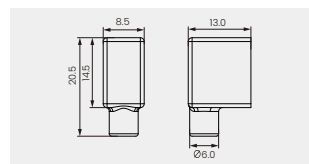
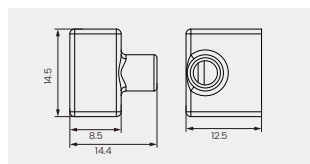
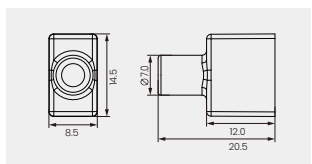
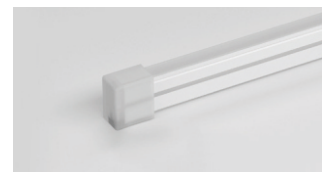
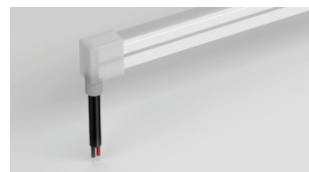
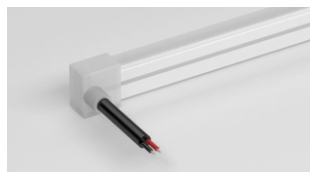
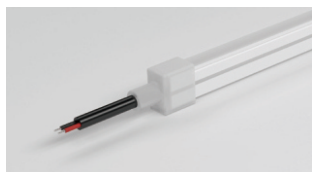
Screwless Solder Free End Cap (IP67)



Front Cable Entry

Closed End cap

Silicone End Cap (IP67)



Front Cable Entry

Side Cable Entry

Bottom Cable Entry

Closed End cap

Cables and Connectors

Cable Type	Schematic Diagram	Specification	Core	Electrical Properties
Integrated endcap Usage		Inner core: 20AWG		Red V+/Black V-
Silicone endcap Usage		OD: 4.0 mm / Inner core: 20AWG		Red V+/Black V-
PVC Cable		OD: 4.0 mm / Inner core: 22AWG		Brown V+/White W/Yellow WW
		OD: 4.0 mm / Inner core: 24AWG		Black V+/Blue B/Green G/Red R
Silicone endcap Usage		OD: 4.0 mm / Inner core: 20AWG M12 Male/Female Connector		Red V+/Black V-
Waterproof Connector with PVC Cable		OD: 4.0 mm / Inner core: 22AWG M12 Male/Female Connector		Brown V+/White W/Yellow WW
		OD: 4.0 mm / Inner core: 24AWG M12 Male/Female Connector		Black V+/Blue B/Green G/Red R
Integrated endcap Usage		Inner core: 22AWG		Red V+/Black V-
Silicone Cable		Inner core: 22AWG		Black V+/White W/Yellow WW
		Inner core: 22AWG		Black V+/Blue B/Green G/Red R

Cable Maximum Load Capacity

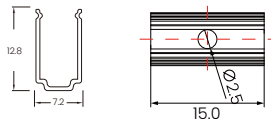
a. Assembled end cap with single-ended power supply, its maximum load power is as follows:

Color	Maximum load current(A)	DC24V Maximum load Power(W)	DC12V Maximum load Power(W)
Single color	4.2	100	50
CCT Tunable	3.5	84	42
RGB	3	72	36

b. When one end of the single color led neon goes out, the power exceeds the wattage listed in the table, it is recommended to use integrated or silicone end cap;

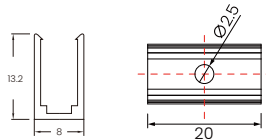
Installation Accessories

Stainless steel Mounting Clips



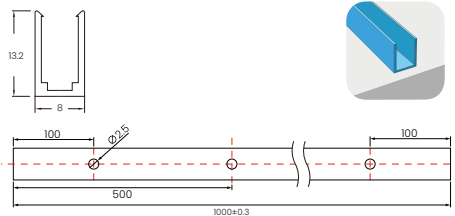
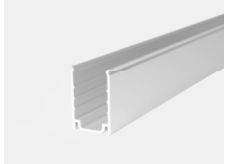
Name	Stainless steel Mounting Clips
Dimension:	15x7.2x12.8mm
Accessories:	M2.3 × 16 mm (SUS304)

Aluminum Mounting Clips



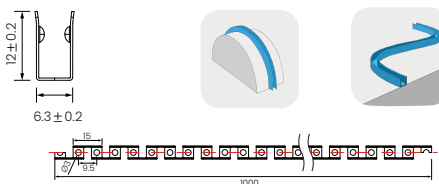
Name	Aluminum Mounting Clips
Dimension:	20x8x13.2mm
Accessories:	M2.3 × 16 mm (SUS304)

Aluminum Profile



Name	Aluminum Profile
Dimension:	1000(±0.3)x8x13.2mm
Accessories:	M2.3 × 16 mm (SUS304)

Curved Profile



Name	Curved Profile
Dimension:	1000x6.3x12mm
Accessories:	M3 × 16 mm (SUS304)

Cutting Mark



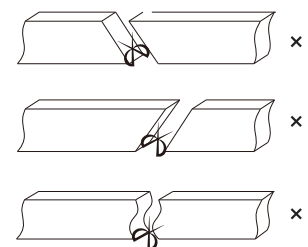
Cutting Mark

Remark:

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



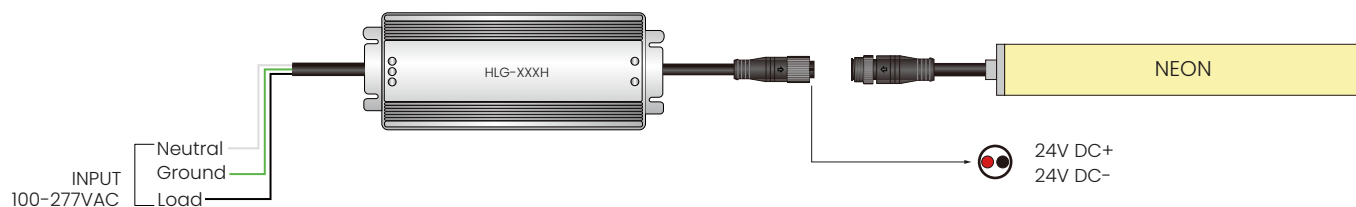
Use professional scissors to cut vertically at the cutting mark



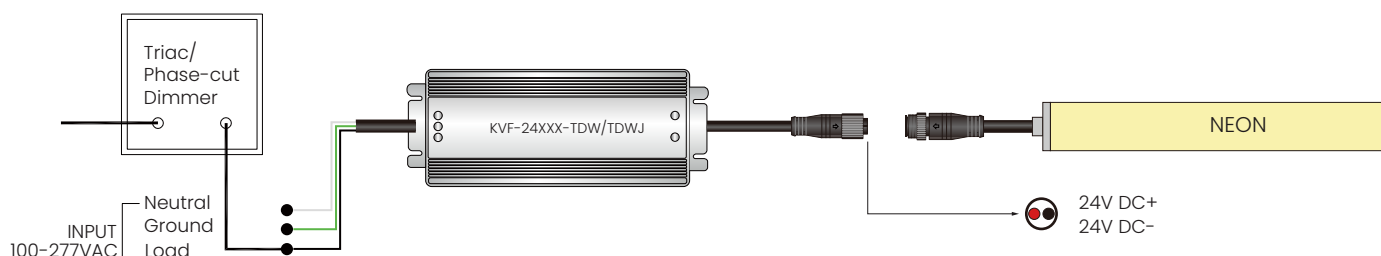
Only cut vertically at the marked cutting position. Do not cut freely, at an oblique angle, or along a curved section.

Single Color Connection Diagram

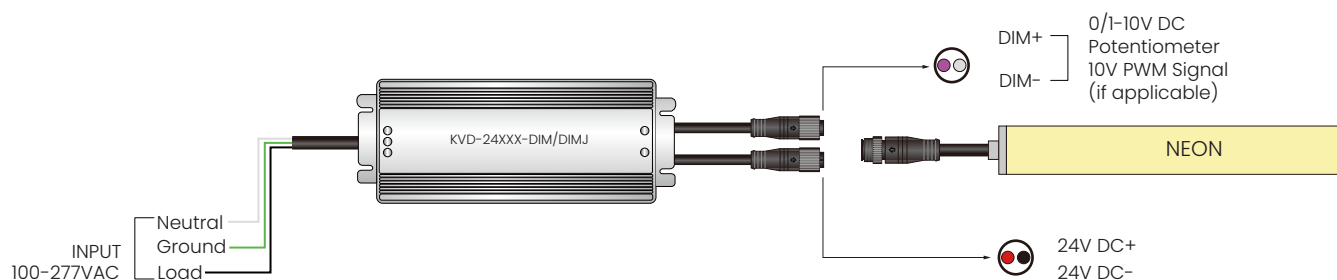
Non-dimmable



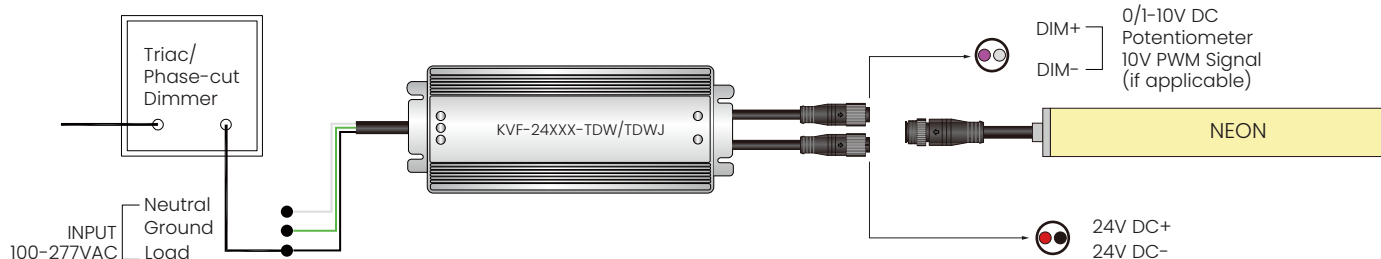
Phase-Cut / TRIAC Dimming



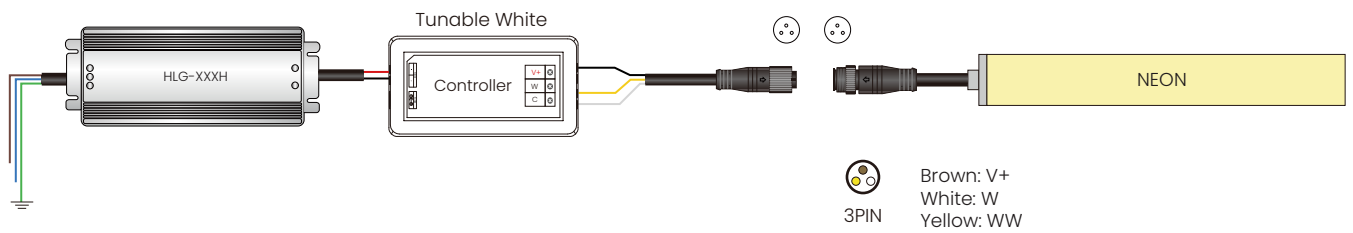
4-in-1 Dimming(0-10V/1-10V/Potentiometer/10V PWM)



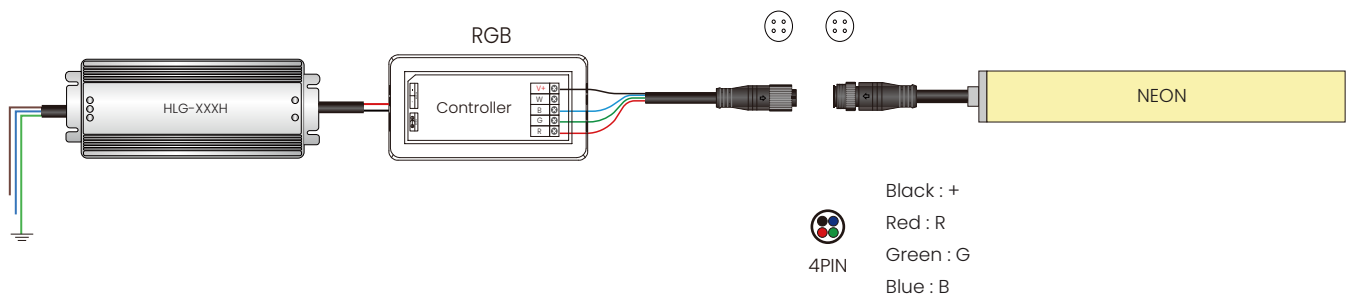
5-in-1 Dimming (Triac/0-10V/1-10V/Potentiometer/10V PWM)



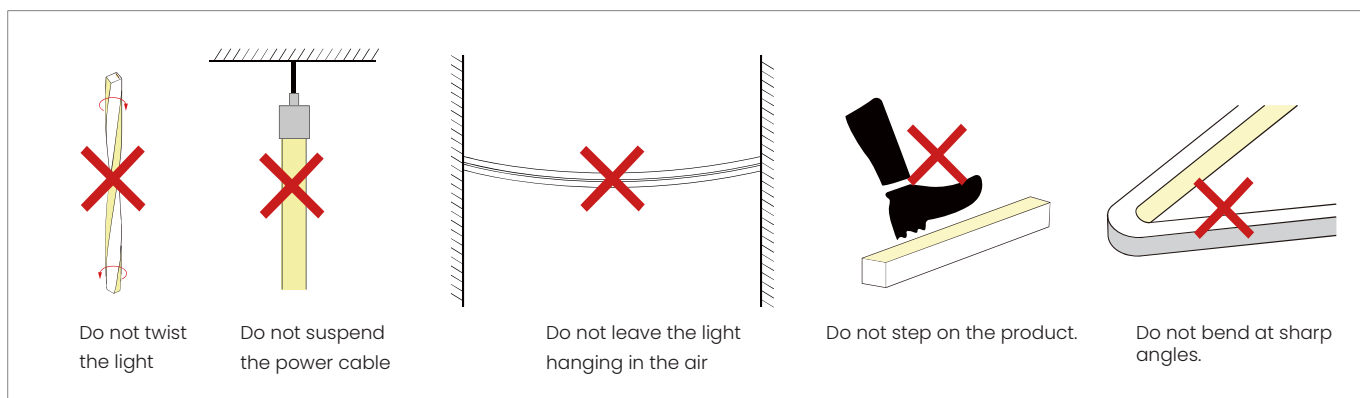
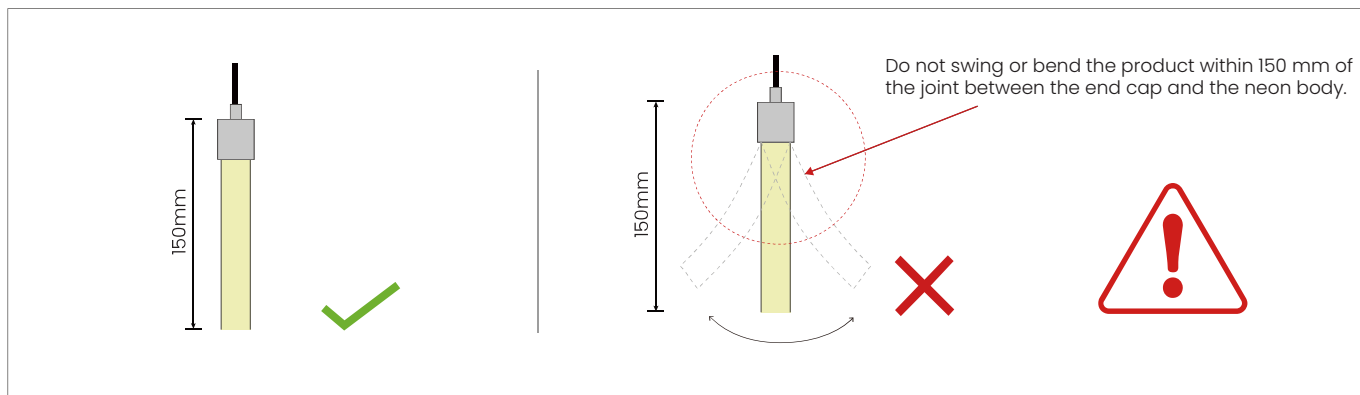
Tunable White Connection Diagram



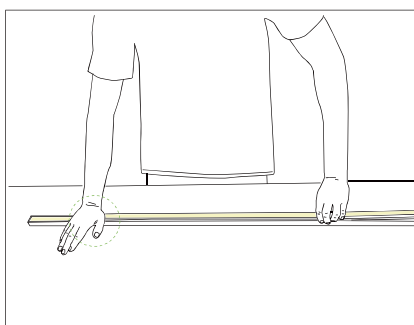
RGB Connection Diagram



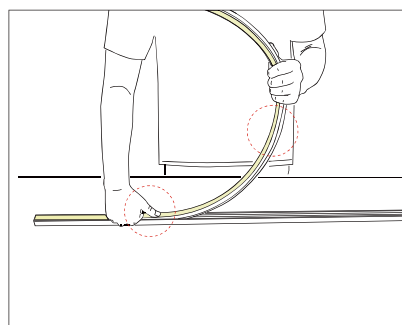
Installation Precautions



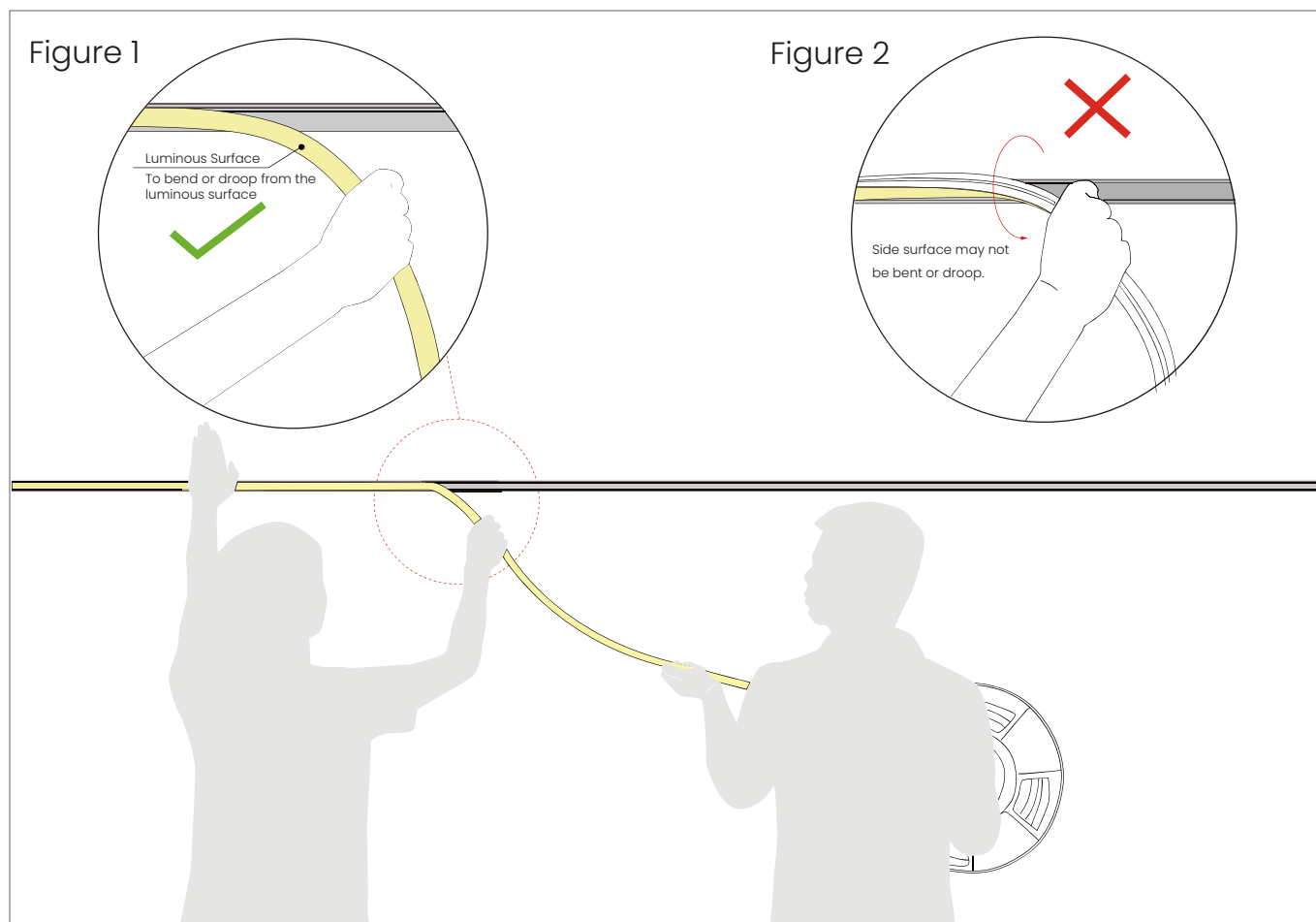
Insert into the Profile



- 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.

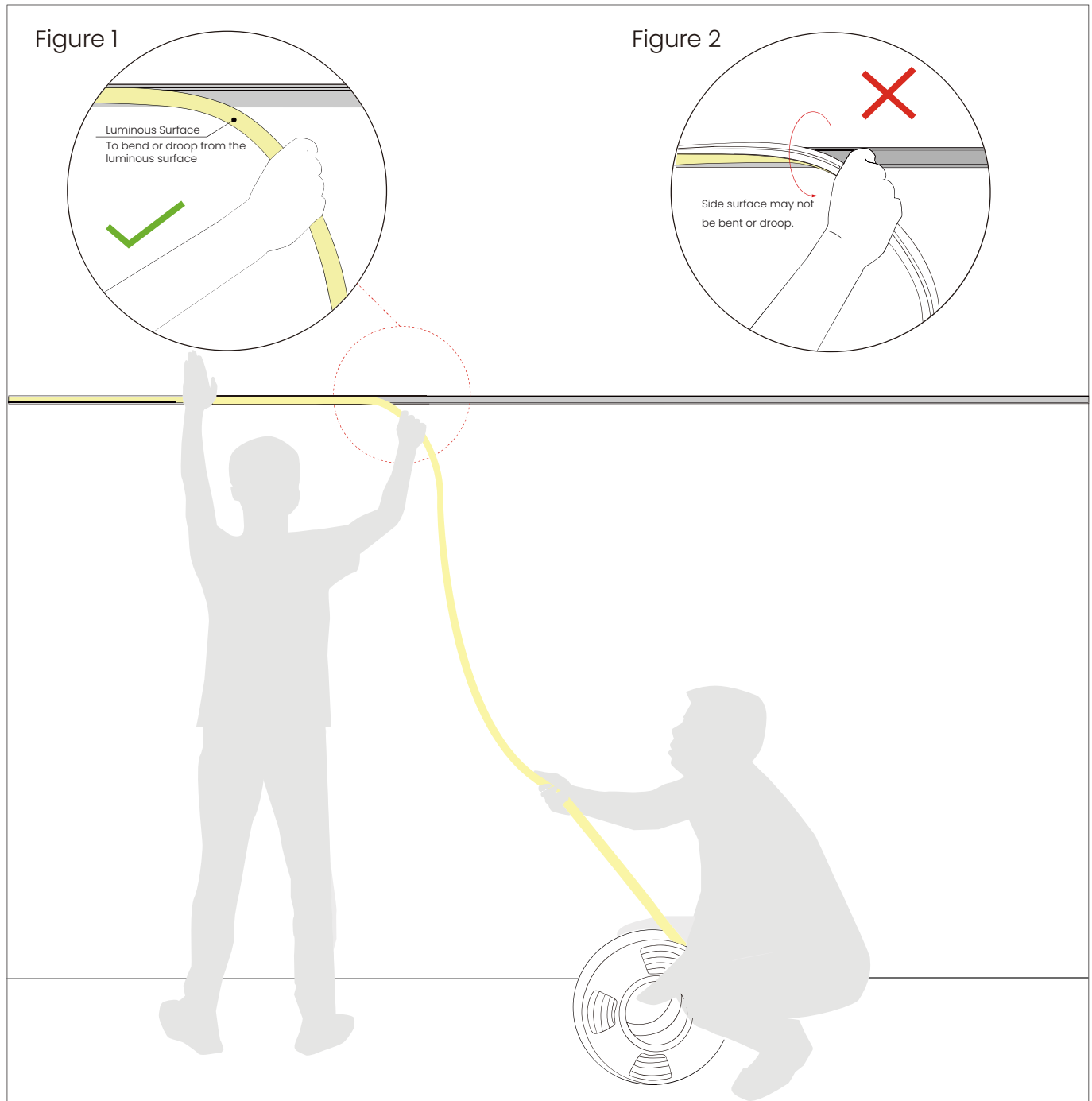
Installation Precautions--Side Mounted (If the length of the light is more than 2 meters, two people must work together to install it.)**1. Installer:**

- 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.)



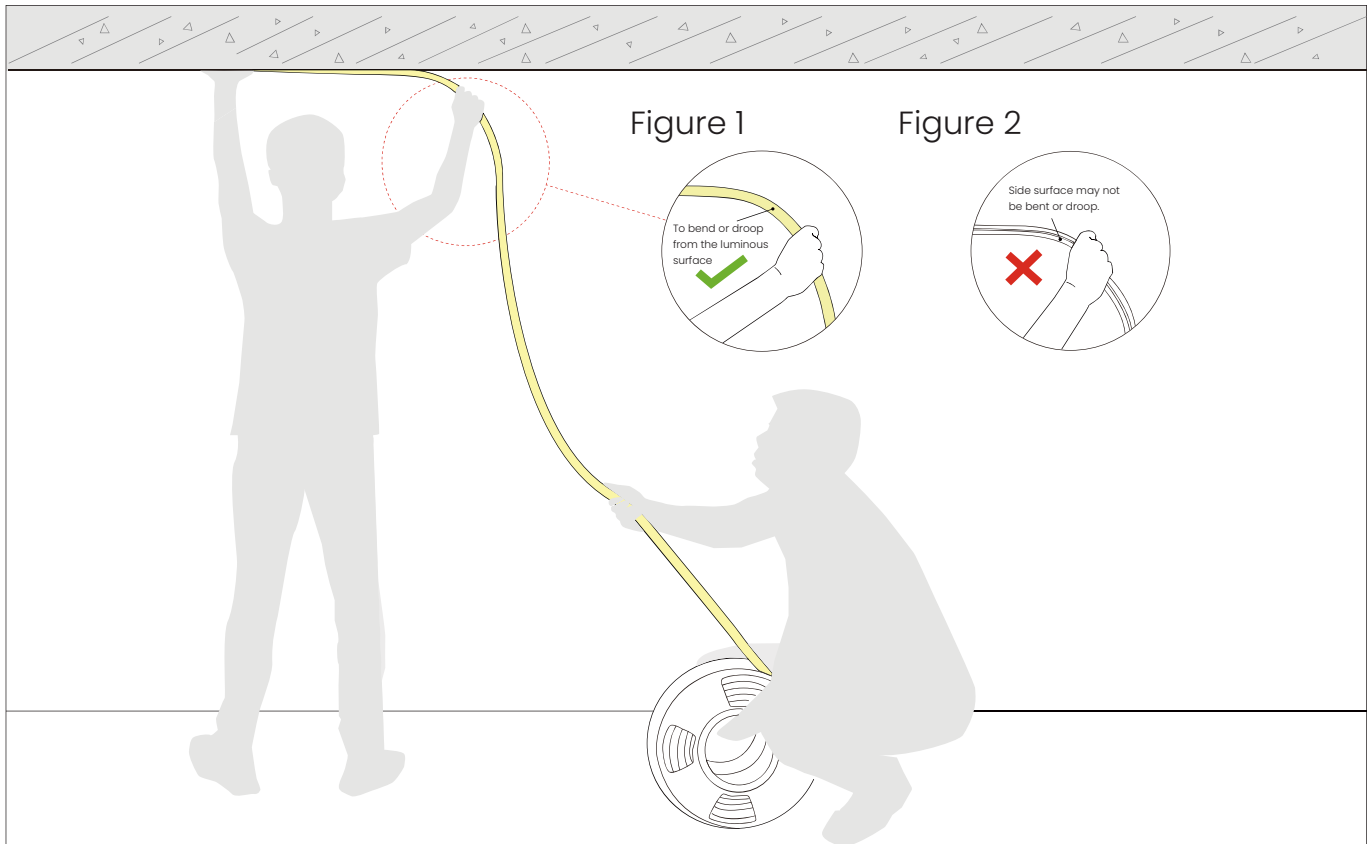
1. Installer:

- 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
NS-S0612 24V IP67	5m	13	39 x 39 x 31 cm	5.7 kgs/ctn	9 kgs/ctn
NS-S0612 24V IP67	10m	13	39 x 39 x 31 cm	11.5 kgs/ctn	16 kgs/ctn
NS-S0612 24V IP67	20m	4	41 x 41 x 26 cm	6 kgs/ctn	8.7 kgs/ctn
NS-S0612 24V IP67	30m	4	41 x 41 x 26 cm	10.5 kgs/ctn	12 kgs/ctn

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 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.