



## DC 24V











## **Cut and connect Neon**

# **Description**

Ultra-Slim Flexible Neon – Easy Cut & Connect

Our latest flexible neon is designed for effortless customization. With a profile as slim as 4mm(W) x 8mm(H), it offers sleek, discreet installation without compromising on brightness. The free-cut design allows you to trim to your desired length and reconnect seamlessly with our easy-to-use connectors, making it perfect for tailored lighting applications in architectural, residential, or creative projects.



Model: NEO1024S0408651WxKSW/5

Optical:

CCT: 2700/3000K/4000K/6000K

CRI: ≥90



**Electrical:** 

Rated Power: 10W/m (@white/24V)

Lumen: 300LM/m @ Ra90 @ 4000K @24V

Input voltage: 24

strip length: 5.56mm (@24 V white)@ free cut

Beam Angle: 110°

Life:

Lifespan: Indoor 60,000 Hours / Outdoor 36000

Warranty: 3 Years



General:

Available IP: IP66

Operating temperature: 10W/m -40 ~ 55°C Certification: cUL,CE. RoHs





## **Cut and connect Neon**









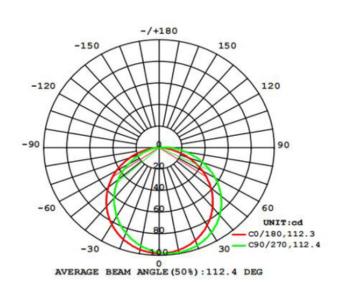


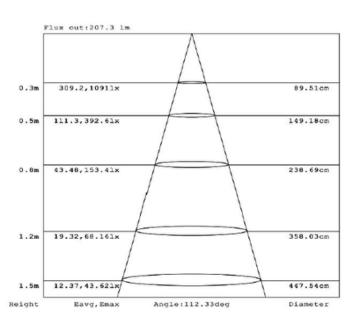


# **Light effciency & Lumen Output**

Item No.	Color Temperature	Ra	Beam Angle	Power	Luminous flux(lm/m)	Luminous efficacy(lm/m)
NEO1024S0408651WxKSW/5	2700K	90	110°	10W/M	280LM	28LM/W
NEO1024S0408651WxKSW/5	3000K	90	110°	10W/M	290LM	29LM/W
NEO1024S0408651WxKSW/5	4000K	90	110°	10W/M	300LM	30LM/W
NEO1024S0408651WxKSW/5	5000K	90	110°	10W/M	290LM	29LM/W

### **Illuminance Distribution**



















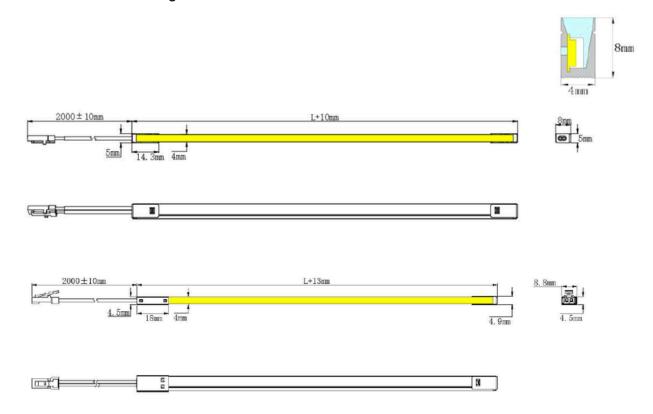
Ra

90



# **Cut and connect Neon**

### **Dimensions & Available lengths**



## **Voltage Drop Estimate**

Type White(@24V)
IP Rate IP66
Item Code Single-end
max.length (m) 10.42%@3M
21.24%@5M



#### Note:

- 1. Above conclusion is based on voltage drop testing result of the light with 2000mm cable only
- 2.The maximum running length is based on the light in static full loading status.
- 3. Above running length is only the light length excluding lengths of connectors.
- 4. The delivery length might be subject to the maximum packing length.















# 110°

## **Cut and connect Neon**

#### NFS0408 Wiring Diagram

Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy; 1. This wring diagram is using the mains of AC220-240V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity; 2. Dimming frequency ranges from 100Hz to 2000Hz, and 500Hz is recommended.

#### Light Length:

The length of the longest single light in parallel connection or sum of lights in series connection.

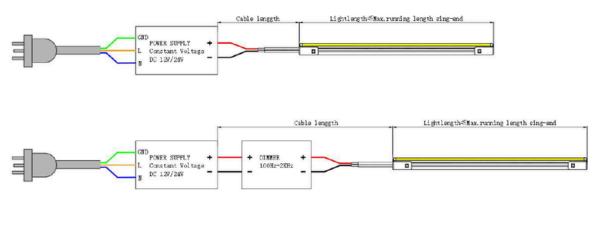
#### Cable Length:

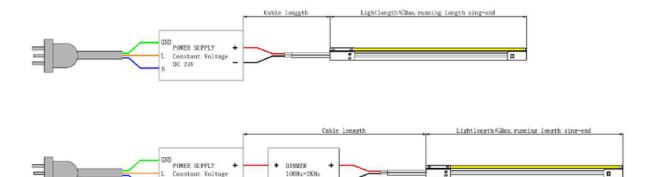
The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

#### **How to Minimize Voltage Drop:**

- 1.Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.
- 2.Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".

# Single-end Feed





















### **Cut and connect Neon**

#### **Double-end Feed**

The following wiring diagram with double-end feed to run length that is longer than max. running length for single-end feed but less than twice the value.

#### **WARNING**

Please ensure the polarity connection is correct on both ends, and short circuit might occur if powering the light from both ends with reverse polarity. It is not recommended to feed both ends of light with two separated power supplies, which would lead to overloading and overheating problem if either power supply is failed.

#### **Light Length:**

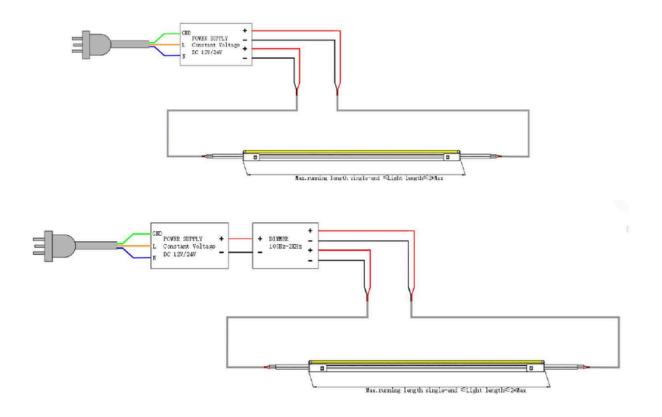
The length of the longest single light in parallel connection or sum of lights in series connection.

#### Cable Length:

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

#### **How to Minimize Voltage Drop:**

- 1.It is optimal to position the power supply in the middle of a single light or multiple lines in daisy chain to keep the equivalent cable length on both ends for double-end feed.
- 2. Please ensure the cable length is not more than the table "Max. Cable Length" according to the half of light length and its wire gauge.
- 3.Please ensure the light length is less than the table "Max. Running Length Double-end Feed".















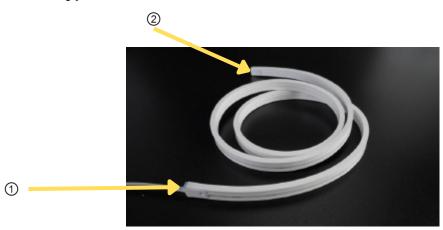






# **Cut and connect Neon**

# **Connector Type**



1 Outlet waterproof End Cap





Metal clip





Silicon end cap/ End outlet

Wire

No outlet waterproof End Cap





Metal clip



Silicon end cap /without hole

3 Non-welding end cover







Metal clip

No welding terminal line















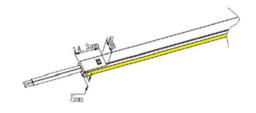


# **Cut and connect Neon**

## **Dimension: mm**

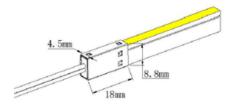
Outlet waterproof End Cap





3 Non-welding end cover

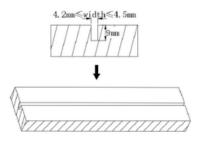




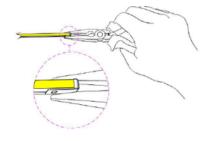
## **Installation Instructions**

Friendly Reminder: please read instructions carefully before operation.

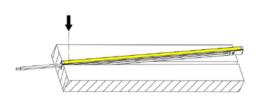
#### Installation methods 1:



1. Slotting as shown.



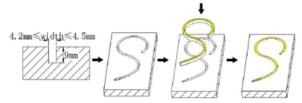
2.Use pliers to lightly clamp the metal clips at both ends of the LED strip to make it slightly change in shape.



3. Press one end of the neon strip into the slot .



4. Press the other end of the neon strip into the slot.



S-shaped slot as shown in the figure (4.2mm≤width≤4.5mm).











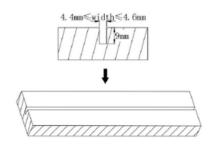




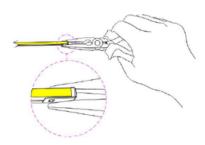
# 110°

# **Cut and connect Neon**

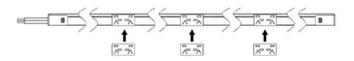
#### Installation methods 2:



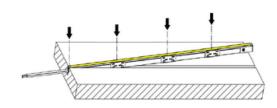
1. Slotting as shown.



3.Use pliers to lightly clamp the metal clips at both ends of the LED strip to make it slightly change in shape.



2.Mount the neon strip into the clips, we suggest 4pcs mounting clips per meter and ensure that the distance between the installation clips is 250mm

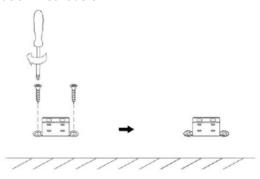


4. Press the neon strips into the slot from one end in order.

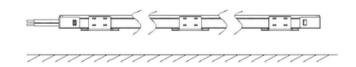


5. Press the other end of the neon strip into the slot.

#### Installation methods 3:



1. Fix the clip with screws as shown in the figure.



2.Mount the neon strip into the clips, we suggest 5pcs mounting clips per meter and ensure that the distance between the installation clips is 200mm











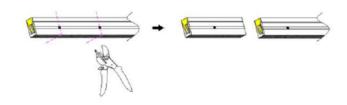


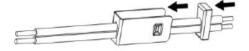


# 110°

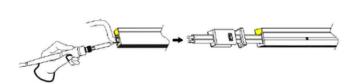
# **Cut and connect Neon**

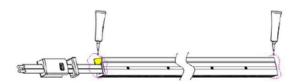
### Cutting, welding and assembling instructions:



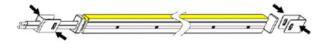


 Cut the LED strips at the cutting mark line according to the required length. 2.Put the silicone end cap and metal clip through the wire.





Connect the wires to the LED strips according to the positive and negative poles correctly.  Apply an appropriate amount of glue to the ends of both ends of the LED strip.





5.Please pinch the metal clip slightly with your hand following the arrows and make it slightly deformation.

6.Assemble the silicone end caps and metal clips according to the direction of the arrow in the illustration, and then wipe off the overflowing glue with a white cloth.



Let it quiescence in 2 hours until the surface of the end cap is dry before installation.









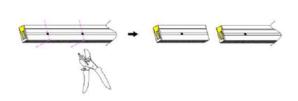




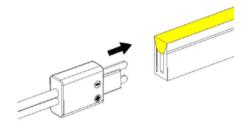


## **Cut and connect Neon**

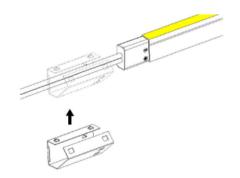
## Cutting, welding and assembling instructions ( No welding required )



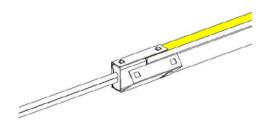
1.Cut the LED strips at the cutting mark line according to the required length.



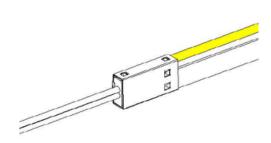
2. Insert the welding plug into the lamp strip. Note: the negative electrode is toward the light surface.



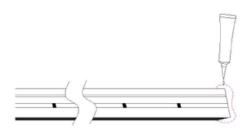
3. Clip the shrapnel into the wire



4. Slide the shrapnel into the light strip



5. Clamp the light belt



6. Apply the end of the LED light strip with appropriate glue









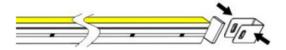






# **Cut and connect Neon**

Cutting, welding and assembling instructions ( No welding required )





- 7.Please pinch the metal clip slightly with your hand following the arrows and make it slightly deformation.
- 8.Assemble the silicone end caps and metal clips according to the direction of the arrow in the illustration, and then wipe off the overflowing glue with a white cloth.



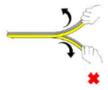
9. Let it quiescence in 2 hours until the surface of the end cap is dry before installation.

## Attentions:









No stretching

No Twisting

No trampling

Do not repeatedly bend the LED Strip