

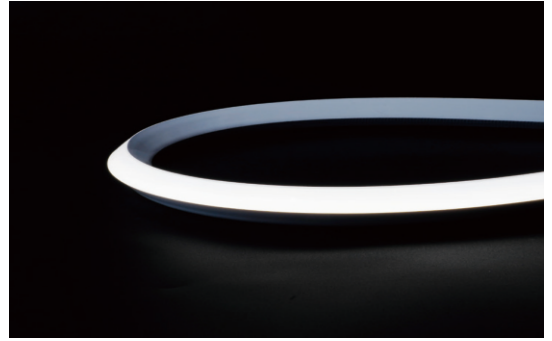
SPECIFICATION 3D BEND NEON

NS-3D1617 24V IP67



Features

- Using high light transmittance, environmentally friendly silicone material, integrated extrusion molding process, unique optical light distribution structure design, uniform surface light without shadow, no transparent window, no light leakage on the side and bottom, clear laser printing, accurate cutting. Its unique design makes the product have top and side two luminous directions while can be vertical and horizontal bending, and can adapt to a variety of installation environment;
- With IP67 protection level, salt liquid resistance, acid and alkali corrosion resistance, UV resistance;
- Can be used in harsh environment or outdoors, with uniform light and dimmable functions;
- Small cutting spacing, freely configurable length, optional matte treatment process, smooth feel and excellent dustproof effect, ensuring finished product color consistency, long-life LED >50000 hrs.

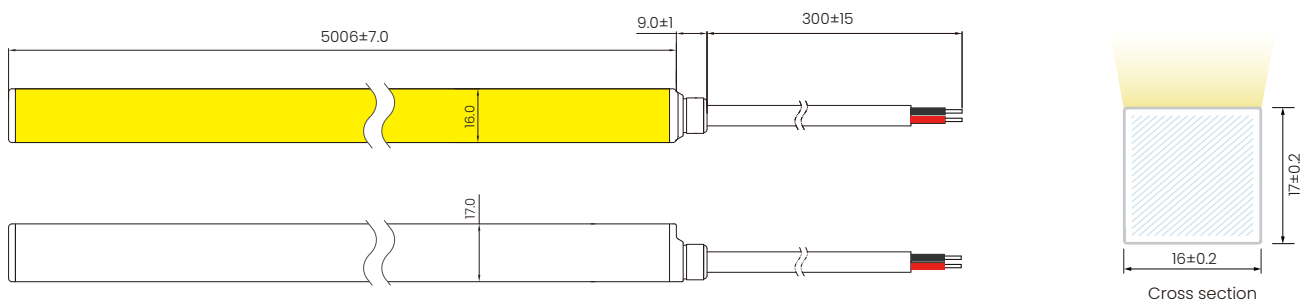


1800k
200k
2400k
2700k
3000k
3500k
4000k
5000k
6500k

2700k
~
6500k



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

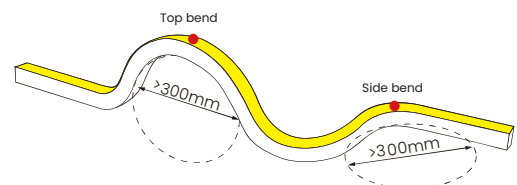
Power Ratings

Power(w/m)	5	10	4.8	9.6
Efficacy(lm/w)@4000K	CV : 74.5	CV : 71.4	CC : 74.5	CC : 71.4
Max Ambient Temperature	55°C	45°C	55°C	45°C

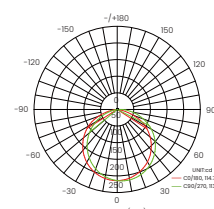
Due to the tolerance of the production and electrical components, output value and electrical power can vary up to 10%

Length Standard

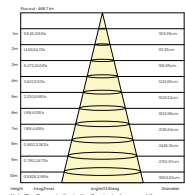
Length Range (M)	Final Length(mm) Integral end cap	Final Length(mm) Silicone end cap	Tolerance (mm)
0M<Neon Strip(L)≤5M	L+5	L+5.5	±7
5M<Neon Strip(L)≤10M	L+5	L+5.5	±10



Note: Min bending diameter of Top bend>300mm
Min bending diameter of Side bend>300mm



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-CV : Model NS-3D1617V24-Cx-N

CCT(K)	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
1800K±100	≥90	DC24V	5	293	58.6	50	8	CV
			10	552	55.2	50	5	CV
2100K±150	≥90	DC24V	5	319	63.8	50	8	CV
			10	612	61.2	50	5	CV
2400K±150	≥90	DC24V	5	345	69.0	50	8	CV
			10	664	66.4	50	5	CV
2700K±150	≥90	DC24V	5	353	70.5	50	8	CV
			10	666	66.6	50	5	CV
3000K±150	≥90	DC24V	5	352	70.4	50	8	CV
			10	676	67.6	50	5	CV
3500K±200	≥90	DC24V	5	369	73.7	50	8	CV
			10	711	71.1	50	5	CV
4000K ⁺⁴⁰⁰ ₋₂₀₀	≥90	DC24V	5	373	74.5	50	8	CV
			10	714	71.4	50	5	CV
5000K ⁺⁵⁰⁰ ₋₃₀₀	≥90	DC24V	5	360	72.0	50	8	CV
			10	696	69.6	50	5	CV
6500K±500	≥90	DC24V	5	376	75.1	50	8	CV
			10	717	71.7	50	5	CV
Red	--	DC24V	5	147	29.3	50	10	CV
			10	289	28.9	50	7	CV
Green	--	DC24V	5	425	84.9	50	8	CV
			10	695	69.5	50	5	CV
Blue	--	DC24V	5	80	15.9	50	8	CV
			10	142	14.2	50	5	CV
Yellow	--	DC24V	5	104	20.8	50	10	CV
			10	206	20.6	50	7	CV
Orange	--	DC24V	5	122	24.3	50	10	CV
			10	258	25.8	50	7	CV
Pink	--	DC24V	5	308	61.6	50	8	CV
			10	578	57.8	50	5	CV

Single Color-CC : Model NS-3D1617V24-CCx-N

CCT(K)	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
1800K±100	≥90	DC24V	4.8	281	58.6	50	10	CC
			9.6	530	55.2	50	6	CC
2100K±150	≥90	DC24V	4.8	306	63.8	50	10	CC
			9.6	588	61.2	50	6	CC
2400K±150	≥90	DC24V	4.8	331	69.0	50	10	CC
			9.6	637	66.4	50	6	CC
2700K±150	≥90	DC24V	4.8	338	70.5	50	10	CC
			9.6	639	66.6	50	6	CC
3000K±150	≥90	DC24V	4.8	338	70.4	50	10	CC
			9.6	649	67.6	50	6	CC
3500K±200	≥90	DC24V	4.8	354	73.7	50	10	CC
			9.6	683	71.1	50	6	CC
4000K ⁺⁴⁰⁰ ₋₂₀₀	≥90	DC24V	4.8	358	74.5	50	10	CC
			9.6	685	71.4	50	6	CC
5000K ⁺⁵⁰⁰ ₋₃₀₀	≥90	DC24V	4.8	346	72.0	50	10	CC
			9.6	668	69.6	50	6	CC
6500K±500	≥90	DC24V	4.8	360	75.1	50	10	CC
			9.6	688	71.7	50	6	CC
Red	--	DC24V	4.8	141	29.3	50	16	CC
			9.6	277	28.9	50	10	CC
Green	--	DC24V	4.8	408	84.9	50	10	CC
			9.6	667	69.5	50	5	CC
Blue	--	DC24V	4.8	76	15.9	50	10	CC
			9.6	136	14.2	50	6	CC
Yellow	--	DC24V	4.8	100	20.8	50	16	CC
			9.6	198	20.6	50	10	CC
Orange	--	DC24V	4.8	117	24.3	50	16	CC
			9.6	248	25.8	50	10	CC
Pink	--	DC24V	4.8	296	61.6	50	10	CC
			9.6	555	57.8	50	6	CC

Tunable White : Model NS-3D1617V24-Ca-W

CCT(K)	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
2700K±150	≥90	DC24V	5	275	55.0	62.5	5	CV
6500K±500	≥90	DC24V	5	304	60.7	62.5	5	CV
2700K+6500K	≥90	DC24V	10	575	57.5	62.5	5	CV

RGB : Model NS-3D1617V24-Crgb-W

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	3.3	52	15.8	62.5	5	CV
G	--	DC24V	3.3	163	49.5	62.5	5	CV
B	--	DC24V	3.3	32	9.7	62.5	5	CV
RGB	--	DC24V	10	247	24.7	62.5	5	CV

RGBW : Model NS-3D1617V24-Crgbwx-W

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	60	16.1	62.5	5	CV
G	--	DC24V	3.7	187	49.8	62.5	5	CV
B	--	DC24V	3.7	36	9.6	62.5	5	CV
W:2700K±150	≥90	DC24V	3.7	171	45.5	62.5	5	CV
RGBW	--	DC24V	15	431	28.7	62.5	5	CV

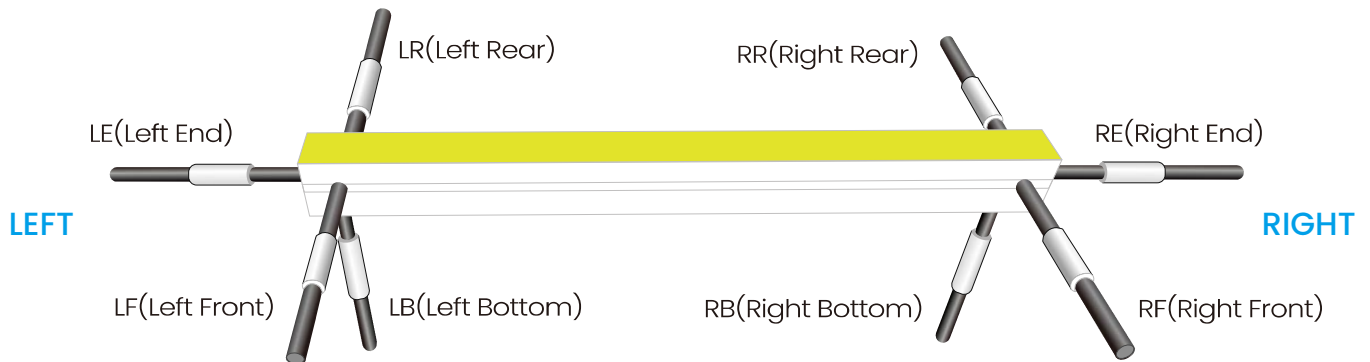
CCT(K)	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	3.7	60	16.1	62.5	5	CV
G	--	DC24V	3.7	187	49.8	62.5	5	CV
B	--	DC24V	3.7	36	9.6	62.5	5	CV
W:3000K±150	≥90	DC24V	3.7	177	47.2	62.5	5	CV
RGBW	--	DC24V	15	437	29.1	62.5	5	CV

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	60	16.1	62.5	5	CV
G	--	DC24V	3.7	187	49.8	62.5	5	CV
B	--	DC24V	3.7	36	9.6	62.5	5	CV
W:4000K ⁺⁴⁰⁰ ₋₂₀₀	≥90	DC24V	3.7	186	49.5	62.5	5	CV
RGBW	--	DC24V	15	446	29.7	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	60	16.1	62.5	5	CV
G	--	DC24V	3.7	187	49.8	62.5	5	CV
B	--	DC24V	3.7	36	9.6	62.5	5	CV
W:6500K±500	≥90	DC24V	3.7	185	49.4	62.5	5	CV
RGBW	--	DC24V	15	446	29.7	62.5	5	CV

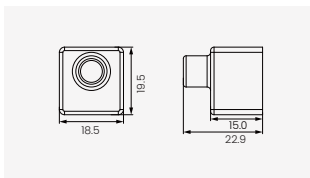
- Maximum run length refers to the maximum length powered from one end using the standard 30 cm cable.
- The specified color temperature refers to the finished product.
- The values shown are typical. Due to production and component tolerances, light output and electrical power may vary by up to ±10%.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

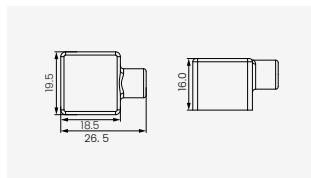


Cable Entry and End Cap Options (Unit: mm)

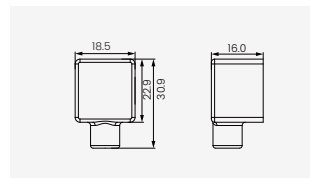
Silicone End Cap (IP67)



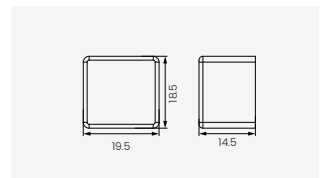
Front Cable Entry



Side Cable Entry

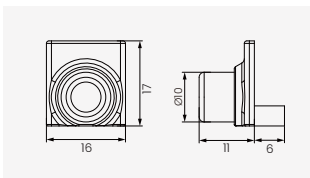


Bottom Cable Entry

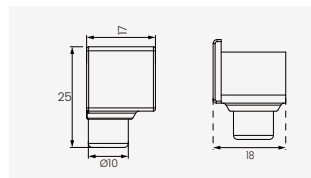


Closed End cap

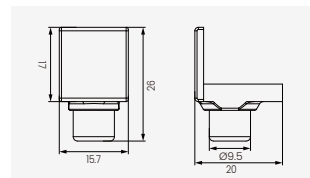
Integral End Cap (IP67)



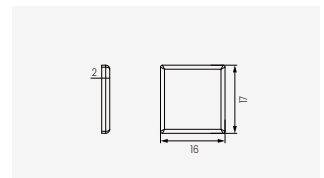
Front Cable Entry



Side Cable Entry

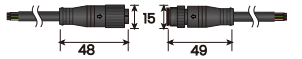


Bottom Cable Entry

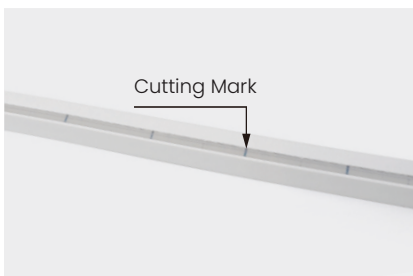


Closed End cap

Cables and Connectors

Cable Type	Schematic Diagram	Specification	Core	Electrical Properties
PVC Cable		OD: 5.0 mm / Inner core: 20AWG	● ●	Red V+/Black V-
		OD: 5.0 mm / Inner core: 20AWG	● ● ●	Brown V+/White W/Yellow WW
		OD: 5.5 mm / Inner core: 20AWG	● ● ● ●	Black V+/Blue B/Green G/Red R
		OD: 5.5 mm / Inner core: 22AWG	● ● ● ● ●	Black V+/White W/Blue B/Green G/Red R
Waterproof Connector with PVC Cable		OD: 5.0 mm / Inner core: 20AWG M12 Male/Female Connector	● ●	Red V+/Black V-
		OD: 5.0 mm / Inner core: 20AWG M12 Male/Female Connector	● ● ●	Brown V+/White W/Yellow WW
		OD: 5.5 mm / Inner core: 20AWG M12 Male/Female Connector	● ● ● ●	Black V+/Blue B/Green G/Red R
		OD: 5.5 mm / Inner core: 22AWG M12 Male/Female Connector	● ● ● ● ●	Black V+/White W/Blue B/Green G/Red R
Silicone Cable		OD: 6.0mm / Inner core: 20AWG	● ●	Red V+/Black V-
		OD: 6.0mm / Inner core: 20AWG	● ● ●	Black V+/White W/Yellow WW
		OD: 6.0mm / Inner core: 20AWG	● ● ● ●	Black V+/Blue B/Green G/Red R
		OD: 6.4 mm / Inner core: Red/Black--20AWG Green/Blue/White--22AWG	● ● ● ● ●	Black V+/White W/Blue B/Green G/Red R
Waterproof Connector with Silicone Cable		OD: 6.0 mm / Inner core: 20AWG M12 Male/Female Connector	● ●	Red V+/Black V-
		OD: 6.0 mm / Inner core: 20AWG M12 Male/Female Connector	● ● ●	Black V+/White W/Yellow WW
		OD: 6.0 mm / Inner core: 20AWG M12 Male/Female Connector	● ● ● ●	Black V+/Blue B/Green G/Red R
		OD: 6.4 mm / Inner core: Red/Black--20AWG Green/Blue/White--22AWG M12 Male/Female Connector	● ● ● ● ●	Black V+/White W/Blue B/Green G/Red R

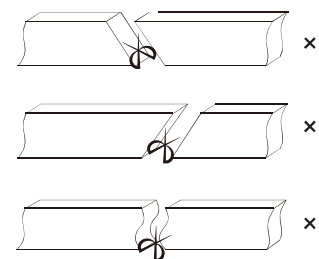
Cutting Mark



Remark:
The black marker is the cutting position.



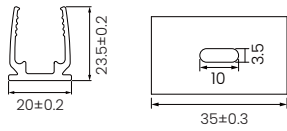
Use a professional cutting tool to cut vertically
at the cutting mark.



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

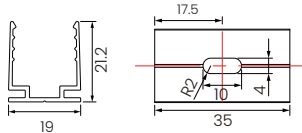
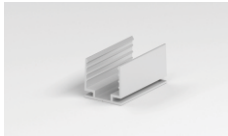
Installation Accessories

PC Clip



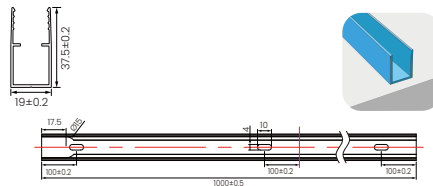
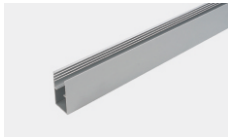
Name	PC Clip
Dimension:	35x20x23.5mm
Accessories:	M3 × 16 mm (SUS304)

Aluminum Mounting Clips



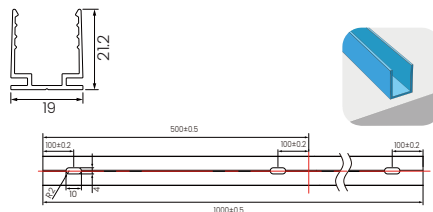
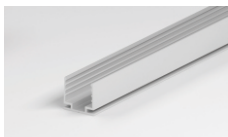
Name	Aluminum Mounting Clips
Dimension:	35x19x21.2mm
Accessories:	M3 × 16 mm (SUS304)

Aluminum Profile



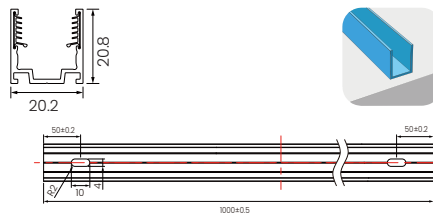
Name	Aluminum Profile
Dimension:	1000x19x37.5mm
Accessories:	M3 × 16 mm (SUS304)

Aluminum Profile



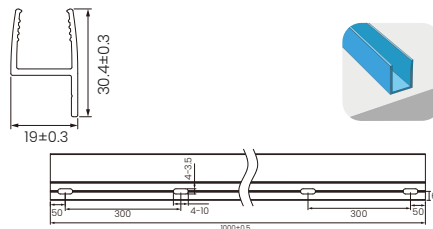
Name	Aluminum Profile
Dimension:	1000x19x21.2mm
Accessories:	M3 × 16 mm (SUS304)

Internal Gear Profile



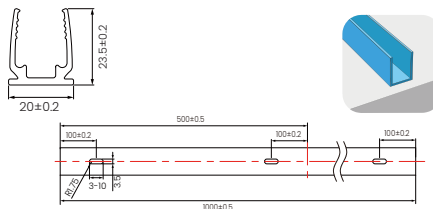
Name	Internal Gear Profile
Dimension:	1000x20.2x20.8mm
Accessories:	M3 × 16 mm (SUS304)

PC Profile



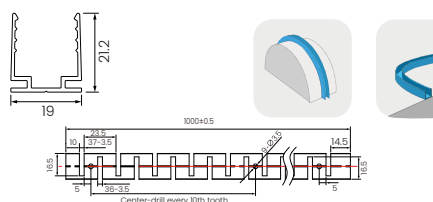
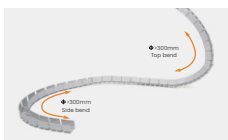
Name	PC Profile
Dimension:	1000x19x30.4mm
Accessories:	M3 × 16 mm (SUS304)

PC Profile



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

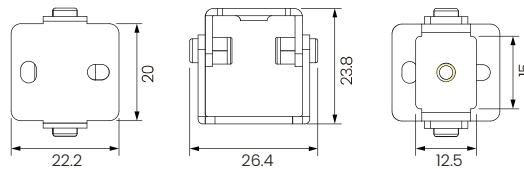
Curved Profile



Name	Curved Profile
Dimension:	1000x19x21.2mm
Accessories:	M3 × 16 mm (SUS304)

Installation Accessories

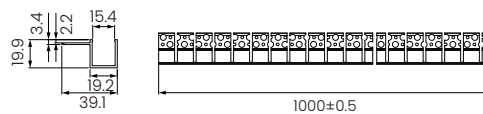
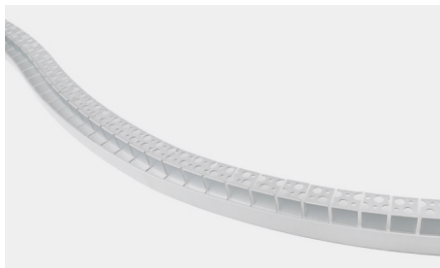
Adjustable Angle Clip
(use with aluminum clips or profile)



Dimension: 22.2x26.4x23.8mm

Accessories: Screw M3x25mm(SUS304)/M3.5x8mm(SUS304)

Flexible Recessed
Single-Sided Aluminum Profile



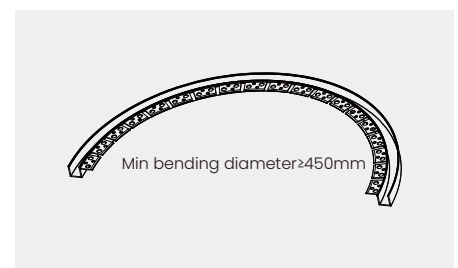
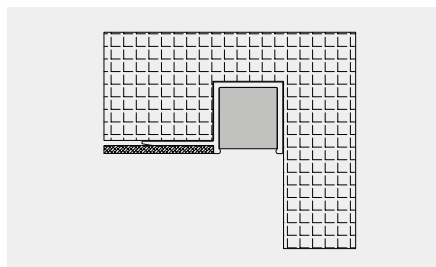
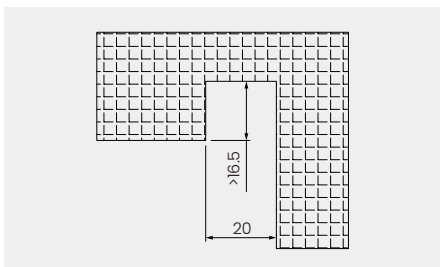
Length:

1000x39.1x19.9

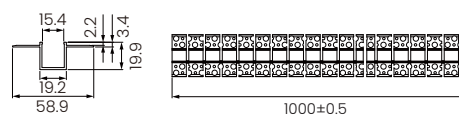
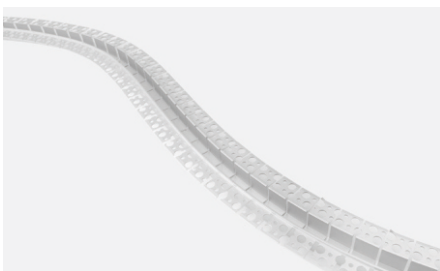
Accessories:

Screw M3 × 16 (SUS304)

Installation method of flexible recessed single-sided aluminum profile



Flexible Recessed
Double-Sided Aluminum Profile



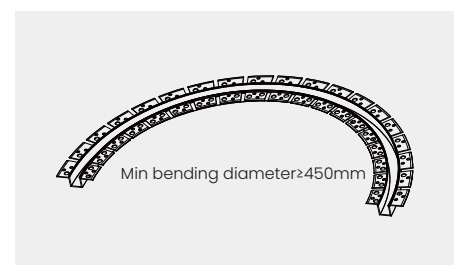
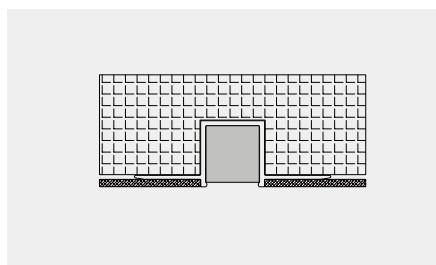
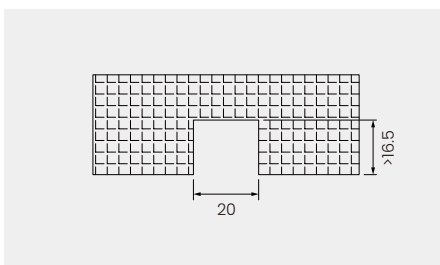
Length:

1000x58.9x19.9

Accessories:

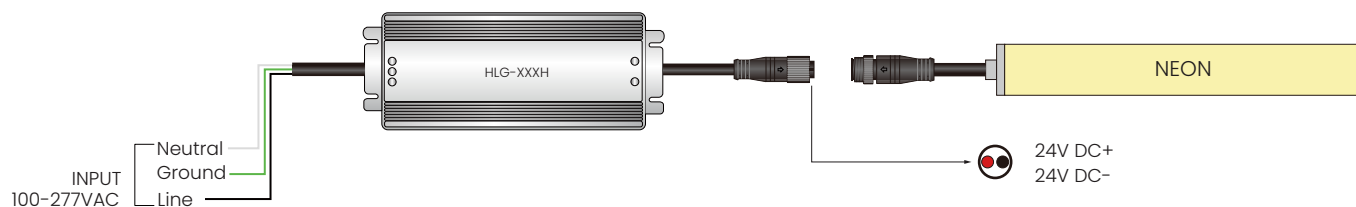
Screw M3 × 16 (SUS304)

Installation method of flexible recessed double-sided aluminum profile

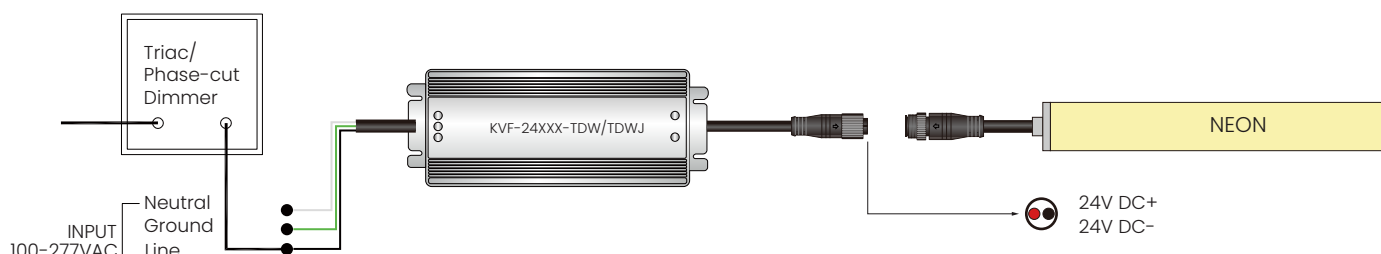


Single Color Connection Diagram

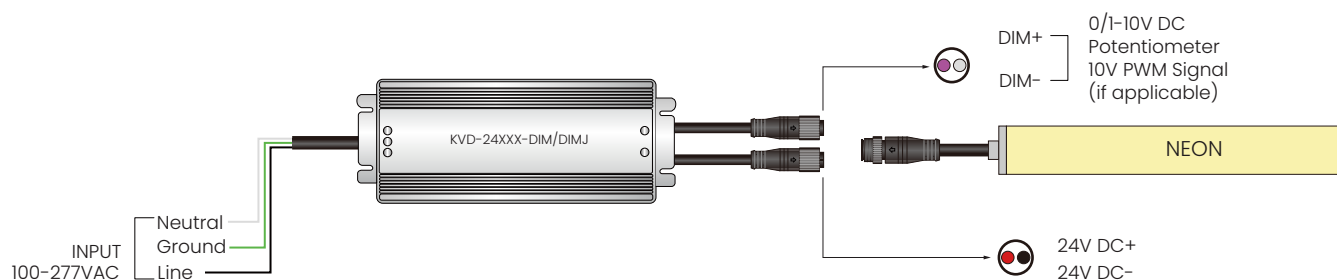
Non-dimmable



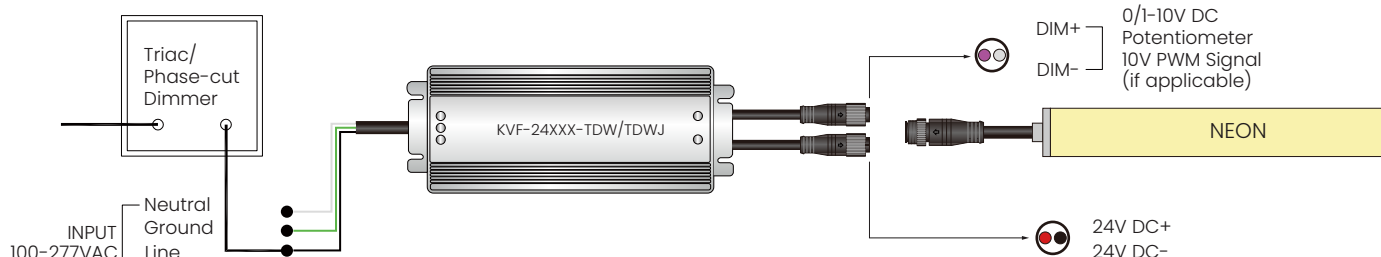
Phase-Cut / TRIAC Dimming



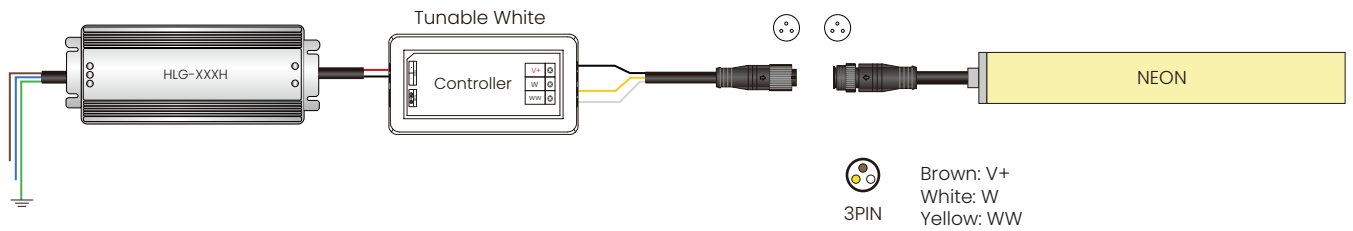
4-in-1 Dimming(0-10V/1-10V/Potentiometer/10V PWM)



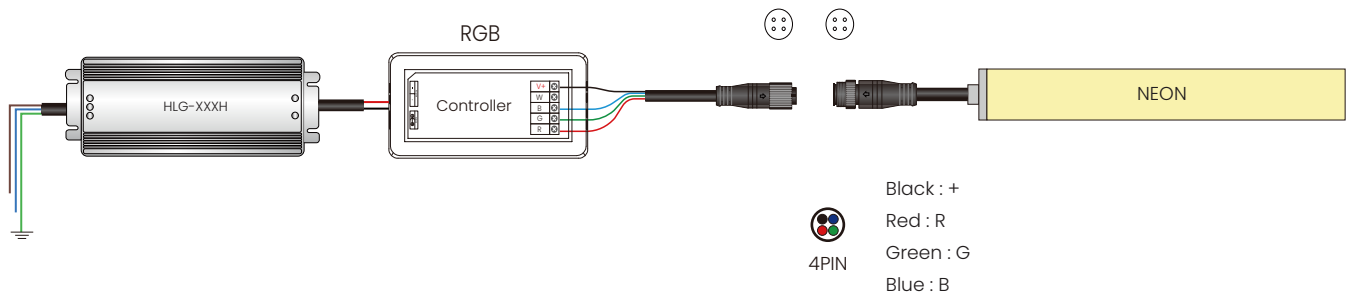
5-in-1 Dimming (Triac/0-10V/1-10V/Potentiometer/10V PWM)



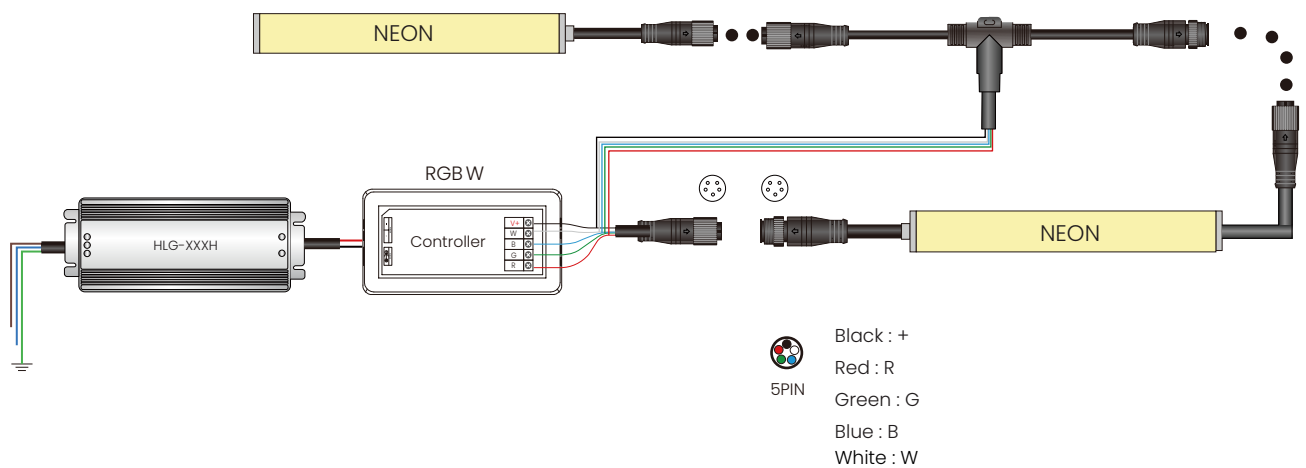
Tunable White Connection Diagram



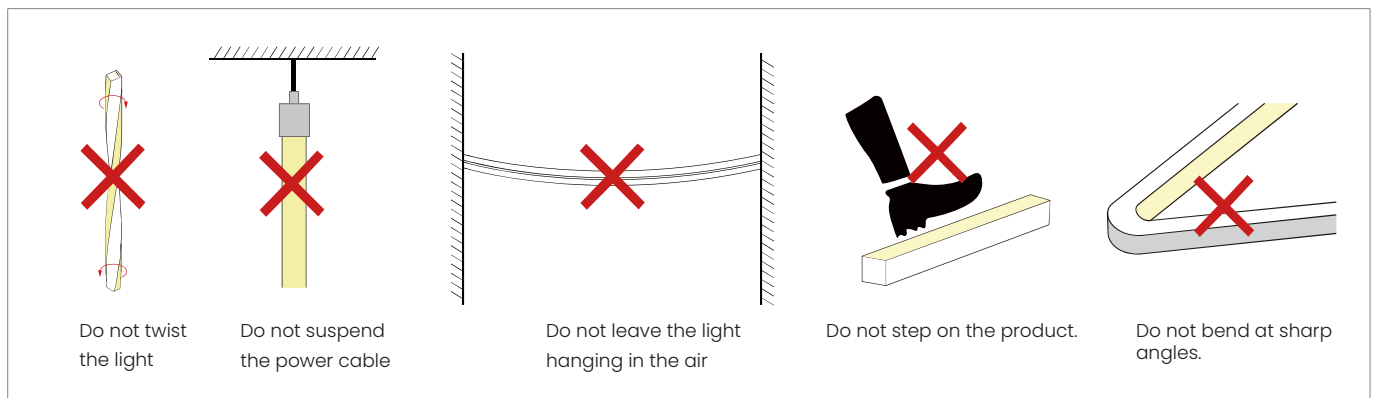
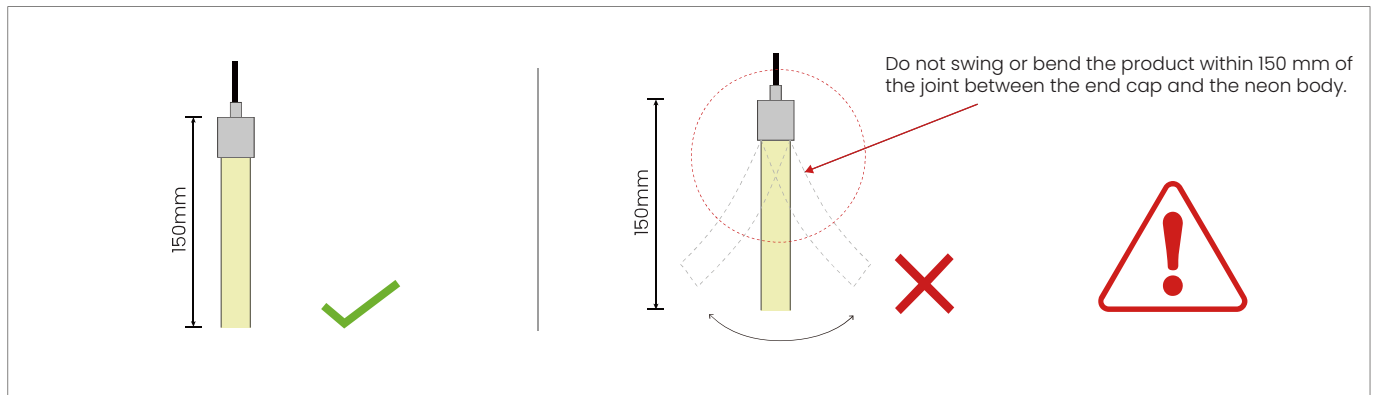
RGB Connection Diagram



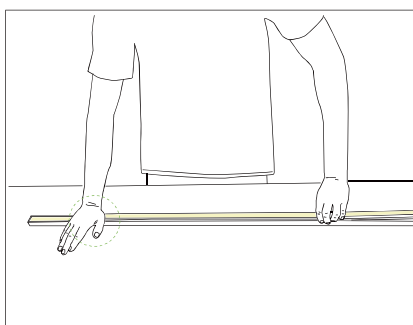
RGBW Connection Diagram



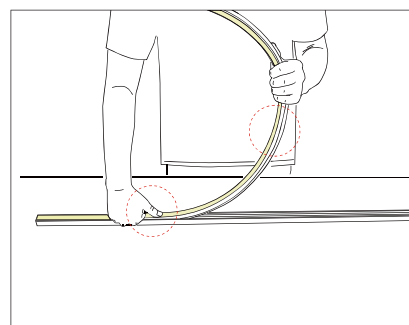
Installation Precautions



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.

Packaging Information



Standard Packaging: White carton with paper reel inside.

Model	Qty/Roll(m)	Rolls/Carton	Carton Size	Net Weight	Gross Weight
NS-3D1617 24V IP67	5m	8	41 x 41 x 26 cm	11.8 kg/carton	13.2 kg/carton
NS-3D1617 24V IP67	10m	3	41 x 41 x 26 cm	8.9 kg/carton	10.1 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 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.