

Neon Flex Specification



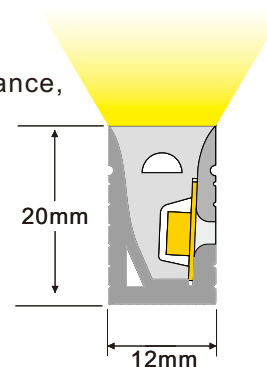
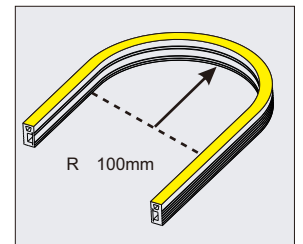
N012060CB3SF(N1220)-Single sided

N012060CC3SF(N1220)-Single sided



Product Parameter

- 12x20 single -sided side light -glowing neon light bar, can bend left and right;
- Light source: highlights LED chips;
- Control method: SPI signal, each LED is addressable individually controlled
- Craft material: high -light transmission and environmental -friendly silicone material, good flexibility of silicone material;
- Optical design: Unique optical light structure design, uniform light on the surface, no shadow, no light spots, very soft light;
- Exterior design: simple and fashionable, exquisite and unique brings better lighting performance to indoor/outside applications;
- Product certification: UL, CE, RoHS;
- Environmental characteristics: salt tolerance, corrosion resistance, flame retardant, UV resistance;
- Work / storage temperature: TA: -25 ~ 55 °C / 0 °C ~ 60 °C;
- Product application: signature lighting, outdoor/interior decoration, architectural contour application;
- 2 years of quality insurance, working life ≥36000 hours.



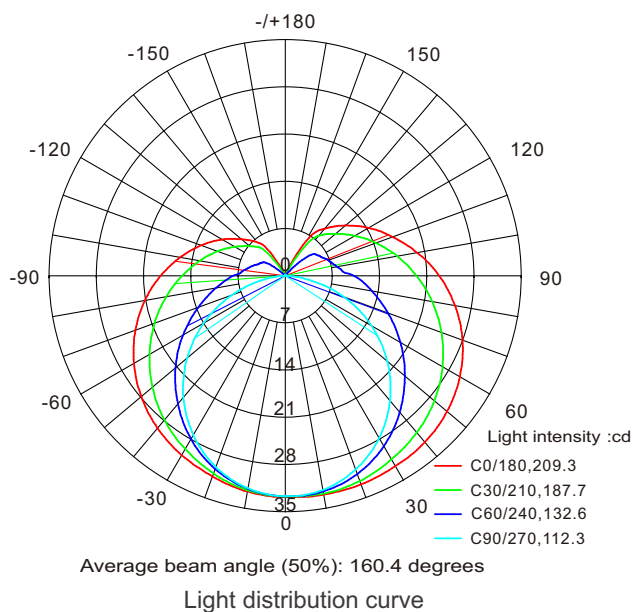
Photoelectric parameters

| PN | Color | Wavelength | LED Qty/M | Pixel/M | Cutting Length | Voltage | Power | Luminance (lm/m) | Standard Length | Max Length |
|-----------------------------------------|-------|-------------|--------------------|--------------------|----------------|---------|-------|------------------|-----------------|------------|
| N012060CB3SF (N1220) Single sided | RGB | R:620-630nm | SMD5050 60PCS/m | 20Pixels WS2811 | 50mm | DC12V | 12W/m | R:18lm | 5025 ±15mm | 15m |
| N012060CC3SF (N1220) Single sided | | G:520-530nm | | 10Pixels WS2811 | 100mm | DC24V | | G:42lm | | |
| | | B:460-470nm | | | | | | B:15lm | | |

Remarks:

1. The above parameters are tested based on 1M standard products;
2. The luminous flux is allowed to have an error range of ±10%;
3. The above parameters are typical values;
4. When this neon led is longer than 5 meters, it needs power from both ends;
5. Subject to change without prior notice.
- 6.Length tolerance applies. Actual product dimensions may vary.

Product light distribution curve



Luminous output: 78.83Lm

| | | |
|-----|------------------|-----------|
| 1m | 10.58, 32.85lx | 296.59cm |
| 2m | 2.646, 8.214lx | 593.18cm |
| 3m | 1.176, 3.651lx | 889.77cm |
| 4m | 0.6614, 2.053lx | 1186.36cm |
| 5m | 0.4233, 1.314lx | 1482.95cm |
| 6m | 0.2940, 0.9126lx | 1779.54cm |
| 7m | 0.2160, 0.6705lx | 2076.13cm |
| 8m | 0.1653, 0.5134lx | 2372.72cm |
| 9m | 0.1306, 0.4056lx | 2669.31cm |
| 10m | 0.1058, 0.3285lx | 2965.89cm |

Height Eavg, Emax Angle: 112.01° Diameter

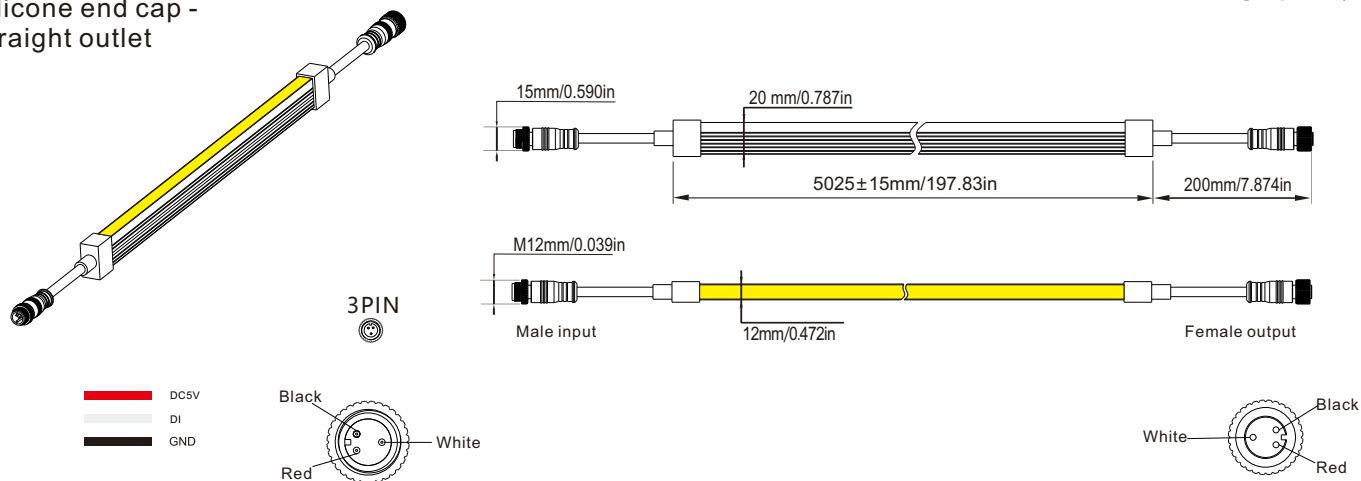
Note: the curve is the illumination area and the average illumination within the area of the lamp under different projection distance

Effective average illumination

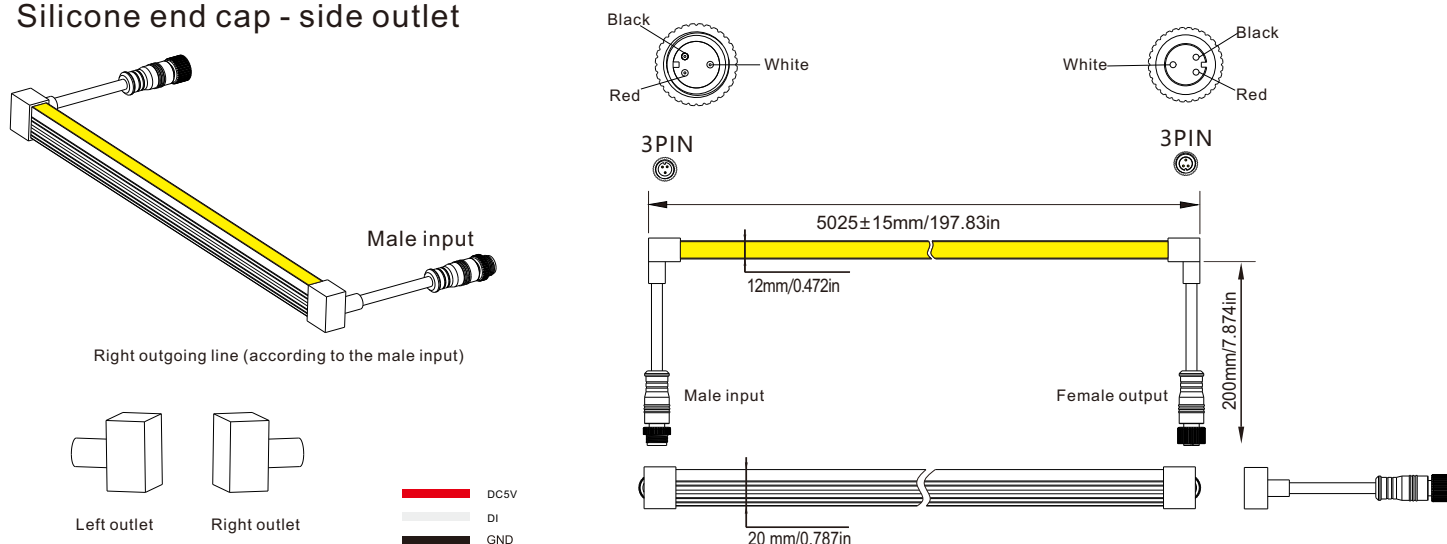
Mechanical parameters

Silicone end cap -
Straight outlet

Unit: mm/in



Silicone end cap - side outlet

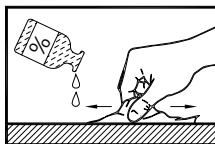


Note: Length tolerance applies. Actual product dimensions may vary.

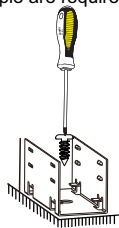


1220 Installation diagram

Wipe the dust on the installation luminous surface with clean water.

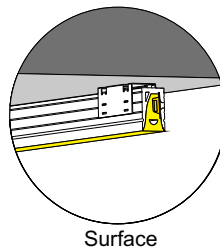
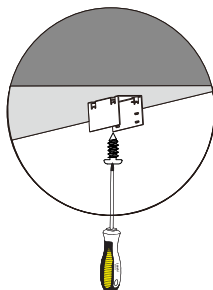


First fix the buckle with screws, and then clip the neon light strip into the buckle. When the length of the neon light strip is greater than 2 meters, two people are required to install it together. (refer to the figure below)

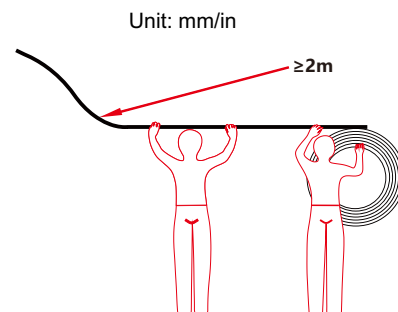


Overall dimension of buckle: L30*W11.4*H18.1mm

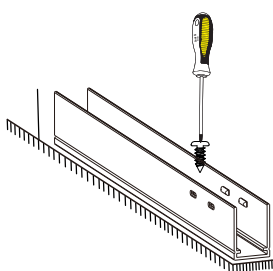
L1.181*W0.452*H0.712in



Surface

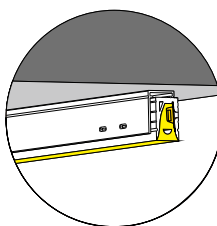
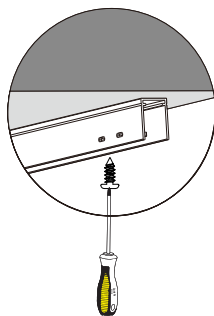


When the length of neon light strip is more than 2 meters, two people are required to install it together.

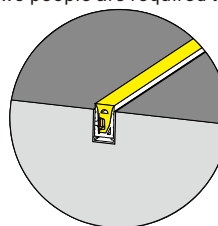


Overall dimension of aluminum profile: L1000*W11.4*H18.1mm

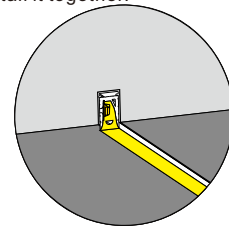
L39.37*W0.452*H0.712in



Surface

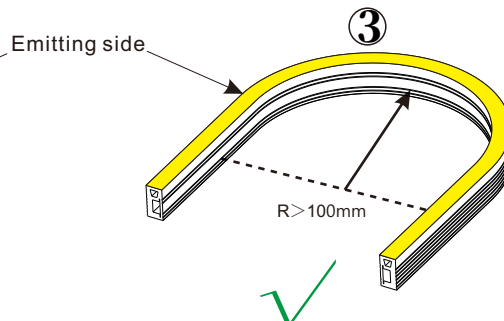
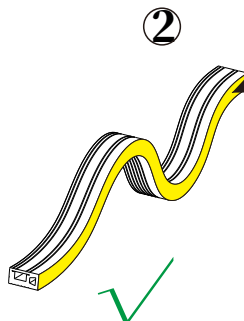
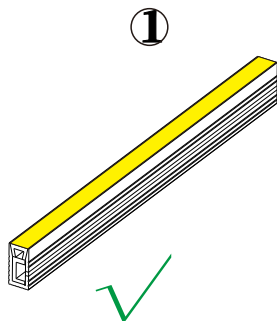


Mounted embedded

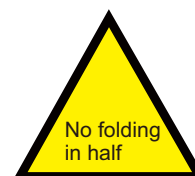
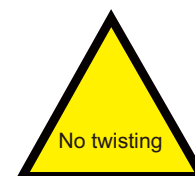
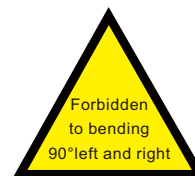
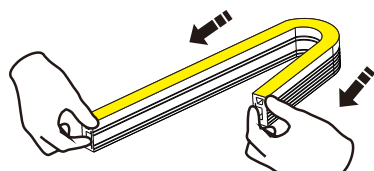
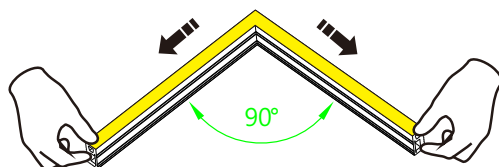


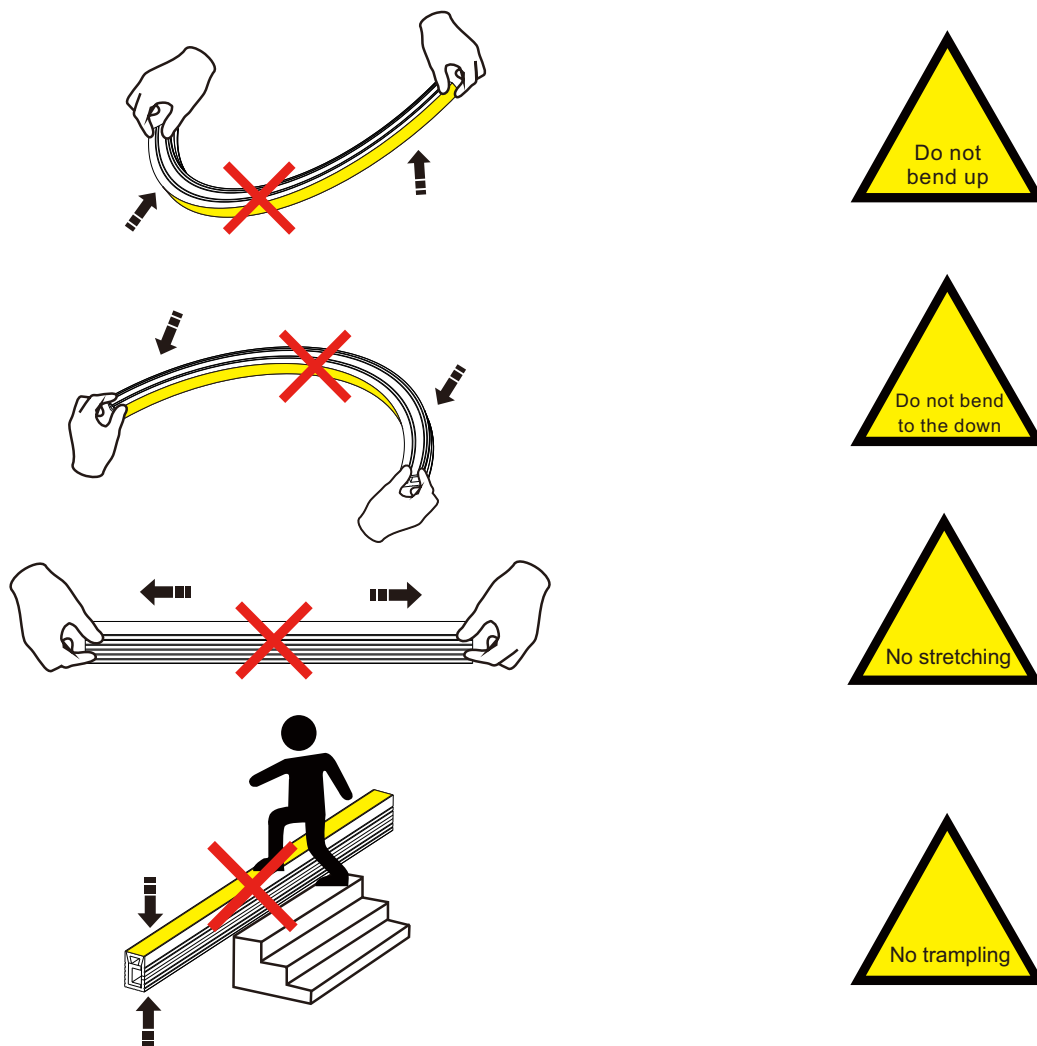
Mounted embedded

Correct installation method



Error installation method



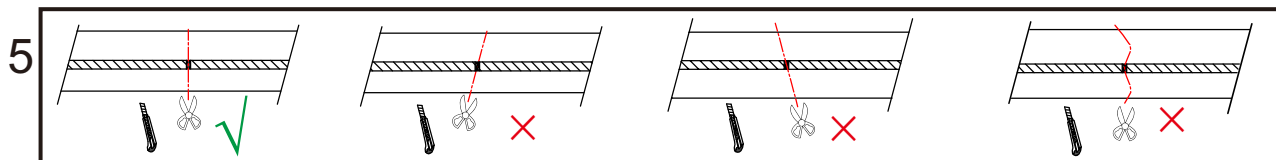
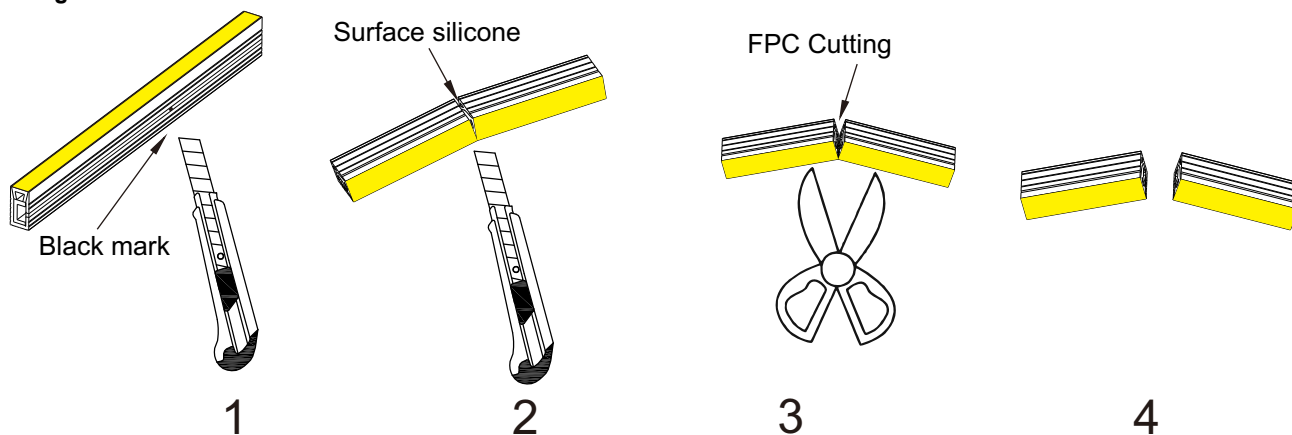


Cutting and the waterproof treatment of both ends

By default, our products will be shipped in regular lengths according to customer requirements.

If the customer has to cut and assemble on site, we can provide some end caps with holes and end caps without holes (all sections can be used). However, please note that in this case, the front and rear ends must be glued for waterproof treatment.

Cutting method



Cutting precautions

Waterproof treatment after cutting

1. The cut output end is glued and plugged with a non hole end cap (Fig. 1);
2. If there is no welding cable at the head and tail ends after cutting, first thread the male wire through the end cap, then weld it to the head end of the LED neon flex, and then apply glue for waterproof treatment (Fig. 2);
3. If there is no cable at the input end of cutting, and the male input cable must be welded (Fig. 3).

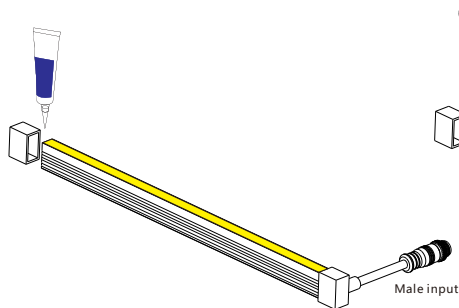
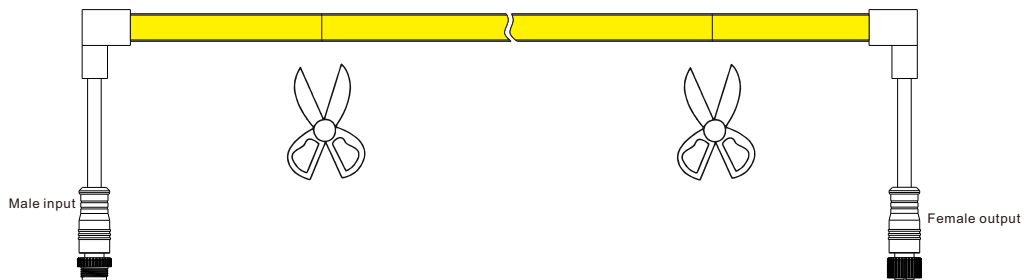


Figure 1

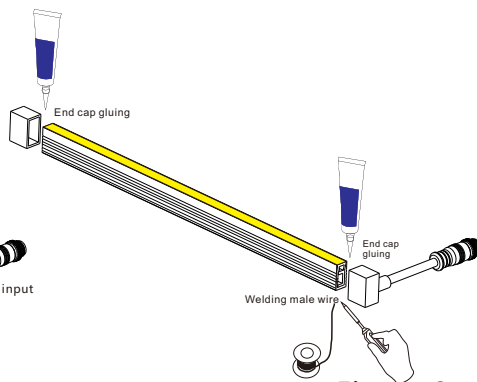


Figure 2

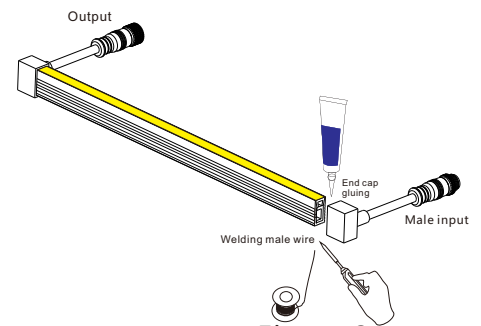
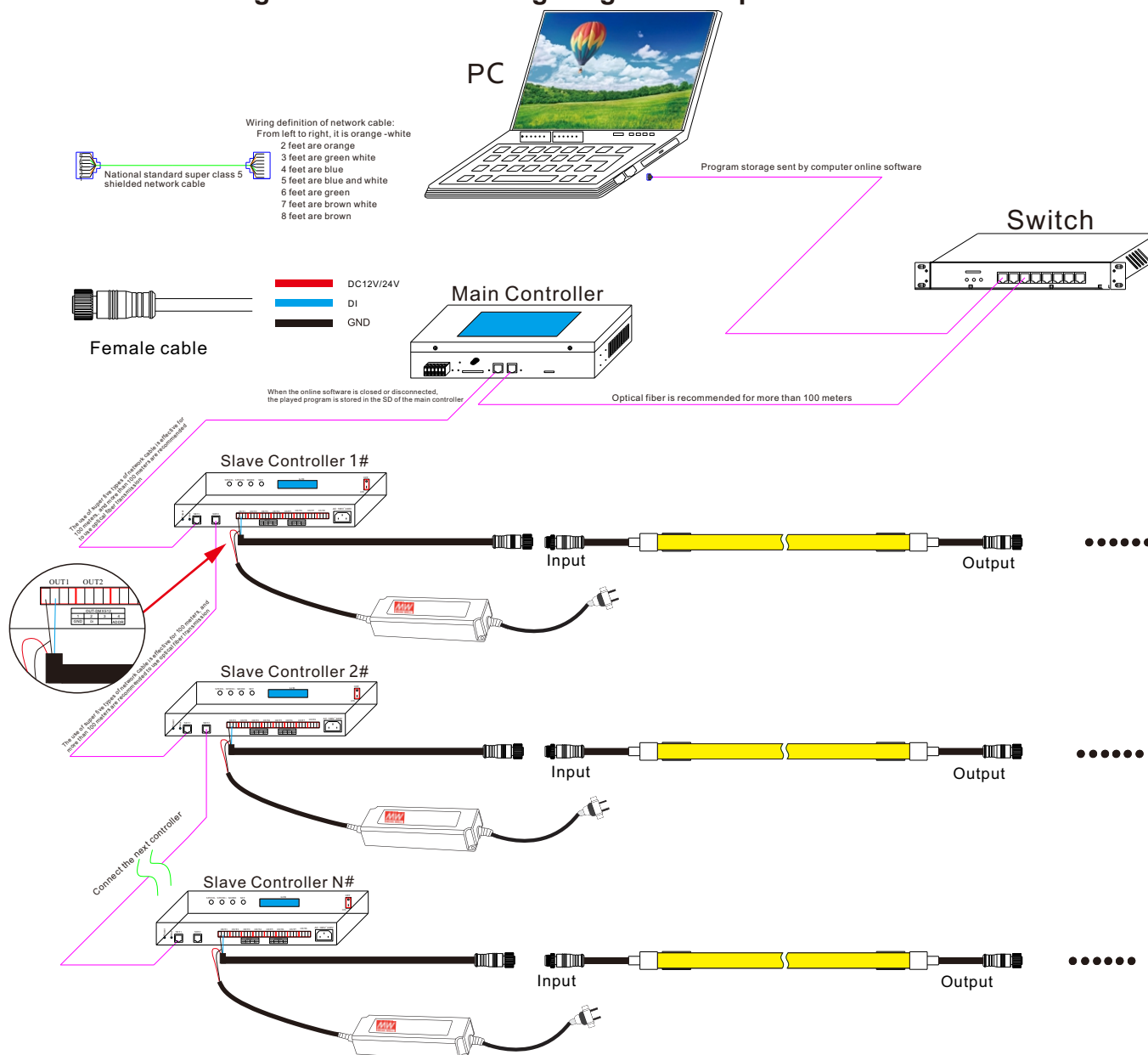


Figure 3

Matters needing attention

- Please use the 5VDC isolation power supply to drive the LED light bar, and the ripple of the constant voltage source is less than 5%. The LED light bar cannot be used to drive the type of power supply and other types of power supply.
- In actual applications, the power supply should be kept by 20% (it is recommended to use only 80% of the power) to ensure a sufficient voltage -driven product.
- Please be careful. When the power is connected, do not touch the AC power supply end to prevent electric shock.
- Pay attention to the positive and negative pole of the power cord. Do not connect the mistake. Whether the power supply and the voltage of the product are consistent, so as not to cause product damage.
- During the installation process, please avoid scraping, twisting and irregular bending of the product, otherwise it may cause damage to the product that cannot be repaired.
- In order to ensure the life and reliability of the light band, please do not bend at the radian of less than 80mm in the radius. The too small bending radius will damage the product itself.
- As the actual application length exceeds the prescribed length, it will lead to the phenomenon such as over loading and incomparable brightness.
- In order to prevent the eyes from being harmed, try to avoid glowing the lights that are lit up for a long time. Non - professional personnel are prohibited from installing, disassembling and maintenance of products.
- It is strictly forbidden to use any acidic, alkaline adhesive fixed product (including not limited to glass glue, etc.).
- Different IP -level use scenarios with different products, IP67 is not suitable for water -soaking environment.
- Different sizes of products Due to the differences in structure at the same color temperature, the product is slightly deviated in the end, and it must be confirmed before use.
- Please use professional tailoring tools when cutting.

Main control - integrated control wiring diagram computer



Product control system solution

| Product picture | Name | PN | Product specifications | Applicable products |
|-----------------|--------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| | Main controller | XS-809-A | Power supply: ac110-240v Power: 10 W Data interface: network interface Memory card type: SDHC card Operating temperature: -10 - 60 Size: 260mm * 160mm * 52mm(L*W*H) Weight: 2.0kg | SPI Neon flex DMX512Neon flex |
| | Slave controller | T-790 | Power supply: ac110-240v Power: 5 W Output type: 4Pin connector Operating temperature: -20 - 85 Size: 310mm * 152mm * 42mm(L*W*H) Weight: 2.0kg | SPI Neon flex DMX512Neon flex |
| | Offline controller | K-1000C | power supply: DC 5V or DC 12-24V input Power consumption: 2 W Output type: 3pin terminal block Operating temperature: -30 - 85 Size: 159mm * 89mm * 24mm(L*W*H) Weight: 0.35kg | SPI Neon flex DMX512Neon flex |

Product Accessories

| Name | Describe | Picture | Net weight (g) | Product size (mm) | Remarks |
|-------------------------|----------------------------------|-------------------------------------------------------------------------------------|----------------|-------------------|-----------------|
| Alum LED Profile | Pre installation slot |  | 105g | L1000xW11.4xH18.1 | Aluminum |
| Alum LED Profile | Pre installation slot |  | 3.23g | L30xW11.4xH18.1 | Aluminum |
| Modeling carrier | Shapable mounting slot |  | 375g | L5000xW11xH15 | Stainless steel |
| Straight outlet end cap | Silicone front outlet end cap |  | 2.5g | L14xW13xH25 | Silicone |
| Side outlet end cap | Silicone side outlet end cap |  | 2.7g | L17xW14.5xH25 | Silicone |
| Seal the end cap | Silicone sealing end cap |  | 2.17g | L14xW14xH25 | Silicone |
| Filling glue | 300h mono molecular silica gel |  | 125g | L32xW46xH17 | Liquid glue |
| Female Connector | 3PIN connector |  | 23g | φ 15xL200 | PVC |
| Male Connector | 3PIN Connector |  | 18g | φ 15xL200 | PVC |
| Connector | 3PIN IP65 Connector |  | / | / | PVC |
| Power supply | 240W waterproof power supply |  | 1.38Kg | L244.2xW68xH38.8 | / |
| Power supply | 350W Non-waterproof power supply |  | 0.82Kg | L215xW115xH30 | / |
| Power supply | 400W rainproof power supply |  | 1.23Kg | L220.4xW130xH48 | / |

Product packaging

· Standard packaging

1.For carton packaging, the line label is pasted 80mm away from the end of the line, the information label is pasted on the product, and the product information label and box number label are pasted on the side of the carton,QC inspection stamp.



Voltage & input line identification



Product information label



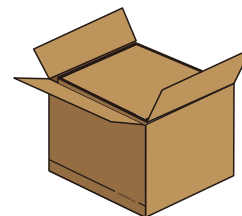
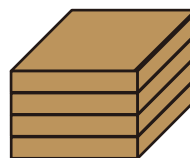
2.For single carton packaging, the line label is pasted 80mm away from the end of the line, the information label is pasted on the product, and the product information label and box number label are pasted on the side of the carton,QC inspection stamp.



Voltage & input line identification



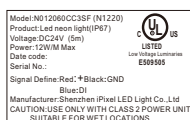
Product information label



3. For wooden case packaging, the line label is pasted 80mm away from the line end, the information label is pasted on the product, and the product information label and box number label are pasted on the side of the carton,QC inspection stamp.



Voltage & input line identification



Product information label



| Name | Size | Quantity / box | Quantity / box | Net weight of single product (kg) | Net weight of each box (kg) | Gross weight (kg) | Outer box size (mm) |
|-------------|---------------------|----------------|----------------|-----------------------------------|-----------------------------|-------------------|---------------------|
| Carton | L5000*12*20mm | 5m*2 | 10m | 1.18 | 2.36 | 2.64 | 360*360*60 |
| Carton | L5000*12*20mm | 5m*8 | 40m | 1.18 | 5.9 | 10.56 | 380*380*265 |
| Wooden case | Customized to order | | | 1.18 | | | |



Reliability testing

| Test item | Test requirement | Test standard | Test method or condition |
|--------------------------------|-----------------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------|
| Safety regulation test | Mechanical strength | GB-7000.1 | Impact hammer 0.7 J |
| | Dust and water proof test | GB-7000.1 | IP67 |
| | Winding test | GB-7000.1 | φ150mm wooden disc, 60N tension, 10 times at room temperature, 10 times after cold treatment (-15°C±2°C, 16h) |
| | Low temperature winding test | GB-7000.1 | Winding the winding shaft, low temperature box -c, after 16h, 15 °C± 2 °C winding the winding shaft for 2 turns |
| | Low temperature impact test | GB-7000.1 | Winding the winding shaft, low temperature box -15°C±5°C, after 16h, winding the winding shaft for 2 turns |
| | Insulation resistance | GB-7000.1 | ≤ 2MΩ |
| | Electrical strength | GB-7000.1 | 500V |
| Mechanical reliability test | Left and right bending test | Internal standards | With an interval of 200mm (including welding points), the left and right bends are respectively 100 times |
| | Distortion test | Internal standards | Twist clockwise for 5 turns and then relax. Repeat for 100 times |
| | Falling test | Internal standards | 100 times of wrestling |
| Environmental reliability test | High temperature storage | GB/T 2423.2 | 60°C, 168 hours |
| | Low temperature storage | GB/T 2423.1 | -30°C, 168 hours |
| | High temperature and humidity operation | GB/T 2423.3 | 60°C, 85%RH |
| | Salt spray Test | GB/T 2423.17 | 5% salt solution concentration, 24h |
| | IK Test | GB/T 20138 | Each exposed surface bears 5 impacts |
| | Normal temperature aging | Internal standards | 25°C, 6000 hours |
| | Switching impulse | Internal standards | 10s on, 10s off, 10000 times |