

PRODUCT SPECIFICATION

SIDE BEND NEON STRIP

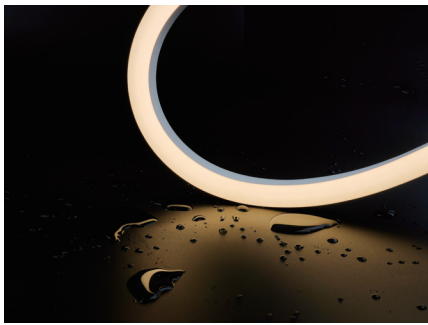
- Side Bend

S1617

Shenzhen GRILIGHT Technology Co.,Ltd

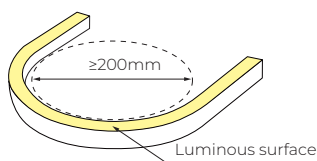
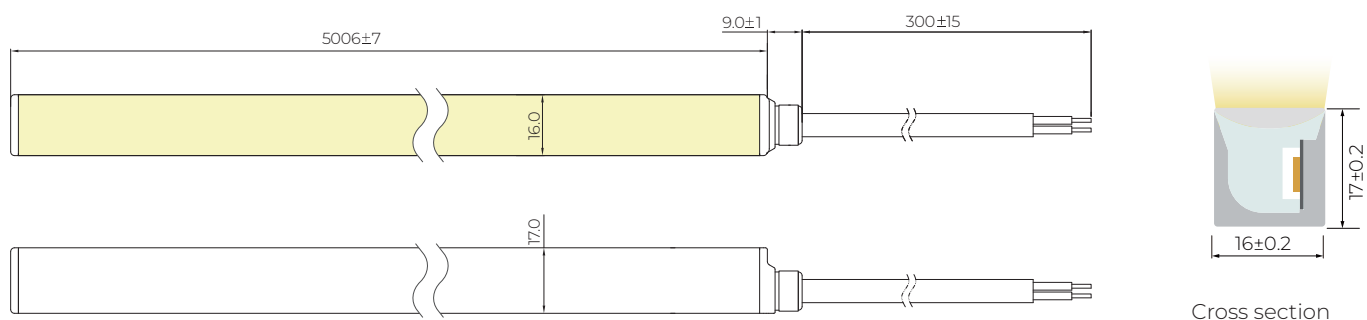
Tel: +8675527390189
Web: www.grilite.com

Fax: +8675527397337
Contact: sale@grilight.com

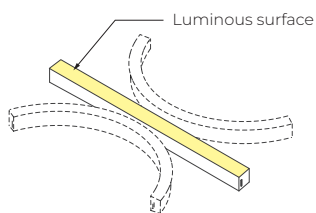


- ELITE is a silicone co-extrusion IP67 neon offers premium UV resistance, chemical stability, and against abrasion.
- Horizontal bending with uniform light and dimmable function.
- Production Length is up to 30m.
- Support freely configurable in length by small cutting increments.
- Matt treatment optional for smooth surface and resistant to dust, the SDCM of finished product can be minimized to 3 steps.
- 3-year warranty for pixel models, 5-year warranty for others, long-life LED > 50,000 hrs, 1 Bin.

Dimension structure (Unit: mm)



Min bending diameter



Bend horizontal only

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

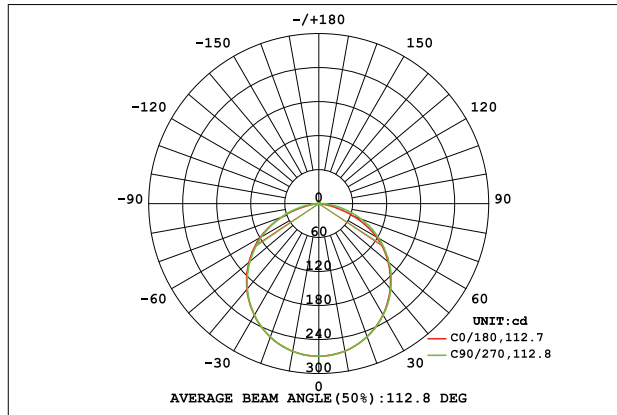
Power (w/m)	Efficacy (lm/w) @4000K	Max Ambient Temperature
5	CV : 73.1 CC : 59.4	55 C
10	CV : 72.7 CC : 59.1	45 C
15	CV : 66 CC : 54.8	35 C

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

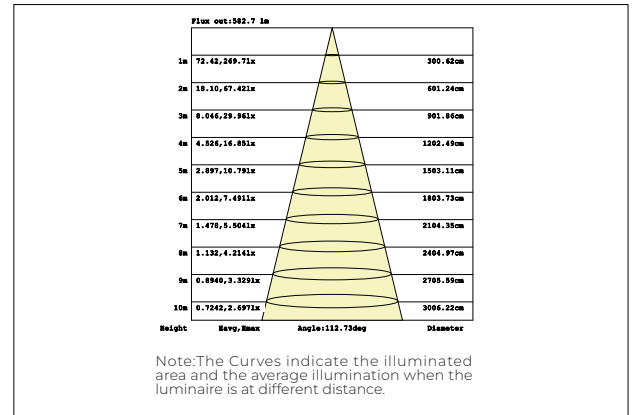
Length Standard

Length Range (M)	Final Length (mm)		Tolerance (mm)
	Integral end cap	Solder free end cap	
0<Neon Strip(L)≤5	L+6	L+32	±7
5<Neon Strip(L)≤10	L+6	L+32	±10
10<Neon Strip(L)≤15	L+6	L+32	±13
15<Neon Strip(L)≤20	L+6	L+32	±16
20<Neon Strip(L)≤25	L+6	L+32	±19
25<Neon Strip(L)≤30	L+6	L+32	±22
30<Neon Strip(L)≤35	L+6	L+32	±25

Light Distribution Curve

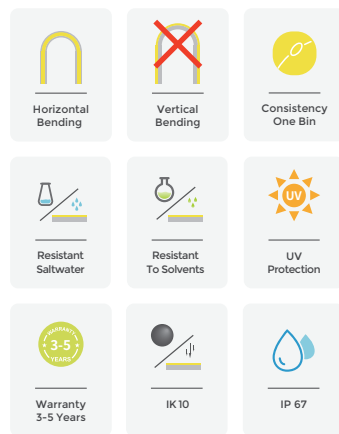


Illuminance curve



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.

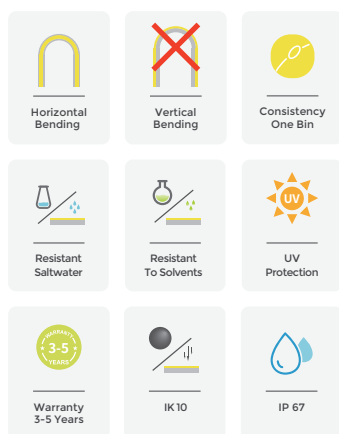
Parameter Table



- The maximum series length refers to the maximum length of the light strip with single-end power supply in series under the standard 30CM cable.
- For the load capacity of the solder free end cap, please refer to <The Maximum Load Capacity of Power Cables>
- 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)	SDCM	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
1800±100	--	≥90	DC24V	5	256	51.1	50	9	CV
				10	486	48.6	50	7	CV
				15	701	46.7	50	5	CV
2100±150	--	≥90	DC24V	5	286	57.1	50	9	CV
				10	541	54.1	50	7	CV
				15	786	52.4	50	5	CV
2400±150	--	≥90	DC24V	5	309	61.7	50	9	CV
				10	593	59.3	50	7	CV
				15	854	56.9	50	5	CV
2700	≤3	≥90	DC24V	5	336	67.1	50	9	CV
				10	644	64.4	50	7	CV
				15	921	61.4	50	5	CV
3000	≤3	≥90	DC24V	5	346	69.1	50	9	CV
				10	677	67.7	50	7	CV
				15	947	63.1	50	5	CV
3500	≤3	≥90	DC24V	5	360	72.0	50	9	CV
				10	695	69.5	50	7	CV
				15	992	66.1	50	5	CV
4000	≤3	≥90	DC24V	5	366	73.1	50	9	CV
				10	727	72.7	50	7	CV
				15	990	66.0	50	5	CV
5000	≤4	≥90	DC24V	5	370	74.0	50	9	CV
				10	706	70.6	50	7	CV
				15	1011	67.4	50	5	CV
6500	≤5	≥90	DC24V	5	364	72.8	50	9	CV
				10	695	69.5	50	7	CV
				15	1005	67.0	50	5	CV
Red	--	--	DC24V	5	146	29.2	50	14	CV
				10	275	27.5	50	10	CV
				15	429	28.6	50	7	CV
Green	--	--	DC24V	5	425	84.9	50	11	CV
				10	689	68.9	50	9	CV
				15	911	60.7	50	7	CV
Blue	--	--	DC24V	5	82	16.4	50	10	CV
				10	142	14.2	50	7	CV
				15	210	14.0	50	5	CV
Yellow	--	--	DC24V	5	118	23.5	50	11	CV
				10	219	21.9	50	9	CV
				15	339	22.6	50	7	CV
Orange	--	--	DC24V	5	123	24.6	50	11	CV
				10	272	27.2	50	9	CV
				15	401	26.7	50	7	CV
Pink	--	--	DC24V	5	313	62.6	50	9	CV
				10	586	58.6	50	7	CV
				15	866	57.7	50	5	CV

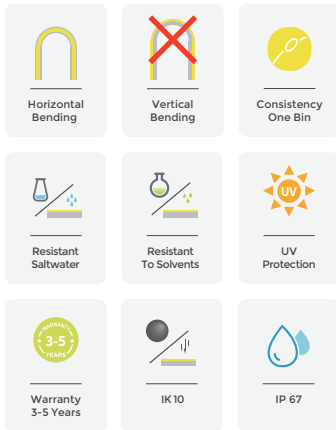


- The maximum series length refers to the maximum length of the light strip with single-end power supply in series under the standard 30CM cable.
- For the load capacity of the solder free end cap, please refer to <The Maximum Load Capacity of Power Cables>
- The given color temperature is the temperature 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 (CC)

CCT(K)	SDCM	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
1800±100	--	≥90	DC24V	5	212	42.4	50	24	CC
				10	403	40.3	50	15	CC
				15	575	38.3	50	12	CC
2100±150	--	≥90	DC24V	5	237	47.4	50	24	CC
				10	449	44.9	50	15	CC
				15	640	42.7	50	12	CC
2400±150	--	≥90	DC24V	5	254	50.8	50	24	CC
				10	489	48.9	50	15	CC
				15	710	47.4	50	12	CC
2700	≤3	≥90	DC24V	5	275	55.0	50	24	CC
				10	528	52.8	50	15	CC
				15	763	50.8	50	12	CC
3000	≤3	≥90	DC24V	5	283	56.7	50	24	CC
				10	555	55.5	50	15	CC
				15	789	52.6	50	12	CC
3500	≤3	≥90	DC24V	5	295	59.1	50	24	CC
				10	570	57.0	50	15	CC
				15	810	54.0	50	12	CC
4000	≤3	≥90	DC24V	5	297	59.4	50	24	CC
				10	591	59.1	50	15	CC
				15	822	54.8	50	12	CC
5000	≤4	≥90	DC24V	5	309	61.7	50	24	CC
				10	588	58.8	50	15	CC
				15	846	56.4	50	12	CC
6500	≤5	≥90	DC24V	5	304	60.8	50	24	CC
				10	580	58.0	50	15	CC
				15	831	55.4	50	12	CC
Red	--	--	DC24V	5	123	24.5	50	32	CC
				10	244	24.4	50	22	CC
				--	--	--	--	--	--
Green	--	--	DC24V	5	337	67.3	50	20	CC
				10	558	55.8	50	14	CC
				15	720	48.0	50	9	CC
Blue	--	--	DC24V	5	65	12.9	50	22	CC
				10	117	11.7	50	15	CC
				15	165	11.0	50	12	CC
Yellow	--	--	DC24V	5	90	17.9	50	30	CC
				10	180	18.0	50	21	CC
				--	--	--	--	--	--
Orange	--	--	DC24V	5	100	20.0	50	30	CC
				10	216	21.6	50	20	CC
				--	--	--	--	--	--
Pink	--	--	DC24V	5	248	49.5	50	22	CC
				10	473	47.3	50	15	CC
				15	684	45.6	50	12	CC

*Red/Yellow/Orange constant current solution maximum power limit is 10W/M



- The maximum series length refers to the maximum length of the light strip with single-end power supply in series under the standard 30CM cable.
- For the load capacity of the solder free end cap, please refer to <The Maximum Load Capacity of Power Cables>
- 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.

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	DC24V	10	660	66.0	71.4	5	CV
6500 ±500	≥90	DC24V	10	709	70.9	71.4	5	CV
2700+6500	≥90	DC24V	11	789	71.7	71.4	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	--	DC24V	3.3	61	18.6	83.3	5	CV
G	--	DC24V	3.3	227	68.7	83.3	5	CV
B	--	DC24V	3.3	38	11.5	83.3	5	CV
RGB	--	DC24V	10	329	32.9	83.3	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	--	DC24V	3.7	70	18.7	83.3	5	CV
G	--	DC24V	3.7	267	71.3	83.3	5	CV
B	--	DC24V	3.7	49	13.0	83.3	5	CV
2700±150	≥90	DC24V	3.7	227	60.6	83.3	5	CV
RGBW	--	DC24V	15	635	42.3	83.3	5	CV

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	3.7	70	18.7	83.3	5	CV
G	--	DC24V	3.7	267	71.3	83.3	5	CV
B	--	DC24V	3.7	49	13.0	83.3	5	CV
3000 ±150	≥90	DC24V	3.7	234	62.4	83.3	5	CV
RGBW	--	DC24V	15	644	42.9	83.3	5	CV

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	3.7	70	18.7	83.3	5	CV
G	--	DC24V	3.7	267	71.3	83.3	5	CV
B	--	DC24V	3.7	49	13.0	83.3	5	CV
4000 ⁺⁴⁰⁰ / ₋₂₀₀	≥90	DC24V	3.7	244	65.0	83.3	5	CV
RGBW	--	DC24V	15	660	44.0	83.3	5	CV

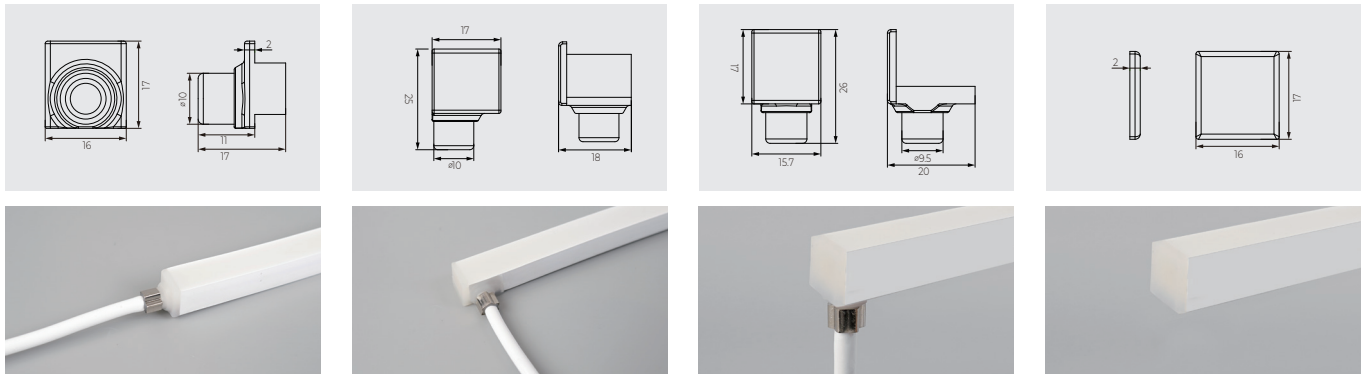
CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	3.7	70	18.7	83.3	5	CV
G	--	DC24V	3.7	267	71.3	83.3	5	CV
B	--	DC24V	3.7	49	13.0	83.3	5	CV
6500±500	≥90	DC24V	3.7	248	66.0	83.3	5	CV
RGBW	--	DC24V	15	665	44.3	83.3	5	CV

RGBW Pixel DMX512

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	Pixel (PCS)	ICModel
R	--	DC24V	5	60	12.0	125	5	8	UCS512CL
G	--	DC24V	5	191	38.1	125	5	8	UCS512CL
B	--	DC24V	5	38	7.6	125	5	8	UCS512CL
W: 4000 ⁺⁴⁰⁰ / ₋₂₀₀	≥80	DC24V	5	161	32.2	125	5	8	UCS512CL
RGBW	--	DC24V	15	456	30.4	125	5	8	UCS512CL

Cable Lead Option (Unit: mm)

Integral end cap (IP67)



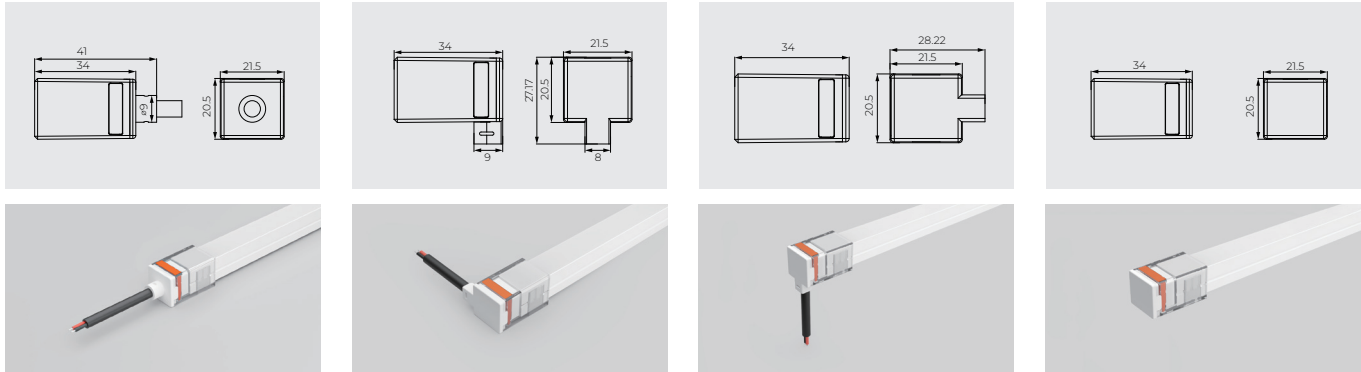
Front Cable Entry

Side Cable Entry

Bottom Cable Entry

Closed End cap

Solder Free End Cap without screws (IP67)



Front Cable Entry

Side Cable Entry

Bottom Cable Entry

Closed End cap

Cable

Cable Type	Schematic Diagram	Specification	Core	Electrical Properties
Applicable to Solder Free End Cap PVC Cable		OD: 5.0mm / Inner core: 20AWG	●●	Red V+, Black V-
		OD: 5.0mm / Inner core: 20AWG	●○●	Brown V+, White W, Yellow WW
		OD: 5.5mm / Inner core: 20AWG	●●●●	Black V+, Blue B, Green G, Red R
		OD: 5.5mm / Inner core: 22AWG	●○●●●	Black V+, White W, Blue B, Green G, Red R
Waterproof Connector with PVC Cable		OD: 5.0mm / Inner core: 20AWG M12Male / Female connecto	●●	Red V+, Black V-
		OD: 5.0mm / Inner core: 20AWG M12Male / Female connecto	●○●	Brown V+, White W, Yellow WW
		OD: 5.5mm / Inner core: 20AWG M12Male / Female connecto	●●●●	Black V+, Blue B, Green G, Red R
		OD: 5.5mm / Inner core: 22AWG M12Male / Female connecto	●○●●●	Black V+, White W, Blue B, Green G, Red R
Applicable to Integral End Cap 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: 6.4mm / 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: 6.0mm / Inner core: 20AWG M12Male / Female connecto	●●	Red V+, Black V-
		OD: 6.0mm / Inner core: 20AWG M12Male / Female connecto	●○●	Black V+, White W, Yellow WW
		OD: 6.0mm / Inner core: 20AWG M12Male / Female connecto	●●●●	Black V+, Blue B, Green G, Red R
		OD: 6.4mm / Inner core: Red/Black--20AWG Green/Blue/White--22AWG M12Male / Female connecto	●○●●●	Black V+, White W, Blue B, Green G, Red R
		OD: 6.4mm / Inner core: Red/Black--20AWG Green/Blue/White--22AWG M12Male / Female connecto	●○●●●	DMX512 : Black V-, White BI/BO, Blue AI/AO, Green PI/PO, Red V+

Cable's 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
RGBW	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;

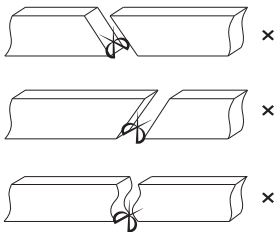
Cutting Mark



Remark:
The black marker is the cutting position



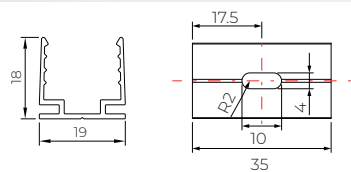
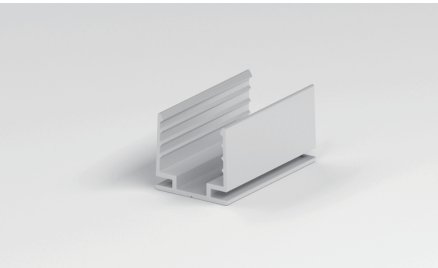
Use professional scissors to cut vertically at the cutting mark



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

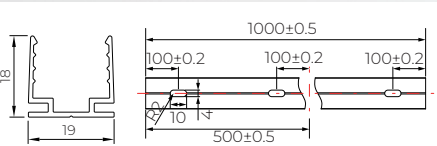
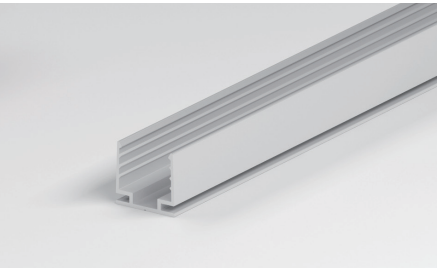
Accessories (Unit: mm)

Aluminium Mounting clips



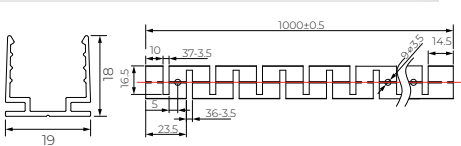
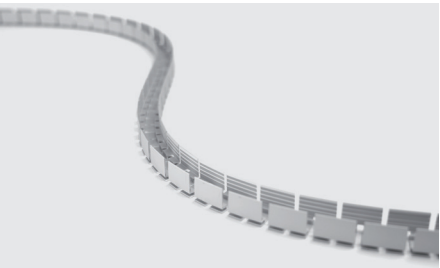
Length: 35X19X18
Accessories:
Screw M3X16 (SUS304)
PC Profile

Aluminium Profile

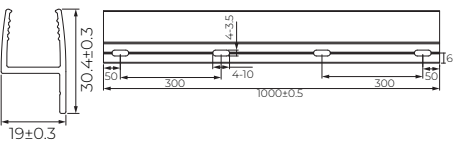


Length: 1000X19X18
Accessories:
Screw M3X16 (SUS304)
PC Profile

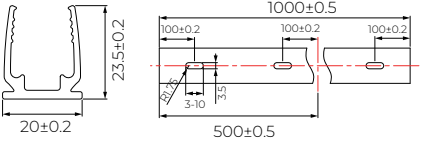
Curved profile



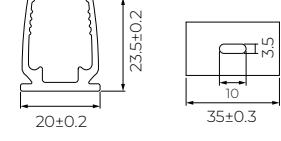
Length: 1000X19X18
Accessories:
Screw M3X16 (SUS304)
PC Clip



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

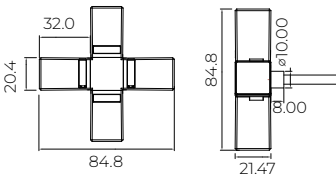
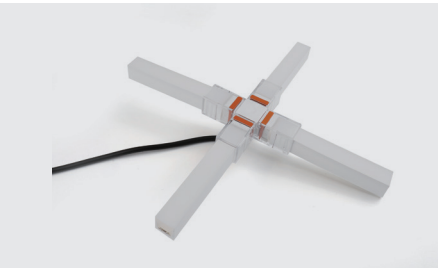


Length: 1000X20X23.5
Accessories:
Screw M3X16 (SUS304)
PC Clip



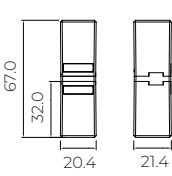
Length: 35X20X23.5
Accessories:
Screw M3X16 (SUS304)
IP67 Cross Connector

IP67 Cross Connector



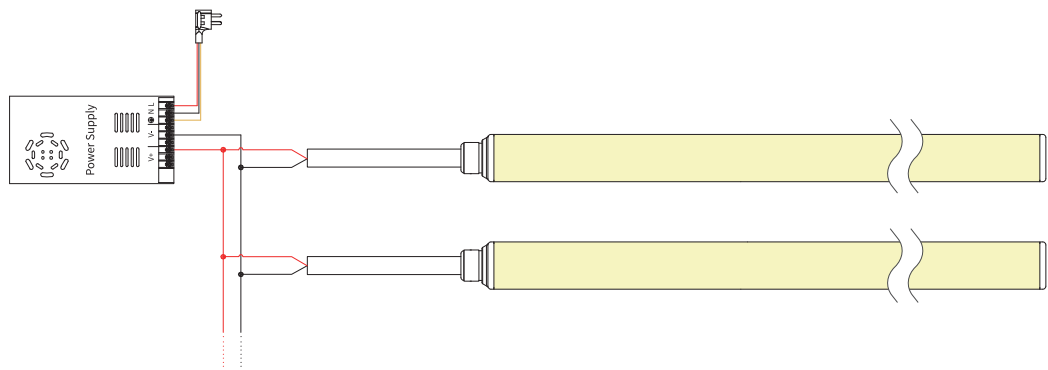
To connect 4pcs of neon after you cut it

IP67 Connector

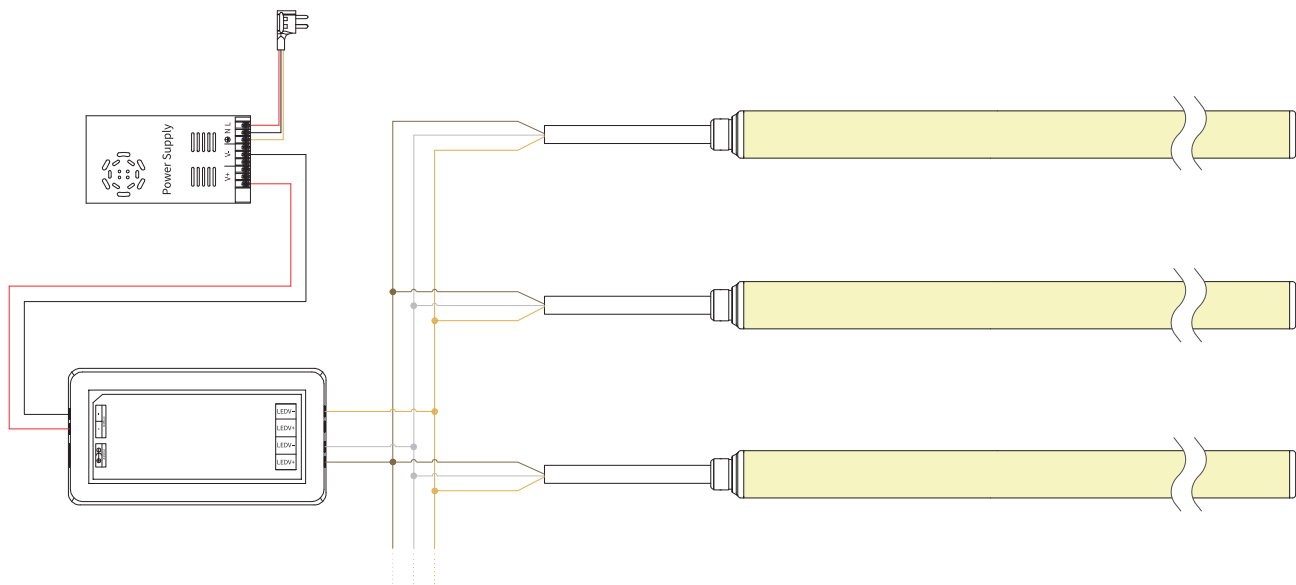


To connect 2pcs of neon after you cut it

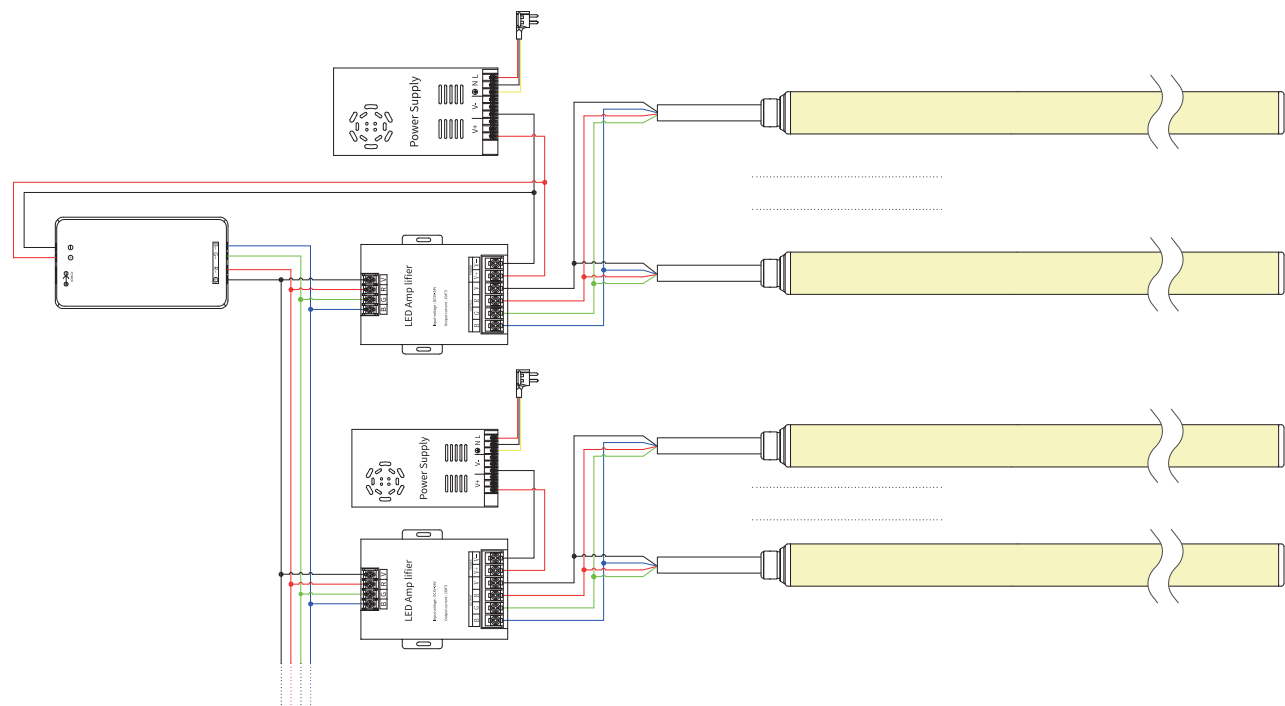
Single Color Connection Diagram



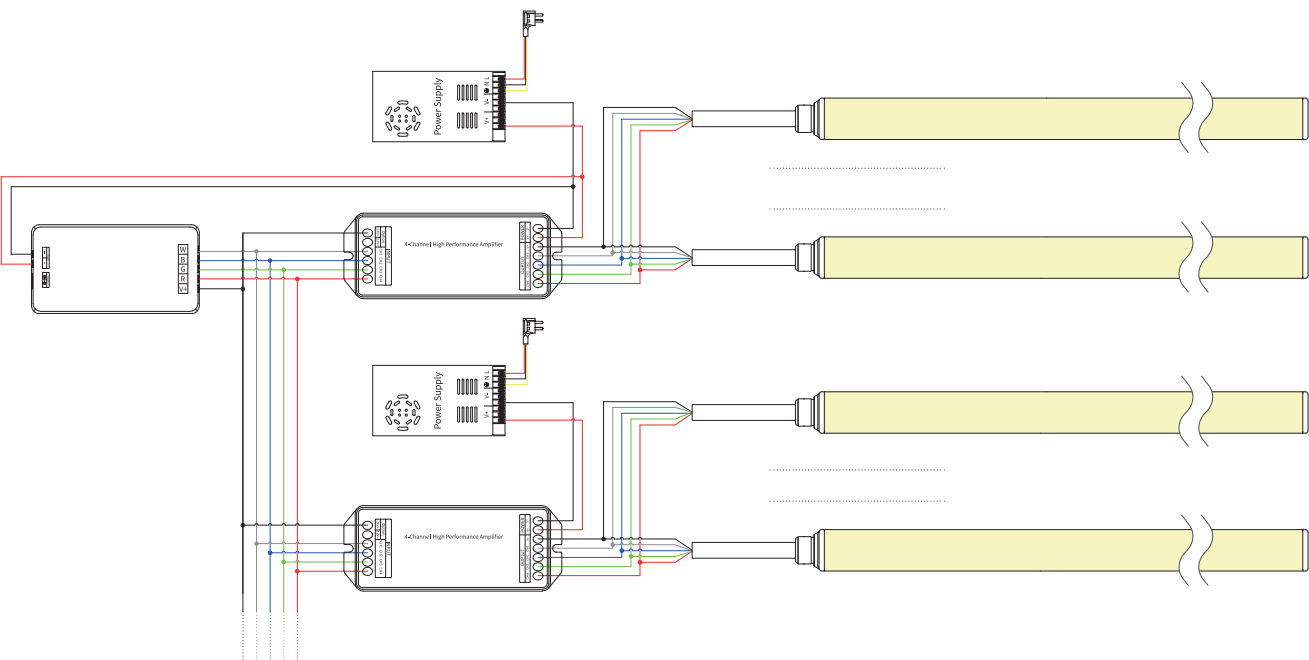
Tunable white Connection Diagram



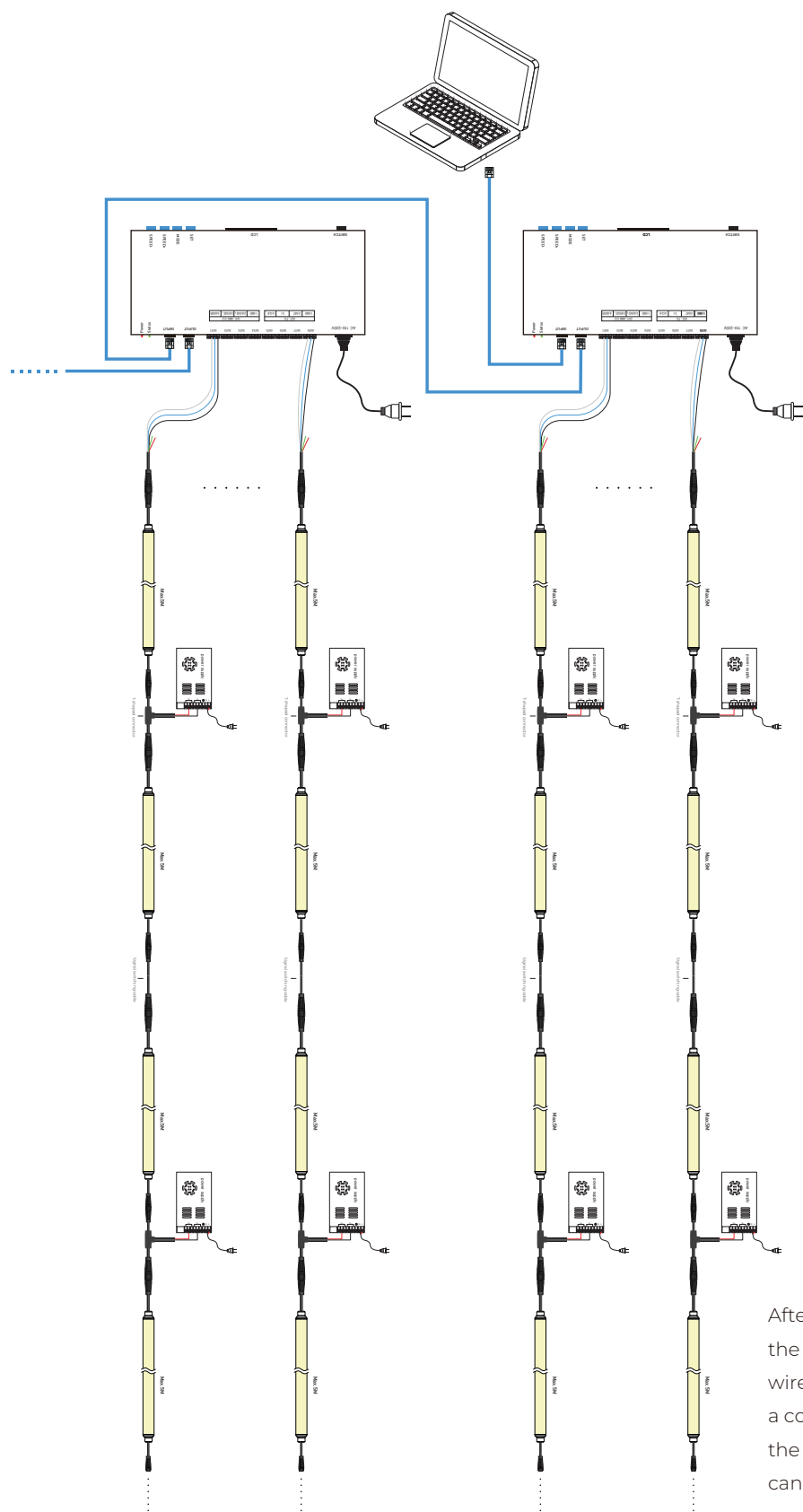
RGB Connection Diagram



RGBW Connection Diagram

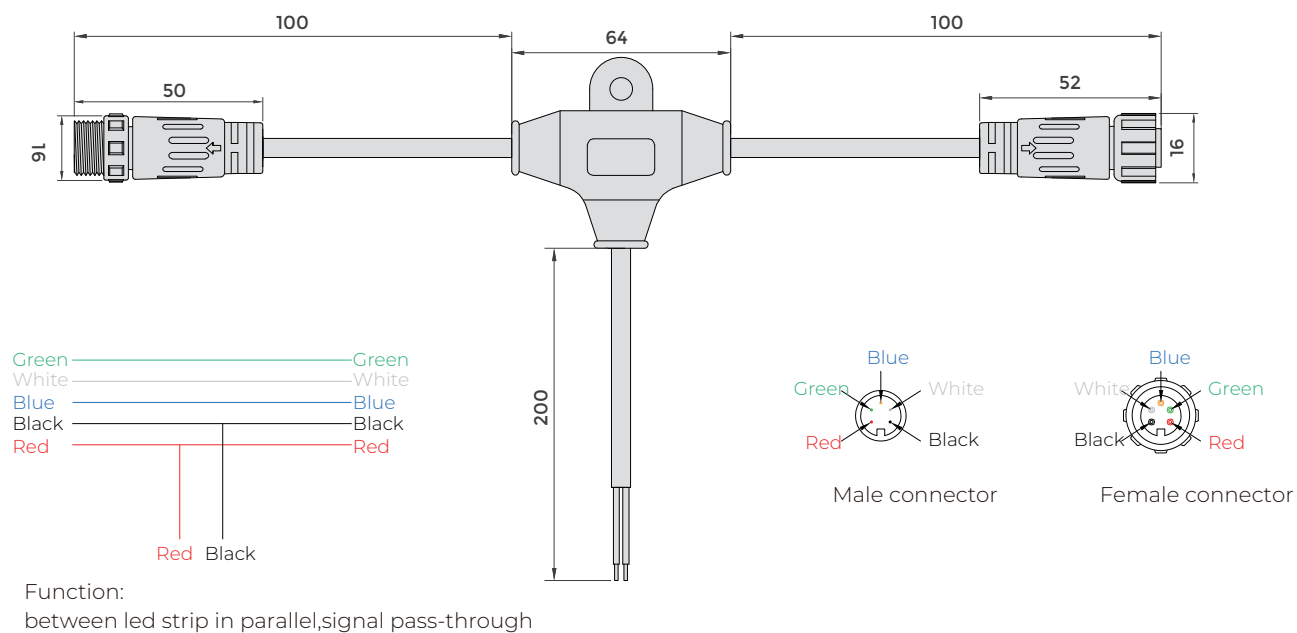


DMX512 Connection Diagram

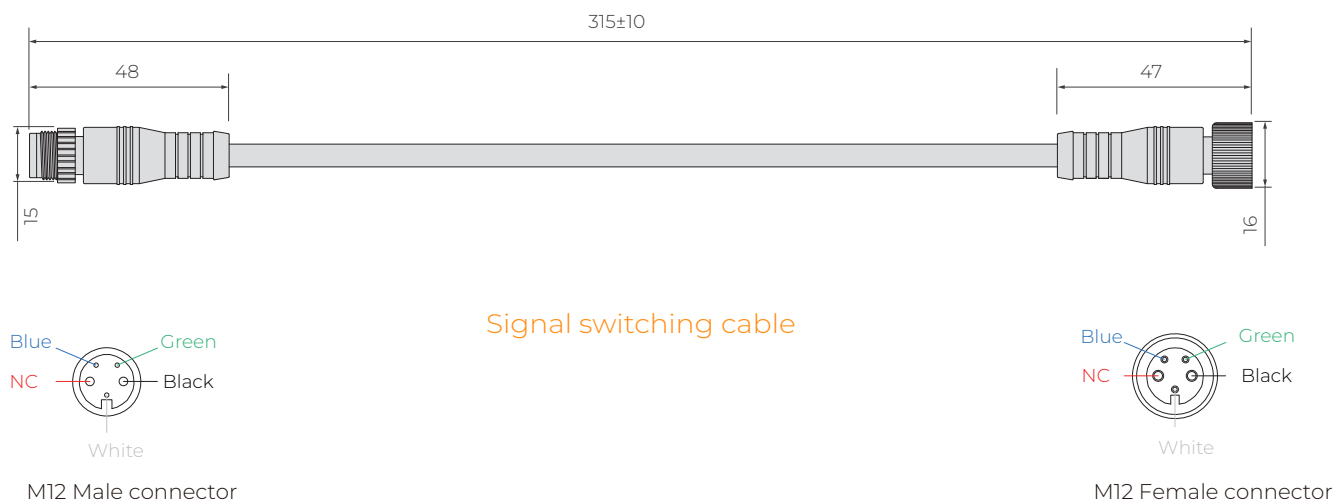


After the led strip is connected to the signal wire and power supply wire correctly, It is necessary to use a controller or corder to address the led strip ,then the controller can run the control effect program.

Accessories for DMX512 series (Unit: mm)

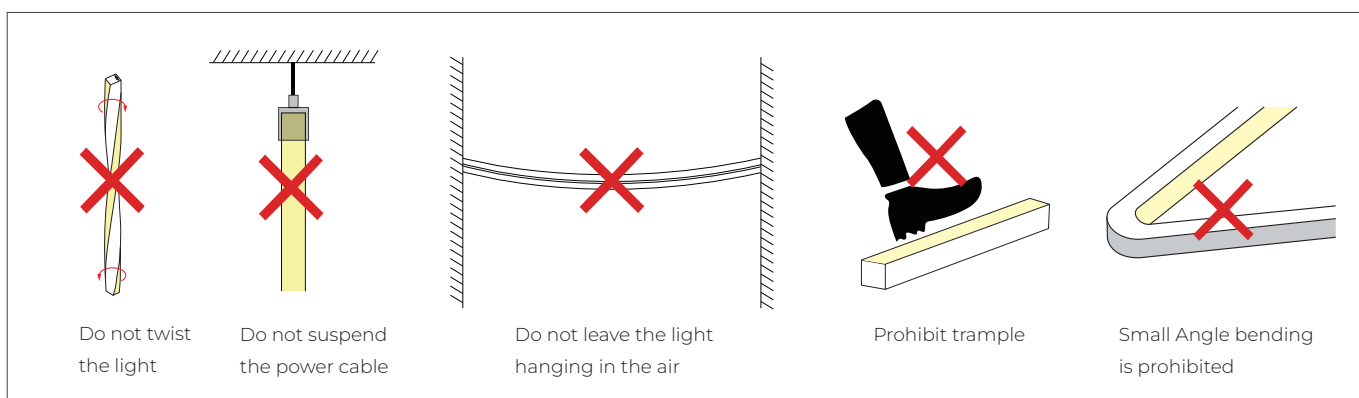
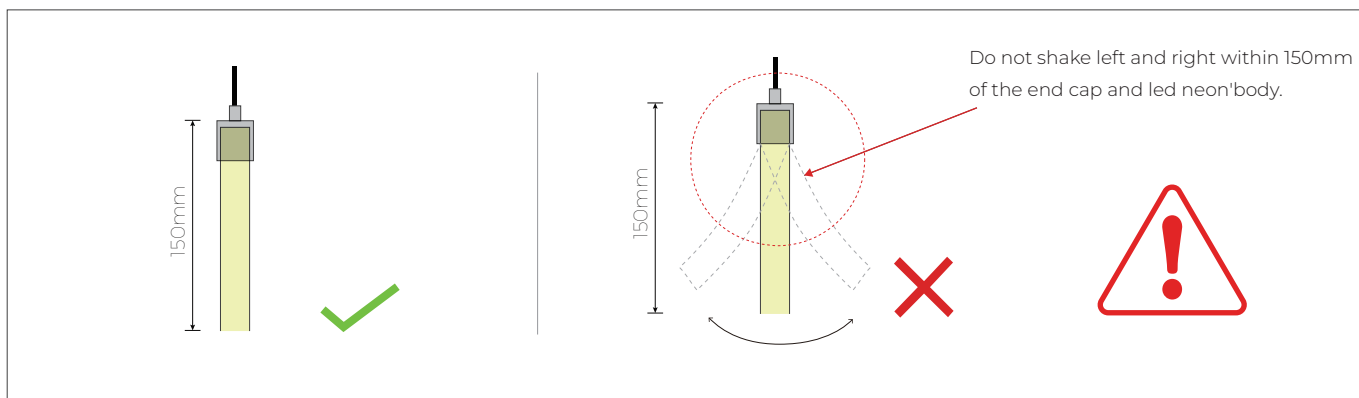


T-type 3 channel connector

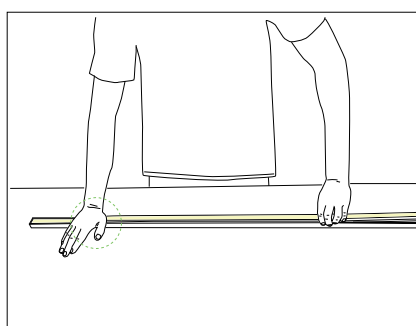


Signal switching cable

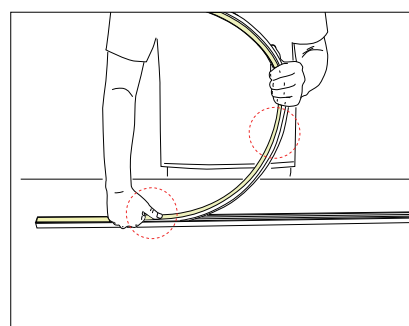
Installation Precautions



Put it in the profile

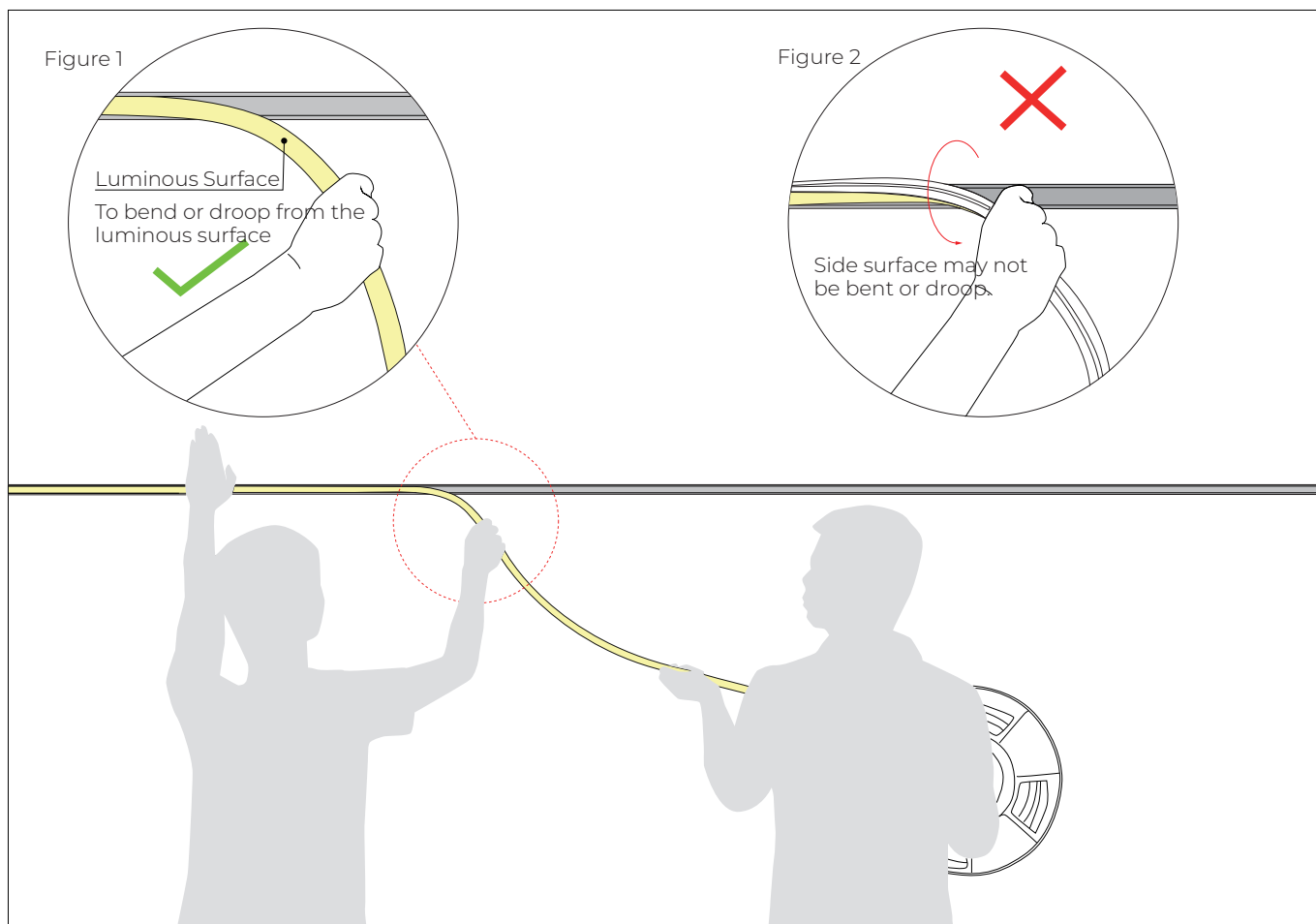


- Please press the LED strip with your palm to slowly insert the LED strip into the groove, and gently straighten the LED strip above the groove with your right hand.
- Try to keep the LED strip in a flat state during the installation process.



- 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.)



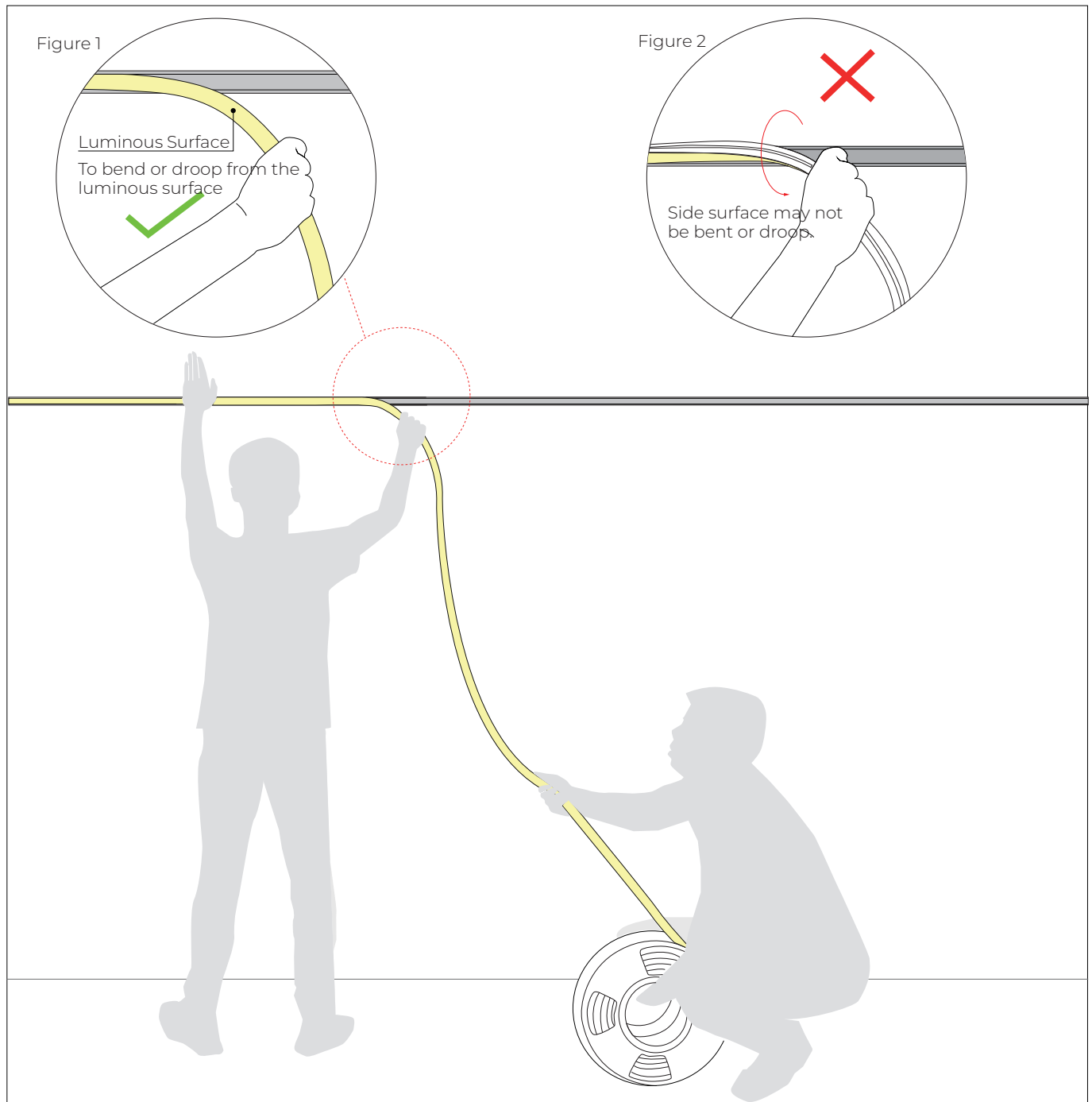
1. Installer:

- 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.

Installation Precautions -- Side Mounted (If the length of the light is more than 5 meters, two persons must work together to install it.)



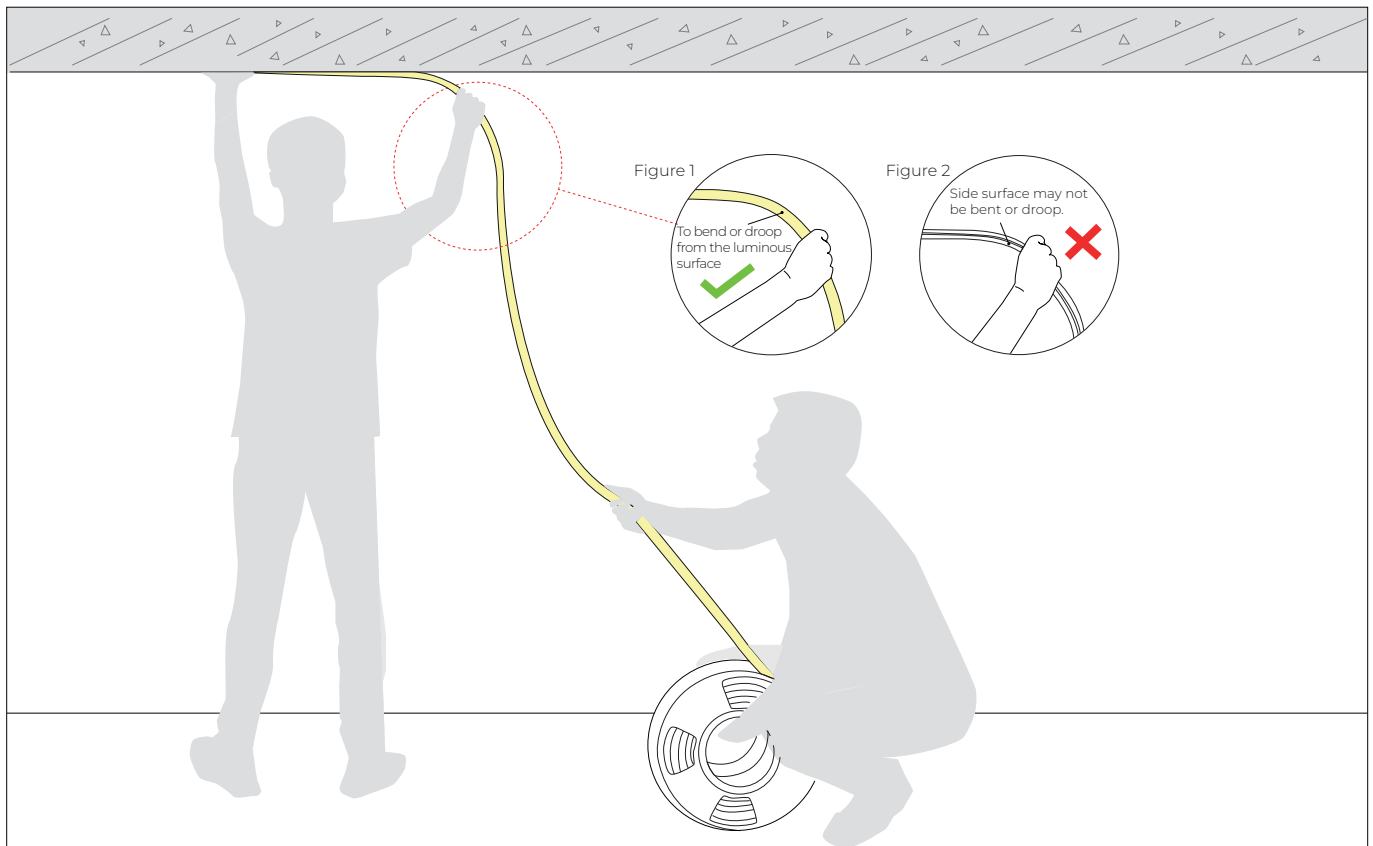
1.Installer:

- 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 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.

Installation Precautions -- Top 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, 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.

Notes

The selection of the cable specification at the output end of the power supply, it depends on the total current of the load and the length of the cable. It is recommended to select according to the following table:

Current of the light	Specifications of the cable								
	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.
- ※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.

BE A TRUSTED LED STRIP MANUFACTURER

Shenzhen GRILIGHT Technology Co.,Ltd

Tel: +8675527390189 Fax: +8675527397337
Web: www.grilite.com Contact: sale@grilight.com