



Side View

SILICONE NEON STRIP

APEX 1617 SV
HL-NS1617-IP68

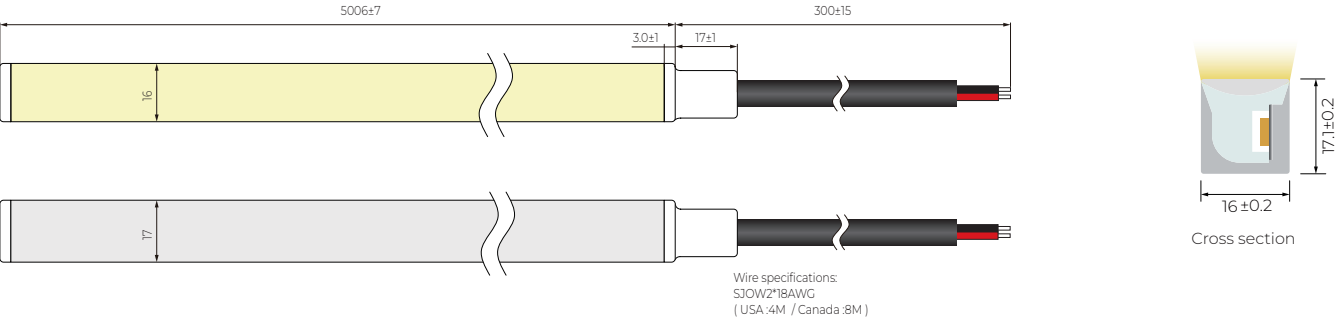


- Advanced sealing tech, integrated molding process for IP68 protection and 5m underwater depth.
- Made from chlorine-resistant silicone formula, Chlorine resistance $\leq 5\text{PPM}$, has better corrosion resistance, ideal for swimming pools.
- Unique light distribution structure provides uniform illumination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

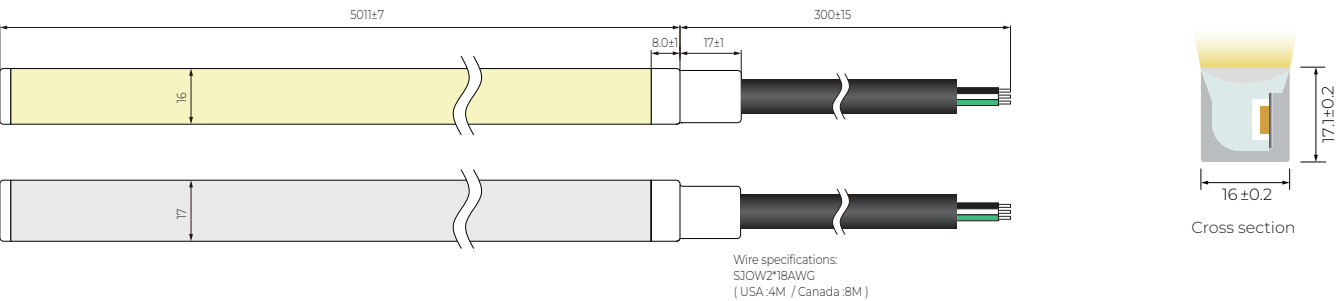


Dimension structure (Unit: mm)

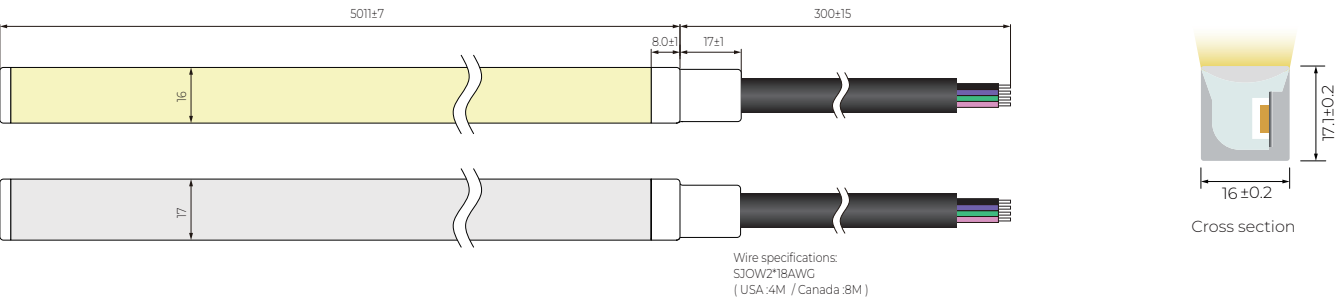
Single Color



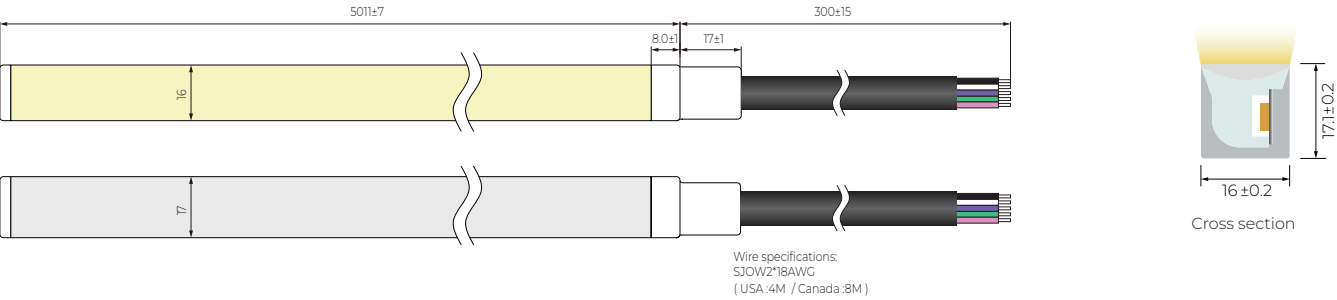
CCT Tunable



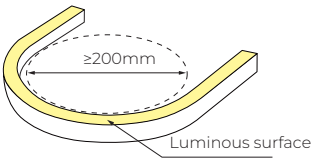
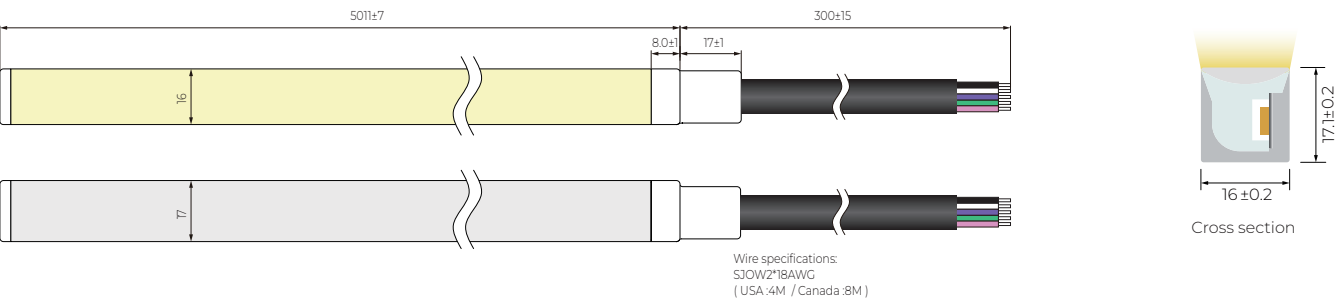
RGB



RGBW



RGBW Pixel



Min bending diameter

Electrical Parameter

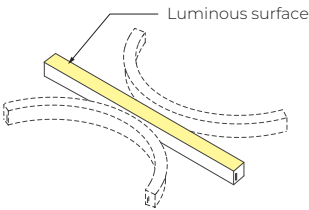
Voltage	LED PIN Temperature	Storage Temperature	Ambient Temperature
DC24V	Max. 65 C	-25 C ~ 60 C	Min.-25°C Max(Table below)

Specification

Power (w/m)	Efficacy (lm/w) @4000K	Max Ambient Temperature
5	CV:64.8 CC:55.5	55 C
10	CV:62.3 CC:53.4	45 C
15	CV:59.4 CC:50.9	35 C

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

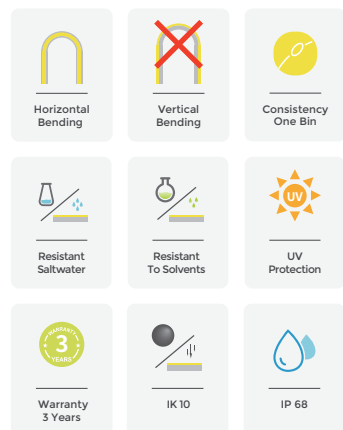
Length Standard



Bend horizontal only

Length Range (M)	Final Length (mm)			Tolerance (mm)
	Single color Integral end cap	RGBW Integral end cap	RGBW Pixel Integral end cap	
0<Neon Strip(L)≤5	L+6	L+11	L+11	±7
5<Neon Strip(L)≤10	L+6	--	--	±10
10<Neon Strip(L)≤15	L+6	--	--	±13
15<Neon Strip(L)≤20	L+6	--	--	±16
20<Neon Strip(L)≤25	L+6	--	--	±19
25<Neon Strip(L)≤30	L+6	--	--	±22

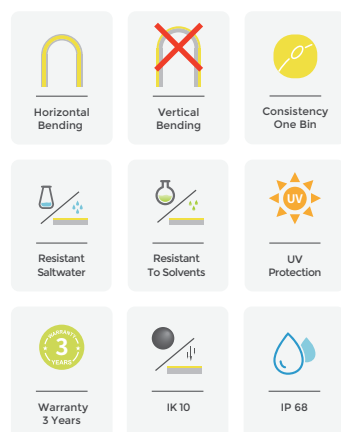
Parameter Table



- The maximum series length refers to the maximum length of the light strip with single-end power supply in series under the standard 4000mm cable.
- The given color temperature is the temperature of finished product.
- The given data are typical values due to the tolerances of the production process and the electrical components, values for light output and electrical power can vary up to 10%.
- All products can be dimmed; the dimmer's voltage should conform to the rated voltage of the led light.
- 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.

Single color : CV

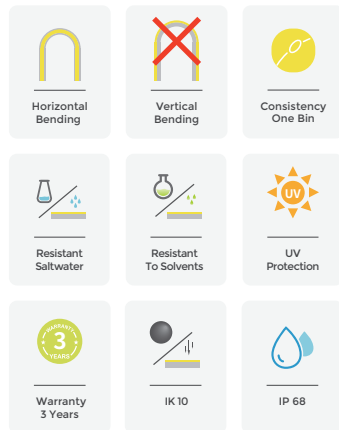
CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max Run Length (M)	CC/CV
1800±100	≥90	DC24V	5	225	45.0	50	5	CV
			10	430	43.0	50	5	CV
			15	612	40.8	50	5	CV
2100±150	≥90	DC24V	5	251	50.1	50	5	CV
			10	480	48.0	50	5	CV
			15	686	45.7	50	5	CV
2400±150	≥90	DC24V	5	272	54.4	50	5	CV
			10	520	52.0	50	5	CV
			15	743	49.5	50	5	CV
2700±150	≥90	DC24V	5	293	58.5	50	5	CV
			10	557	55.7	50	5	CV
			15	794	52.9	50	5	CV
3000±150	≥90	DC24V	5	300	59.9	50	5	CV
			10	572	57.2	50	5	CV
			15	815	54.3	50	5	CV
3500±200	≥90	DC24V	5	301	60.2	50	5	CV
			10	573	57.3	50	5	CV
			15	821	54.7	50	5	CV
4000 ⁺⁴⁰⁰ ₋₂₀₀	≥90	DC24V	5	324	64.8	50	5	CV
			10	623	62.3	50	5	CV
			15	891	59.4	50	5	CV
5000 ⁺⁵⁰⁰ ₋₃₀₀	≥90	DC24V	5	306	61.1	50	5	CV
			10	591	59.1	50	5	CV
			15	849	56.6	50	5	CV
6500±500	≥90	DC24V	5	297	59.4	50	5	CV
			10	578	57.8	50	5	CV
			15	830	55.3	50	5	CV
Red	--	DC24V	5	131	26.2	50	5	CV
			10	258	25.8	50	5	CV
			15	384	25.6	50	5	CV
Green	--	DC24V	5	403	80.6	50	5	CV
			10	575	57.5	50	5	CV
			15	863	57.5	50	5	CV
Blue	--	DC24V	5	78	15.5	50	5	CV
			10	132	13.2	50	5	CV
			15	301	20.1	50	5	CV
Yellow	--	DC24V	5	101	20.1	50	5	CV
			10	199	19.9	50	5	CV
			15	290	19.3	50	5	CV
Orange	--	DC24V	5	112	22.4	50	5	CV
			10	237	23.7	50	5	CV
			15	365	24.3	50	5	CV
Pink	--	DC24V	5	288	57.5	50	5	CV
			10	540	54.0	50	5	CV
			15	797	53.1	50	5	CV



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Singlr color : CC

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max Run Length (M)	CC/CV
1800±100	≥90	DC24V	5	193	38.6	50	5	CC
			10	369	36.9	50	5	CC
			15	525	35.0	50	5	CC
2100±150	≥90	DC24V	5	215	42.9	50	5	CC
			10	411	41.1	50	5	CC
			15	588	39.2	50	5	CC
2400±150	≥90	DC24V	5	233	46.6	50	5	CC
			10	446	44.6	50	5	CC
			15	636	42.4	50	5	CC
2700±150	≥90	DC24V	5	251	50.1	50	5	CC
			10	477	47.7	50	5	CC
			15	680	45.3	50	5	CC
3000±150	≥90	DC24V	5	257	51.3	50	5	CC
			10	490	49.0	50	5	CC
			15	698	46.5	50	5	CC
3500±200	≥90	DC24V	5	258	51.6	50	5	CC
			10	491	49.1	50	5	CC
			15	704	46.9	50	5	CC
4000 ⁺⁴⁰⁰ ₋₂₀₀	≥90	DC24V	5	278	55.5	50	5	CC
			10	534	53.4	50	5	CC
			15	764	50.9	50	5	CC
5000 ⁺⁵⁰⁰ ₋₃₀₀	≥90	DC24V	5	262	52.3	50	5	CC
			10	506	50.6	50	5	CC
			15	728	48.5	50	5	CC
6500±500	≥90	DC24V	5	255	50.9	50	5	CC
			10	495	49.5	50	5	CC
			15	710	47.3	50	5	CC
Red	--	DC24V	5	112	22.4	50	5	CC
			10	221	22.1	50	5	CC
			--	--	--	--	--	--
Green	--	DC24V	5	345	69.0	50	5	CC
			10	565	56.5	50	5	CC
			15	740	49.3	50	5	CC
Blue	--	DC24V	5	67	13.3	50	5	CC
			10	119	11.9	50	5	CC
			15	169	11.3	50	5	CC
Yellow	--	DC24V	5	86	17.2	50	5	CC
			10	171	17.1	50	5	CC
			--	--	--	--	--	--
Orange	--	DC24V	5	96	19.2	50	5	CC
			10	203	20.3	50	5	CC
			--	--	--	--	--	--
Pink	--	DC24V	5	247	49.3	50	5	CC
			10	463	46.3	50	5	CC
			15	683	45.5	50	5	CC



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CCT Tunable

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
2700±150	≥90	DC24	7.5	386	51.5	62.5	5	CV
6500±500	≥90	DC24	7.5	419	55.9	62.5	5	CV
2700+6500	≥90	DC24	15	800	53.3	62.5	5	CV

RGB

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24	3.3	60	18.1	62.5	5	CV
G	--	DC24	3.3	168	51.0	62.5	5	CV
B	--	DC24	3.3	36	10.9	62.5	5	CV
RGB	--	DC24	10	270	27.0	62.5	5	CV

RGBW

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24	3.7	61	16.3	62.5	5	CV
G	--	DC24	3.7	154	41.0	62.5	5	CV
B	--	DC24	3.7	47	12.5	62.5	5	CV
2700±150	≥80	DC24	3.7	189	50.5	62.5	5	CV
RGBW	--	DC24	15	445	30.5	62.5	5	CV

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24	3.7	61	16.3	62.5	5	CV
G	--	DC24	3.7	154	41.0	62.5	5	CV
B	--	DC24	3.7	47	12.5	62.5	5	CV
3000±150	≥80	DC24	3.7	179	47.8	62.5	5	CV
RGBW	--	DC24	15	435	28.7	62.5	5	CV

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24	3.7	61	16.3	62.5	5	CV
G	--	DC24	3.7	154	41.0	62.5	5	CV
B	--	DC24	3.7	47	12.5	62.5	5	CV
4000 ⁺⁴⁰⁰ ₋₂₀₀	≥80	DC24	3.7	200	53.4	62.5	5	CV
RGBW	--	DC24	15	455	31.5	62.5	5	CV

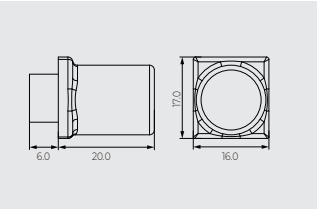
CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24	3.7	61	16.3	62.5	5	CV
G	--	DC24	3.7	154	41.0	62.5	5	CV
B	--	DC24	3.7	47	12.5	62.5	5	CV
6500±500	≥80	DC24	3.7	171	45.5	62.5	5	CV
RGBW	--	DC24	15	426	27.0	62.5	5	CV

Pixel RGBW : DMX512

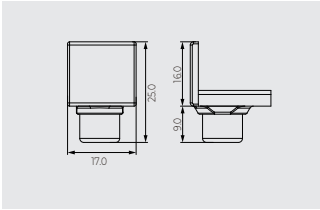
CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit cut (mm)	Max. Run Length (M)	Pixel (PCS)	ICModel
R	--	DC24	5	39	7.7	125	5	8	UCSS12CL
G	--	DC24	5	103	20.6	125	5	8	UCSS12CL
B	--	DC24	5	30	6.0	125	5	8	UCSS12CL
W: 4000 ⁺⁴⁰⁰ ₋₂₀₀	≥80	DC24	5	127	25.3	125	5	8	UCSS12CL
RGBW	--	DC24	15	288	19.2	125	5	8	UCSS12CL

Cable Entry (Unit: mm)

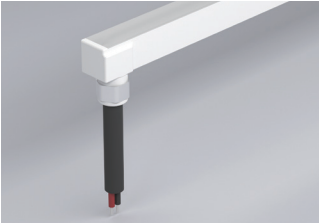
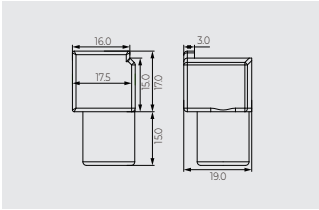
Integral end cap (IP68) Single Color



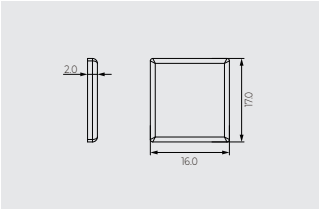
Front Cable Entry



Side Cable Entry

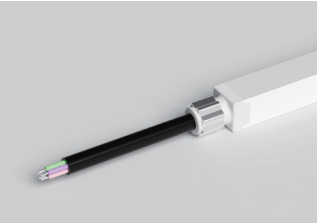
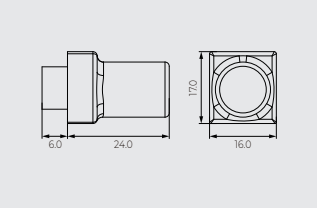


Bottom Cable Entry

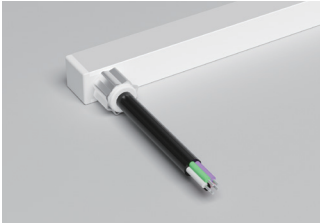
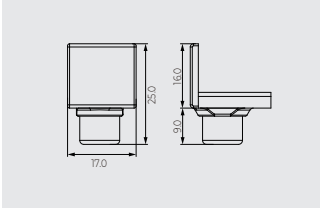


Closed End cap

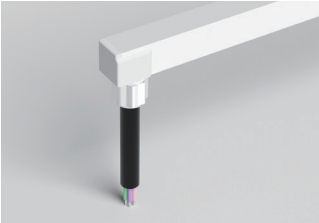
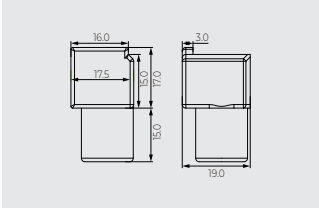
Integral end cap (IP68) RGBW/RGBW Pixel



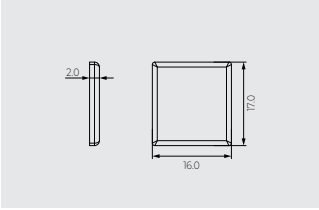
Front Cable Entry



Side Cable Entry



Bottom Cable Entry



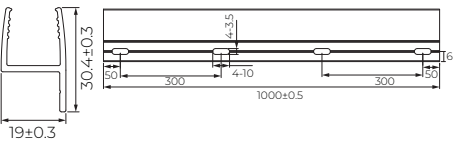
Closed End cap

Cable

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

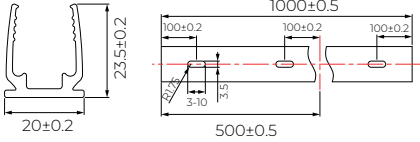
Accessories (Unit: mm)

PC Profile



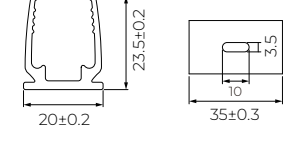
Length: 1000X19X30.4
Accessories:
Screw M3X16 (SUS304)

PC Profile



Length: 1000X20X23.5
Accessories:
Screw M3X16 (SUS304)

PC Clip



Length: 35X20X23.5
Accessories:
Screw M3X16 (SUS304)

Optional combination (Unit: mm)

1617-IP68-2T-Single color (For connection of two single color light strips)



2T junction box



Length:
131.4X68.2X37
Quantity:
1PCS

P3 terminal cap



Length:
12.3X21
Quantity:
2PCS

7.4 Waterproof sealing ring



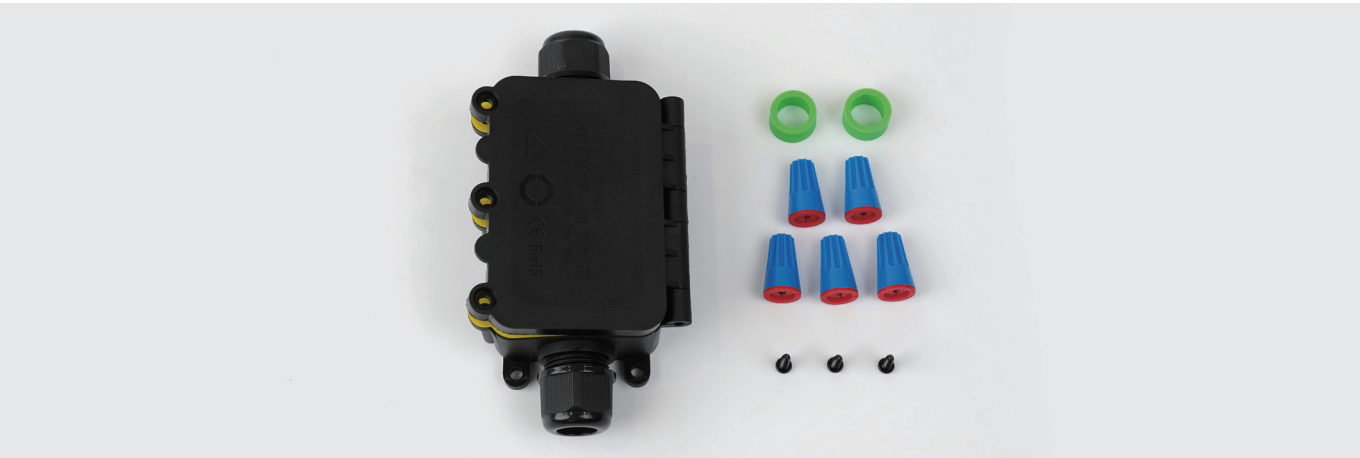
Length:
15.8X8.6
Quantity:
2PCS

Screw



Length:
M3X12
Quantity:
3PCS

1617-IP68-2T-Pixel (For connection of two digital light strips)



2T junction box



Length:
131.4X68.2X37
Quantity:
1PCS

P3 terminal cap



Length:
12.3X21
Quantity:
5PCS

9.6 Waterproof sealing ring



Length:
15.8X8.6
Quantity:
2PCS

Screw



Length:
M3X12
Quantity:
3PCS

1617-IP68-3T-Single color (For connection of three single color light strips)



3T junction box

P4 terminal cap

7.4 Waterproof sealing ring
7.4 Waterproof sealing ring

Screw



Length:
131.4X80.4X37
Quantity:
1PCS



Length:
13.5X23.6
Quantity:
2PCS

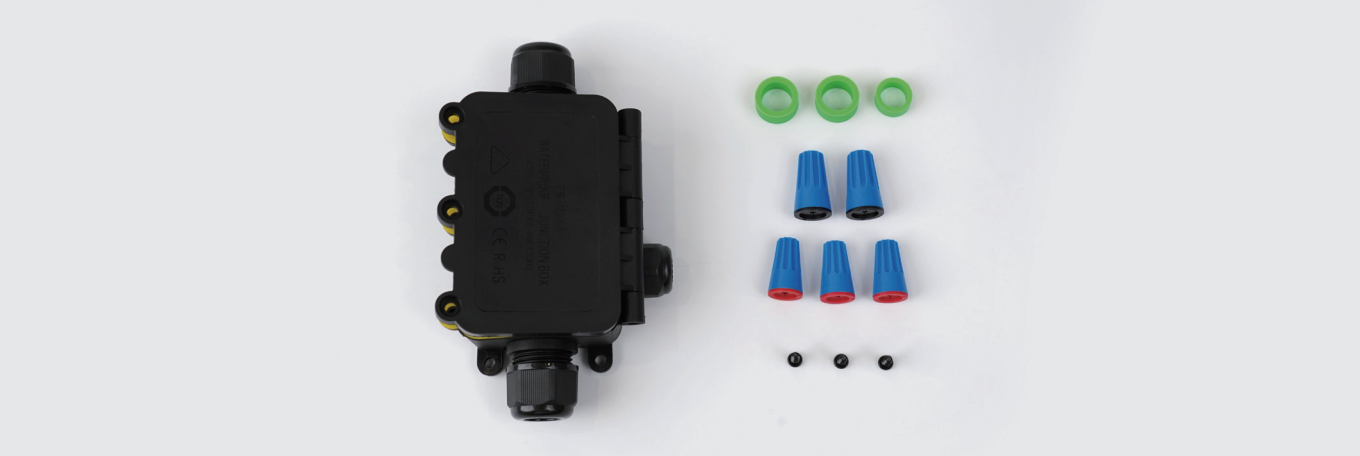


Length:
15.8X8.6(7.4)/13.8X6.5(7.4)
Quantity:
2PCS(7.4)/1PCS(7.4)



Length:
M3X12
Quantity:
3PCS

1617-IP68-3T-Pixel (For connection of two digital light strips, powered by a two-core wire)



3T junction box

P4 terminal cap
P3 terminal cap

9.6 Waterproof sealing ring
7.4 Waterproof sealing ring

Screw



Length:
131.4X80.4X37
Quantity:
1PCS



Length:
13.5X23.6(P4)/12.3X21(P3)
Quantity:
2PCS(P4)/3PCS(P3)

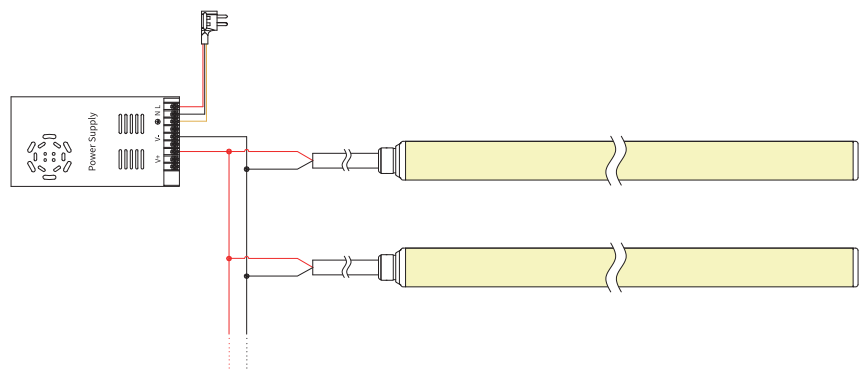


Length:
15.8X8.6(9.6)/13.8X6.5(7.4)
Quantity:
2PCS(9.6)/1PCS(7.4)

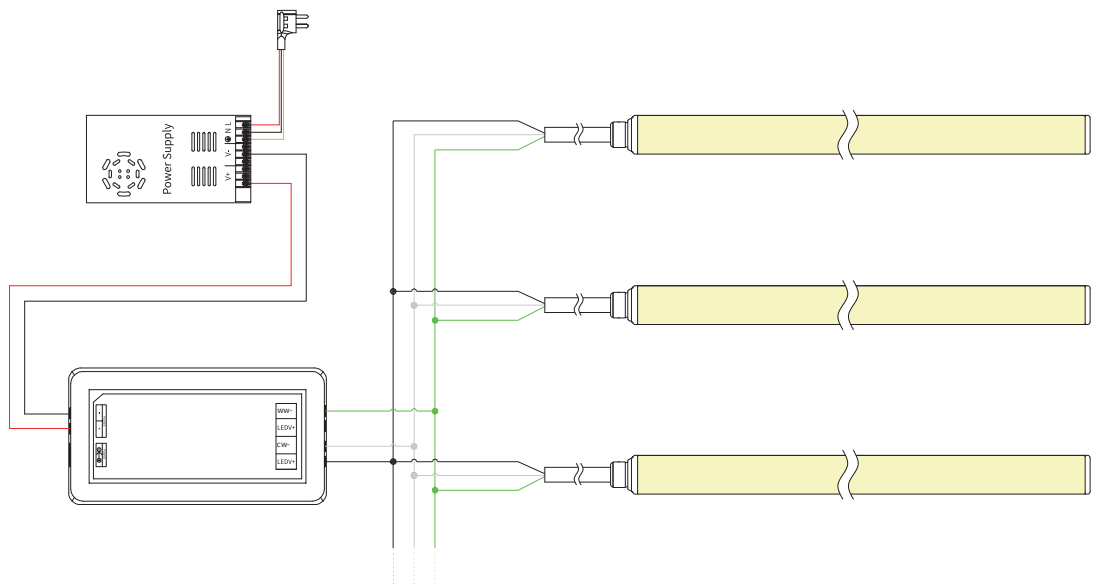


Length:
M3X12
Quantity:
3PCS

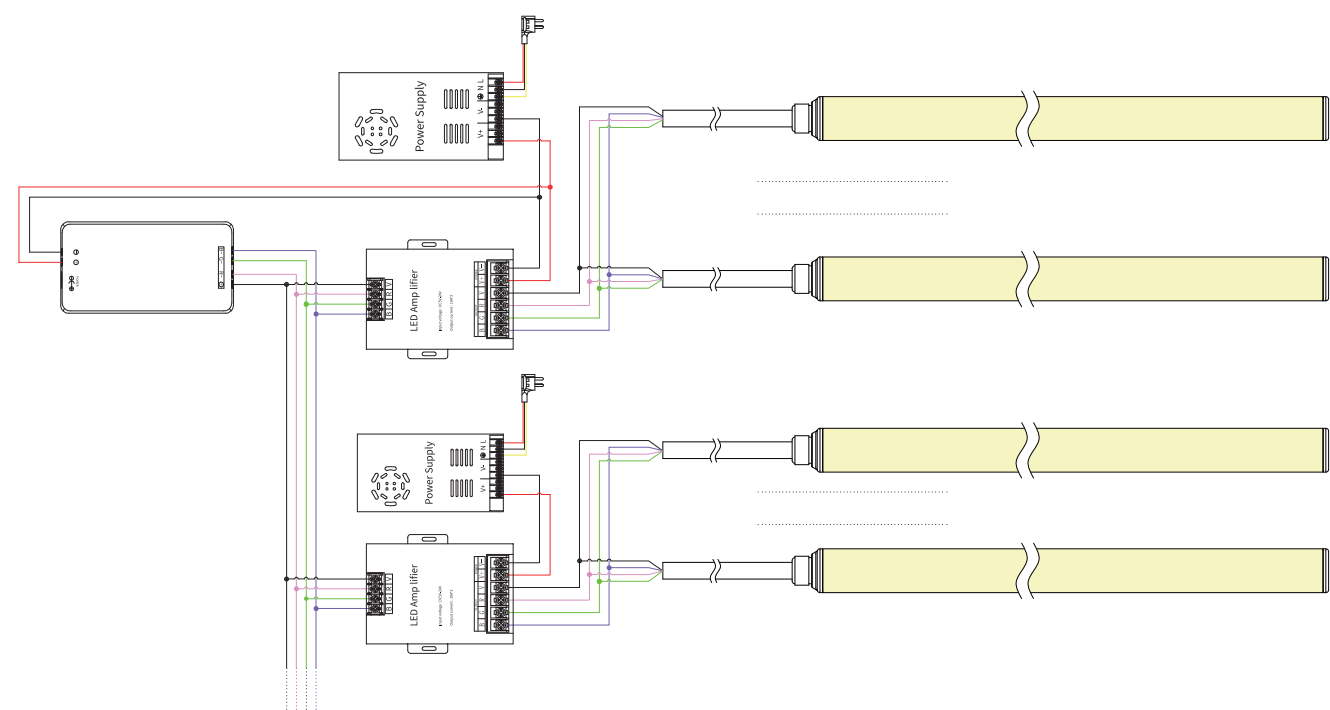
Single Color Connection Diagram



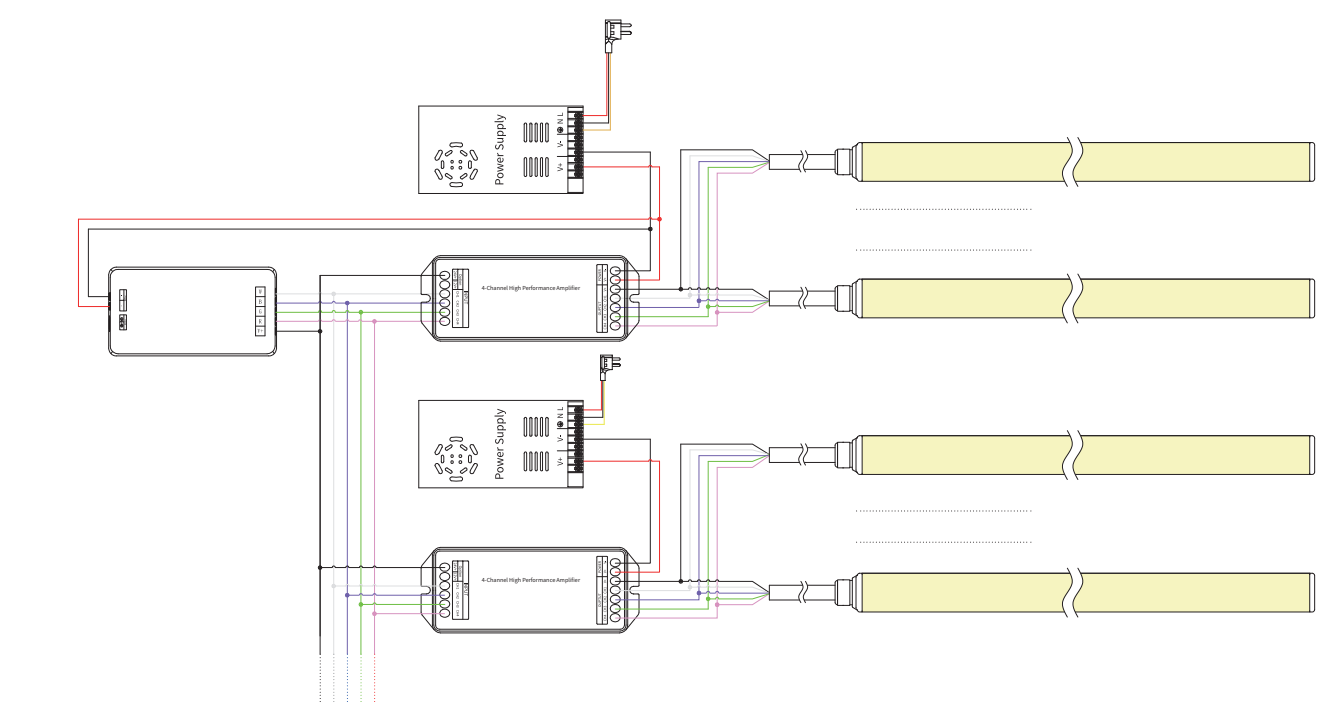
Tunable white Connection Diagram



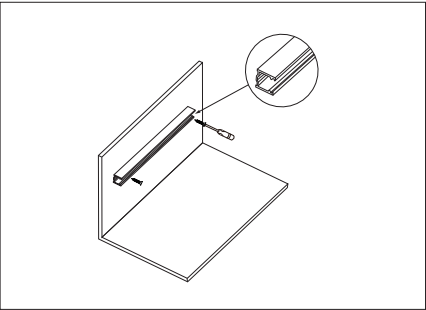
RGB Connection Diagram



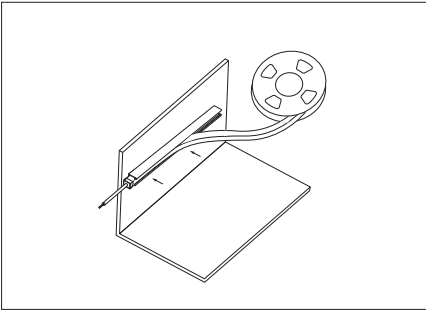
RGBW Connection Diagram



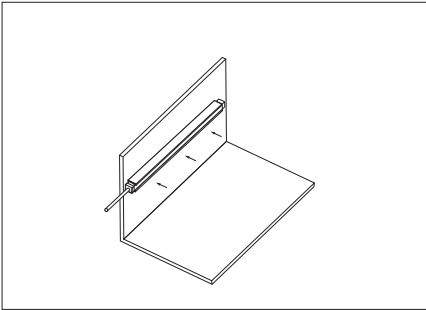
Profile Installation



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

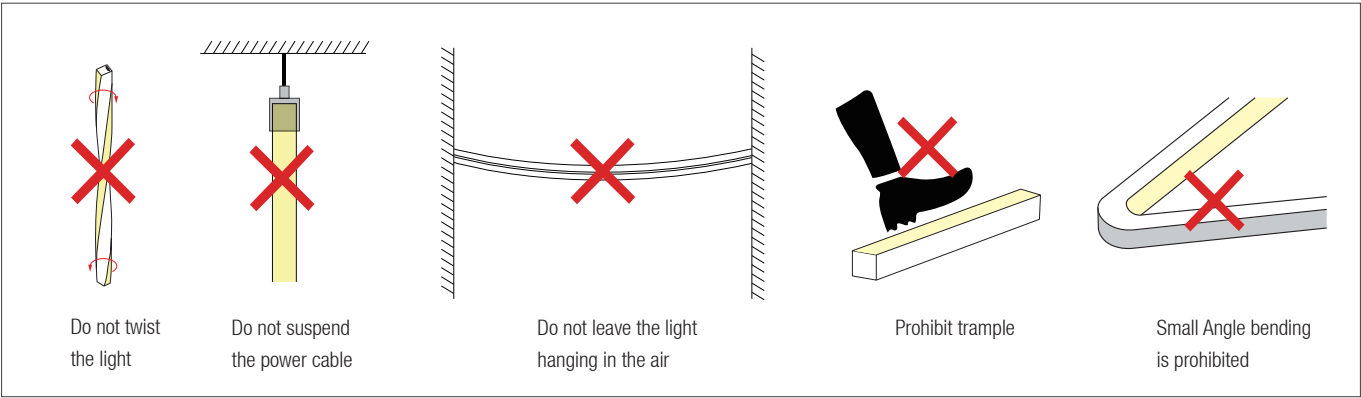
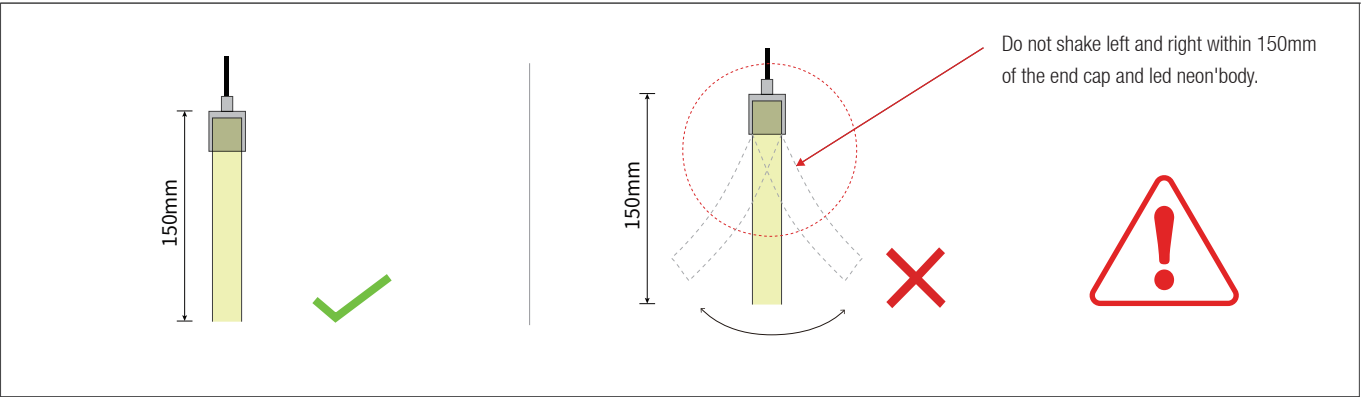


2. Fixing the strip into the profile. No bending sharply and twisting in the process.

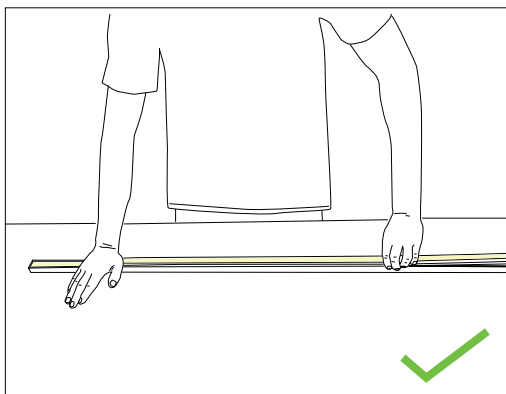


3. Fixing well and connect the DC driver and turn on the power supply.

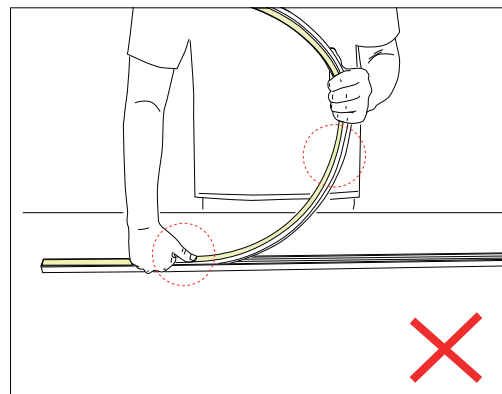
Installation Precautions



Put it in the profile

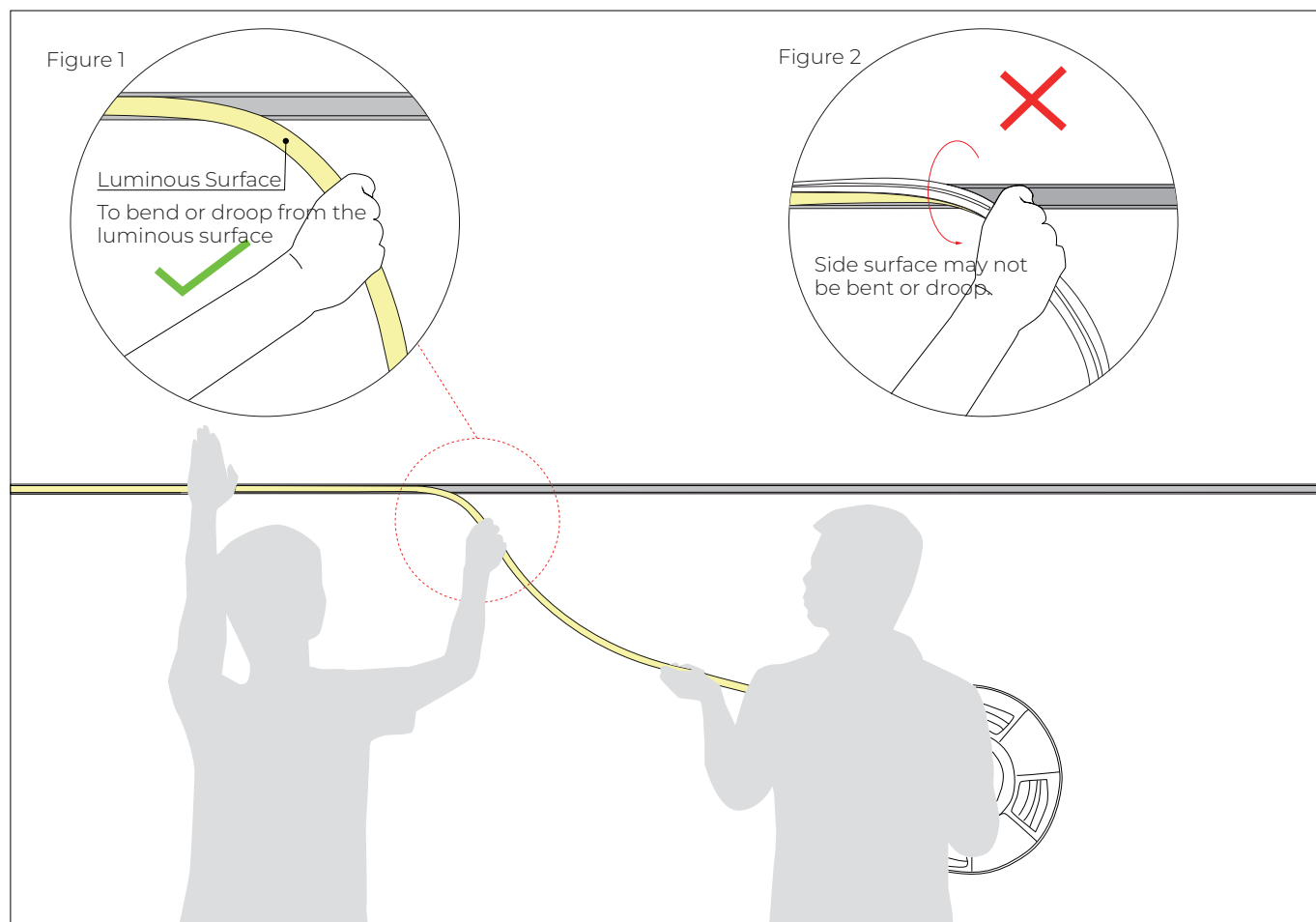


- Please press the led strip with your palm to slowly insert the led strip into the groove, and gently straighten the led strip above the groove with your right hand.
- Try to keep the led strip in a flat state during the installation process.



- 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 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.

Notes

- ※ 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.
- ※ 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.

**Specialized
LED strip Manufacturer**

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