

## Features

- Pixelation-free with exactly the deep rich neon color
- Constant current IC technology for enhanced reliability
- Consistent brightness without any decay
- Cutable every 50mm[1.97in] for excellent flexibility
- UL, RoHs and CE listed
- Wide voltage input with over temperature and over voltage protection
- IP67 protection with high performance silicone
- Dimmable with external controller

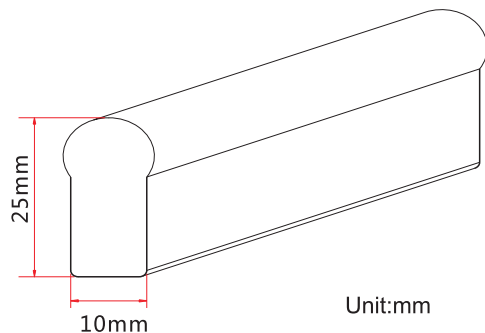
## Application

- Decorative & landscape lighting
- Accent lighting
- Signage
- Architectural and interior outlines

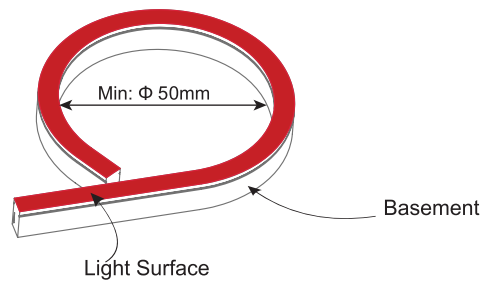
## Installation

- Bracket, or Aluminum channel

### Side Cut Structure



### Bending



### Optical & Electrical Parameters








Model No.	Light Color	CCT/Wavelength	Beam Angle	Luminous Flux (lm/m)	Ra	Voltage (DC V)	Power (W/m)
LED Neon <sup>10</sup> 1225 RT	White	7465K	180°	546	--	24	9.6
	Red	619.3nm		231	--		
	Yellow	584.4nm		686	--		
	Green	517.8nm		438	--		
	Blue	461.9nm		91	--		

### Other Parameters

Model No.	LED Quantity (pcs/m)	Min Cuttable Length(mm)	Working Temperature	Storage Temperature
LED Neon <sup>10</sup> - 1225 RT	120	50	-20~+60	-20~+70

# LED Neon<sup>10</sup> - 1225 RT

## Color Available

		
2800-3200K	4000-4500K	6500-7000K
		
Yellow	Red	Blue
		
Green		

## Color Instruction



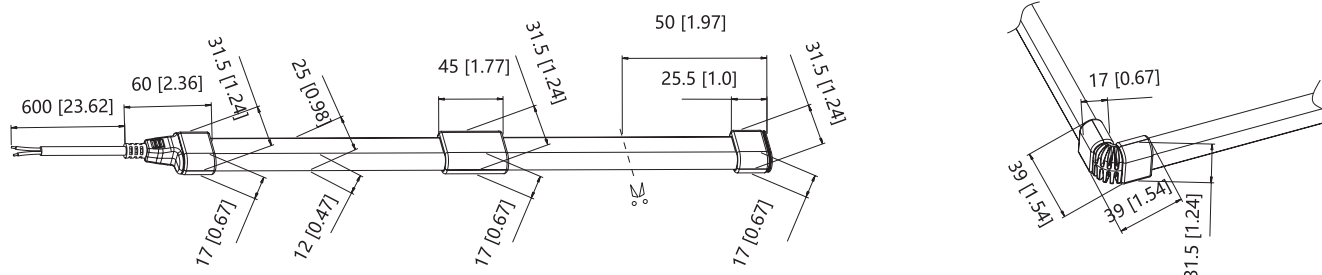
All in milky top surface

Basement according to lighting color (P.S: White in Dark Grey)  
Customize available

## Profile Drawings

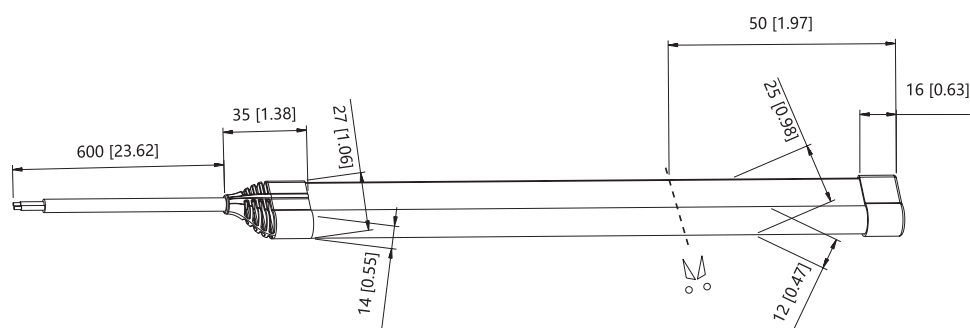
### Simple Version (Single Feed)

Unit:mm



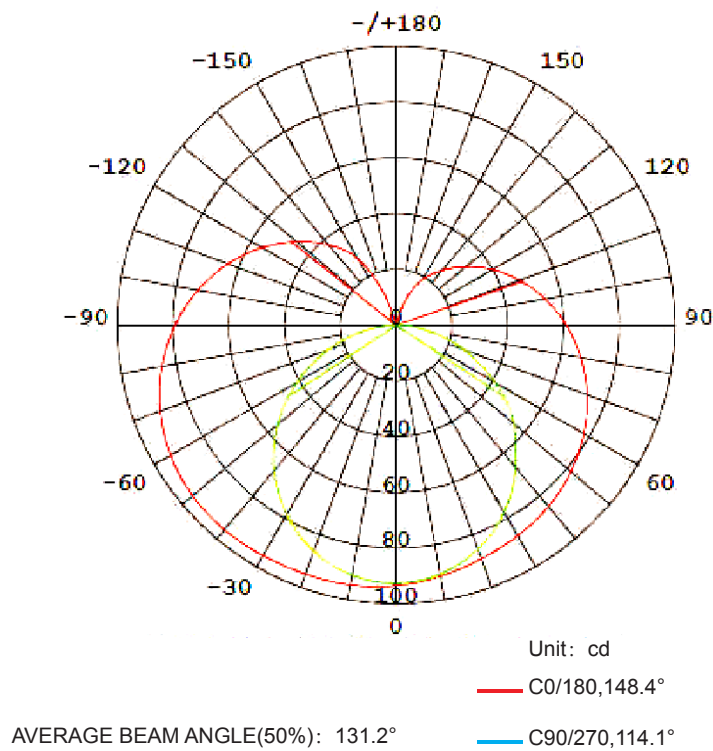
### Silicone End Version (Single Feed)

Unit:mm

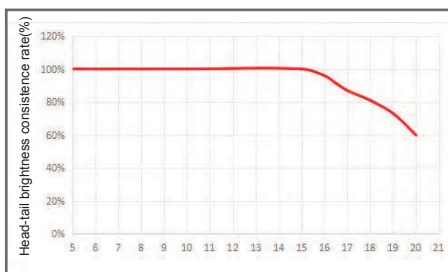


# LED Neon<sup>10</sup> - 1225 RT

## Luminous Intensity Distribution Diagram

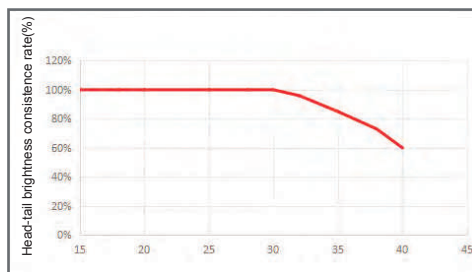


Series Connection Length vs. Top-End Luminance (Single Feed)



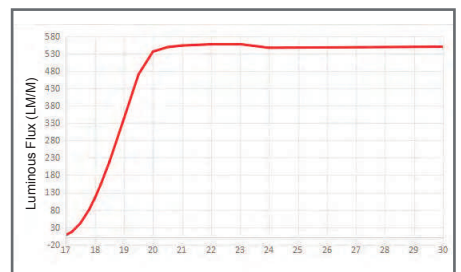
Series Connection Length (M) (Single Feed)

Series Connection Length vs. Top-End Luminance (Double Feed)



Series Connection Length (M) (Double Feed)

Luminous Flux vs. Voltage



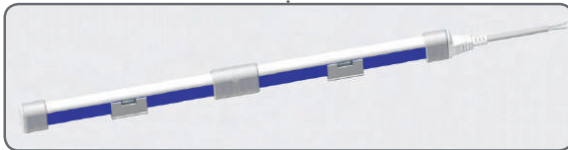
Voltage(V)

Note: The above tested data is based on one meter N2-4 neon light.

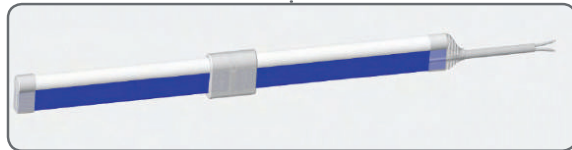
# LED Neon<sup>10</sup> - 1225 RT

## Product Versions

N2-4














Simple Version



Silicone End Version

## Accessories List

### Simple Version

Picture	Description	Qty(15m)	Qty(30m)	Optional /Free
	Description	2 Sets	4 Sets	Free
	Splice connector	1 Sets	2 Sets	Free
	O-ring	2 Sets	4 Sets	Free
	Gasket	2 Sets	4 Sets	Free
	L Connector	1 Sets	2 Sets	Free
	End caps	2 Sets	4 Sets	Free
	Bottom exit	2 Sets	4 Sets	Optional
	Right side exit	2 Sets	4 Sets	Optional
	Left side exit	2 Sets	4 Sets	Optional
	Aluminum track	30 Sets	60 Sets	Optional
	923L	1 Sets	2 Sets	Optional

#### Note:

The difference of each product version is in the fittings.  
It is recommended 2 sets mounting accessories per meter Aluminum track.

# LED Neon<sup>10</sup> - 1225 RT

## Silicone End Version

Picture	Description	Qty(15m)	Qty(30m)	Optional /Free
	Power supply connector	2 Sets	4 Sets	Free
	White sheathed wire	2 Sets	2 Sets	Free
	Splice connector	1 Sets	4 Sets	Free
	L Connector	1 Sets	4 Sets	Free
	Silicone End cap	2 Sets	2 Sets	Free
	Aluminum track	30 Sets	4 Sets	Optional
	923L	1 Sets	4 Sets	Optional

Note: It is recommended 2 sets mounting accessories per meter Aluminum track.

## Cable Instruction



Diagram illustrating the cable connection to the LED Neon track. The diagram shows a cross-section of the track with three cables: Left Cable, Right Cable, and Bottom Cable. An eye icon is shown pointing towards the Left Cable.



Diagram illustrating the Power Supply Connector connected to the Bottom Cable. The diagram shows the connector plugged into the cable, with labels for the Power Supply Connector and the Bottom Cable.

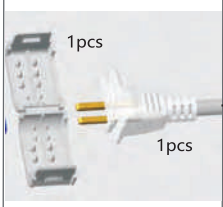




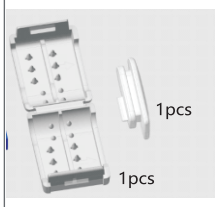


Diagram illustrating the Left Cable and Right Cable connected to the LED Neon track. The diagram shows the cables plugged into the track, with labels for the Left Cable and the Right Cable.

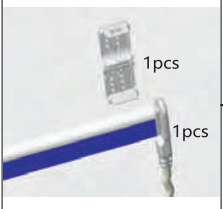


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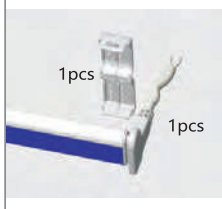


# LED Neon<sup>10</sup> - 1225 RT

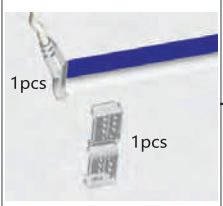


## Accessory Sets (Simple Version)

Input part of End Exit	Description
	 Power connector (end exit)
	 Foldable housing

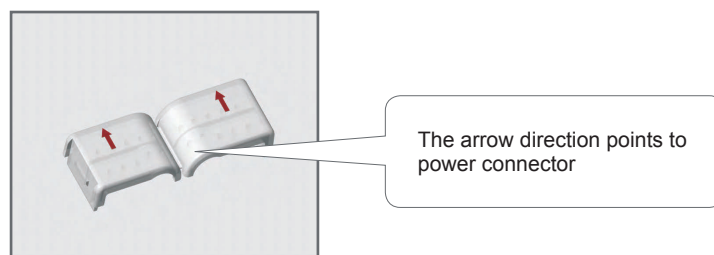
End cap part	Description
	 End cap
	 Foldable housing

Input part of bottom exit	Description
	 Bottom exit
	 Foldable housing

Input part of right side exit	Description
	 Right side exit
	 Foldable housing

Input part of left side exit	Description
	 Left side exit
	 Foldable housing

1Note: ① Arrow explanation on foldable housing



# LED Neon<sup>10</sup> - 1225 RT

## Power Supply Configuration Table

Product standard length (m)	Rated Current (A)	Rated Voltage (V)	Rated Wattage (W)	Power Supply (W)	Power Feed
1	0.4	24	9.6	≥12	Single end
5	2	24	48	≥60	Single end
10	4	24	96	≥120	Single end
15	6	24	144	≥180	Single end
20	8	24	192	≥240	Both ends
25	10	24	240	≥300	Both ends
30	12	24	288	≥360	Both ends

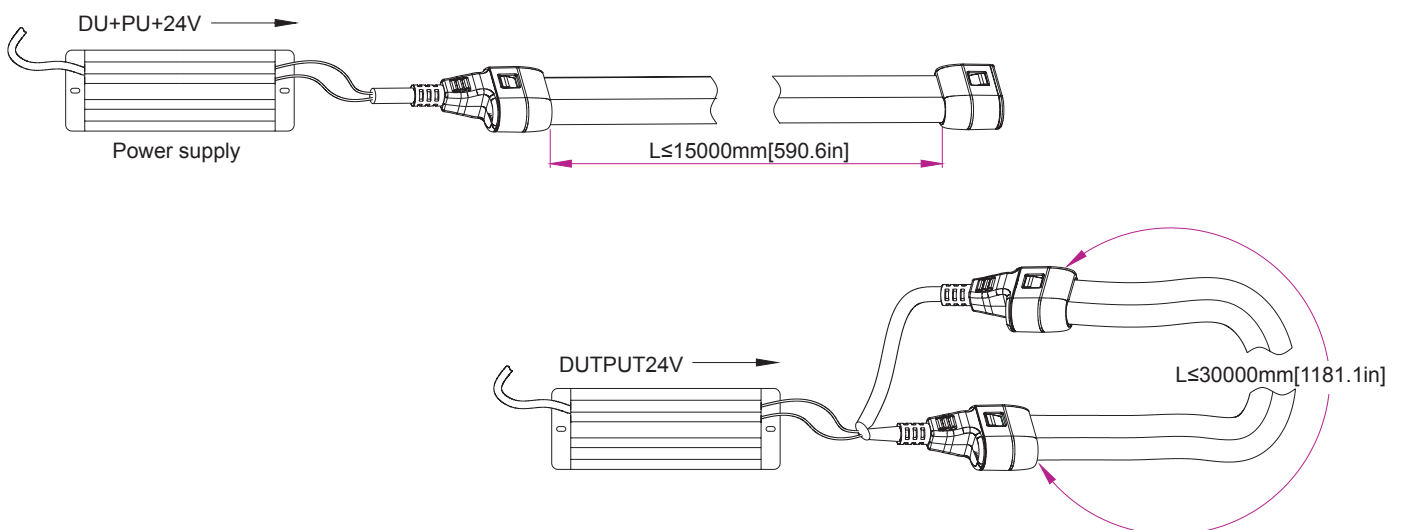
**Note:**

If the Length is shorter than 15m, recommend single feed supply.

If the length is longer than 15m shorter than 30m, recommend supplement both feed.

## Power Supply Connection

Unit:mm[in]



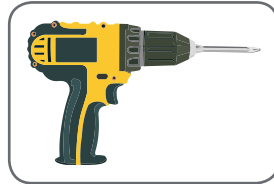


# LED Neon<sup>10</sup> - 1225 RT

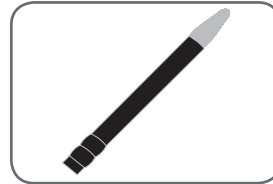
## Tools



Ratcheting Cutter



Electric Screwdriver



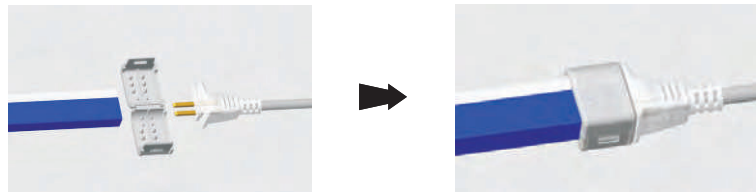
Brush



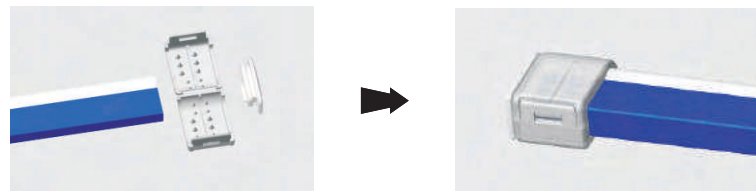
Portable Silicone Glue

## Simple Version

End exit

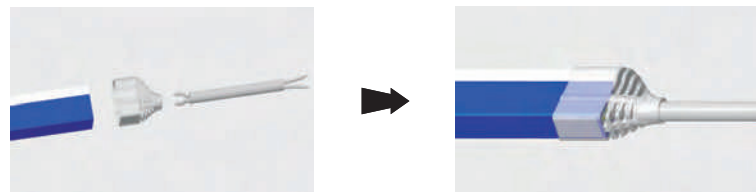


End cap



## Silicone End Version

End exit



End cap

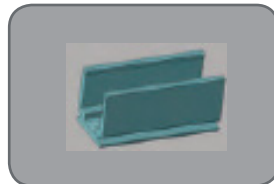


# LED Neon<sup>10</sup> - 1225 RT

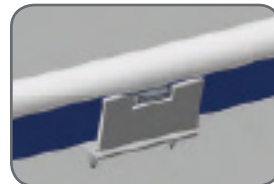
## Self-locking Aluminum Mounting Kit



Aluminum track with grip plate



Aluminum track only



Push the light into the Aluminum track

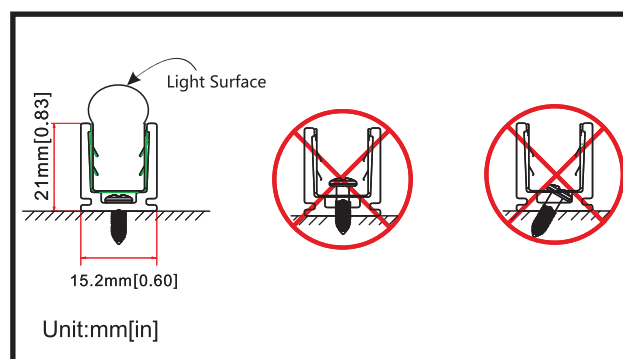


Power the light to ensure that it is working properly

It is recommended to use Aluminum Track with Grip Plate to install the neon light.

## Installation Face and Aluminum Track

Installation face		Free	Optional
	Top		
	Side		--
	Bottom		--

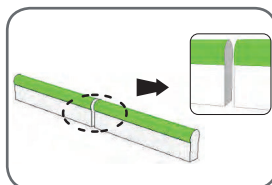


# LED Neon<sup>10</sup> - 1225 RT

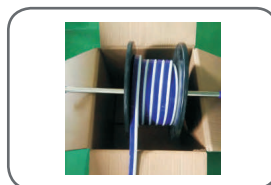
## Warning



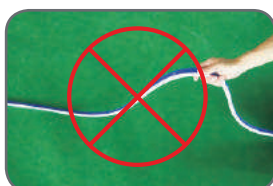
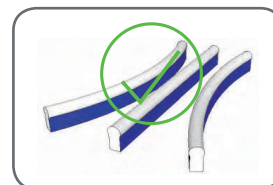
Cuttable place



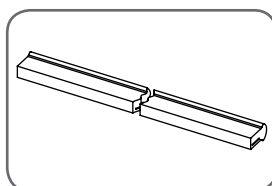
cutting position has to be straight



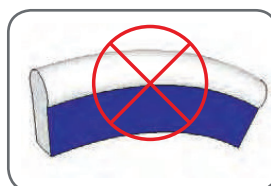
Slide a spindle into the roll and then place the roll with spindle on top of the box provided.



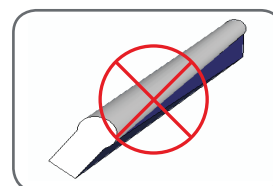
Gently unroll the fixture without excessive force.



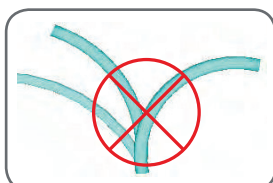
No cutting Distort



No embossing operation



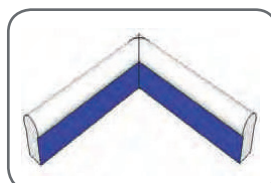
Do not twist



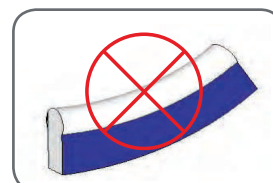
Do not repeatedly bending  
This will damage the circuit



Do not wring



Do not Bend 90°



No embossing operation

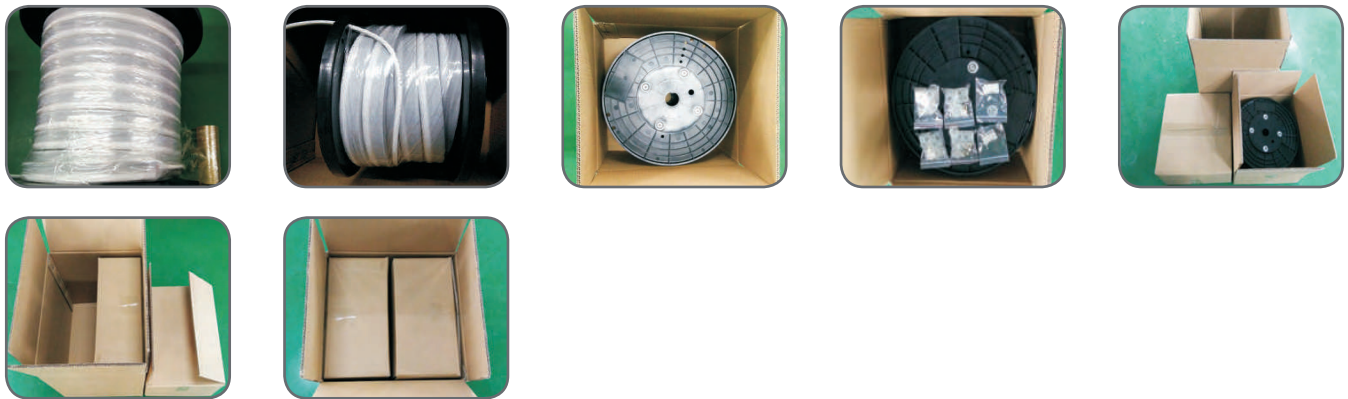
## Important

- Before installation, to make sure:
  - The operator is qualified electrician.
  - The light is disconnected from the power supply and the product remains unpowered.
- Do not do live-line working during installation.
- Do not use any organic chemical solvents.
- Do not disassemble or retrofit the light. Do not touch the surface of the light with a sharp object.
- Treatment the ends and the circuit connection points with insulation, waterproof and anti-corrosion in the installation.
- To avoid air bubbles when applying glue;
- Make sure the input voltage meets the requirements and lines are connected correctly before lighting on.
- Only the professional for installation and maintenance.

# LED Neon<sup>10</sup> - 1225 RT

## Packaging Information

### Method 1



Model No.	Net Weight / CTN	Gross Weight/ CTN	Quantity / CTN	Shipping Dimension
LED Neon <sup>10</sup> - 1225 RT(15m)	8.5 (±10%) kgs	12.31(±10%) kgs	2 rolls	380*350*350mm

### Method 2









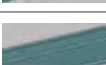


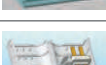





Model No.	Net Weight / CTN	Gross Weight/ CTN	Quantity / CTN	Shipping Dimension
LED Neon <sup>10</sup> - 1225 RT (30m)	8.4 (±10%) kgs	12.31(±10%) kgs	1 roll	390*390*325mm

# LED Neon<sup>10</sup> - 1225 RT

## Packaging Information of Accessories (Optional)

### Simple Version

Picture	Model No.	Quantity / CTN	Carton Size(mm)	Net Weight(Kg)	Gross Weight(Kg)
	End exit	250	390*390*325	13.00(1±10%)	14.50(1±10%)
	Bottom exit	250	390*390*325	13.25(1±10%)	14.85(1±10%)
	Right side exit	250	390*390*325	13.25(1±10%)	14.85(1±10%)
	Left side exit	250	390*390*325	13.25(1±10%)	14.85(1±10%)
	End caps	1000	375*375*200	7.50(1±10%)	8.50(1±10%)
	1m Aluminum track of three grip plates and mounting screws	50	1100*185*185	12.50(1±10%)	13.80(1±10%)
	2m Aluminum track of nine grip plates and mounting screws	50	2100*185*185	25.30(1±10%)	27.30(1±10%)
	1m Aluminum track	50	1100*185*185	12.20(1±10%)	13.50(1±10%)
	2m Aluminum track	50	1100*185*185	24.40(1±10%)	26.40(1±10%)
	3.5cm Aluminum track with grip plate	1250	390*390*325	12.20(1±10%)	13.50(1±10%)
	3.5cm Aluminum track	1250	390*390*325	9.87(1±10%)	11.18(1±10%)
	Splice Connector	800	375*375*200	9.52(1±10%)	10.52(1±10%)
	L Connector	500	375*375*200	9.55(1±10%)	10.55(1±10%)
	Grip Plate	2000	375*375*200	3.40(1±10%)	4.40(1±10%)
	923L	150	375*375*200	6.75(1±10%)	7.80(1±10%)

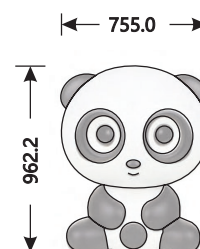
#### Note:

The difference of each product version is in the fittings  
It is recommended 2 sets mounting accessories per meter Aluminum track.

## Examples

### To make a luminous panda with N2-4

#### 1. Panda, seeing the picture on the right.



#### 2. To calculate the outline length

To transform the pattern into strokes, as shown in the figure on the right; the black circle is as the starting point, and the arrow is as the path direction;

To calculate the length of each stroke

$L1 = (\text{Actual length}) + 100\text{mm}(\text{Tolerance}) = 1842\text{mm} \approx 1850\text{mm};$

$L2 = (\text{Actual length}) + 300\text{mm}(\text{Tolerance}) = 6020\text{mm} \approx 6050\text{mm};$

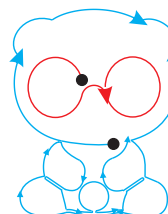
#### Measurement method



- Import the drawing into CAD software to measure the length.
- Use a rope to walk along with the outline of the pattern and then measure the length of the rope.
- Do not use the product itself for the walking along.

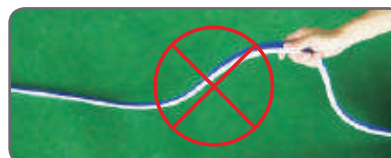
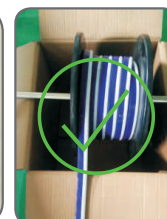
#### Note:

- “≈” means actual cutting length might be longer.
- The tolerance could be adjusted, and make sure the cutting length is longer than actual length.



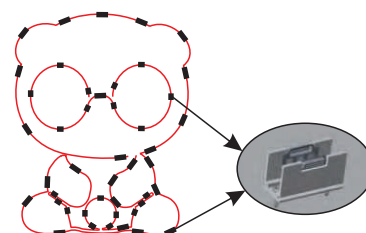
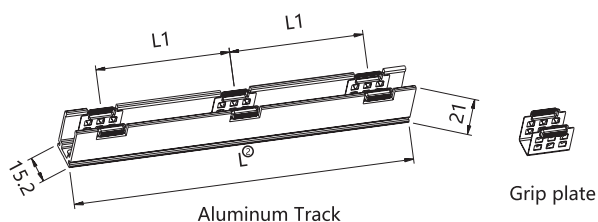
#### 3. Unpacking

- To check the product information on the label, such as model number, color, voltage etc.
- Slide a spindle into the roll and then place the roll with spindle on top of the box provided.
- Cut only from the cutting mark



Gently unroll the fixture without excessive force.

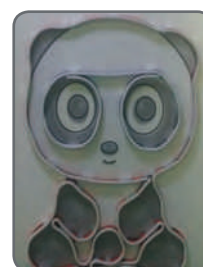
## 4.Install Aluminum Track



Pictures		Actual length L(mm)
		35 <sup>°</sup>
		50 <sup>°</sup>

### Note:

- The length of Aluminum track is 35mm with one grip plate
- Aluminum track length and interval of grip plate (L1) are according to customer need



## 5.Install Light

After the product is installed, cut off the excess light along the cutting position and install the end cap. Refer to page 11 or 16 for the installation method



## 6.Power the light to ensure that it is working properly.

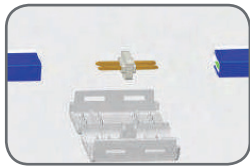
## Other Cases



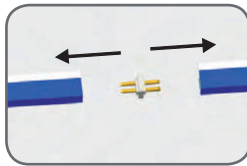


## Appendix: Product Installation

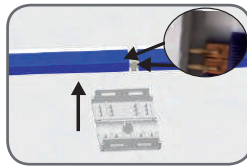
### Splice connector



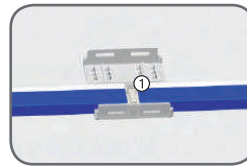
Exploded drawing



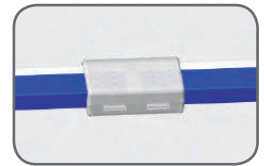
Insert the pin (NOTE: Pin should be on the back of PCB)



Apply glue on the joint of strip and the housing connector, and then put the strip into the housing

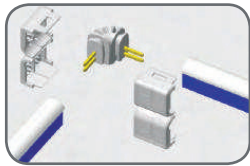


Close the housing after applying glue

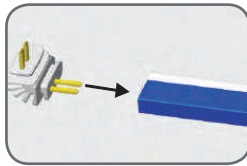


Final picture

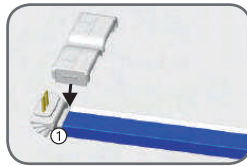
### L connector



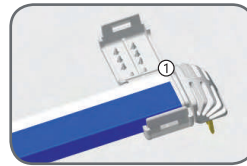
Exploded drawing



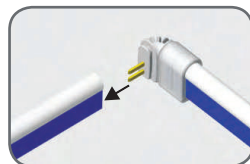
Insert the pin (NOTE: Pin should be on the back of PCB)



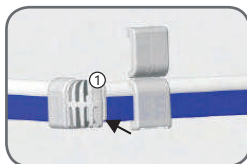
Apply glue on the joint of strip and the housing connector, and then put the strip into the housing. (Note: The arrow on the housing points to the power connector)



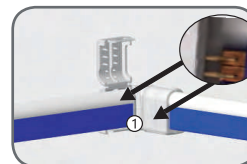
Close the housing after applying glue



Insert the pin (NOTE: Pin should be on the back of PCB)



Apply glue on the joint of strip and the housing connector, and then put the strip into the housing. (Note: The arrow on the housing points to the power connector)



Close the housing after applying glue on the joint again.



Final picture

#### Note:

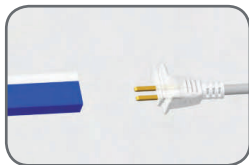
- To have waterproof and insulation treatment at every connection with 10g silicone glue.
- Make sure the pin have a good contact with the copper foil
- "Pin the side" means the PCB is on this side, and the pin should contact well with the PCB



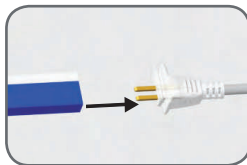
## Appendix: Product Installation

### Simple Version

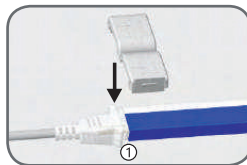
#### Power Connector (End Exit)



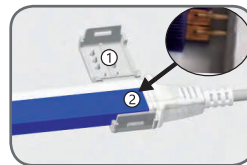
Exploded drawing



Insert the pin (NOTE: Pin should be on the back of PCB)



Apply glue on the joint of strip and the housing connector, and then put the strip into the housing

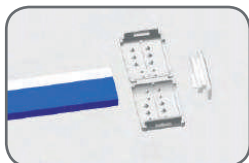


Close the housing after applying glue

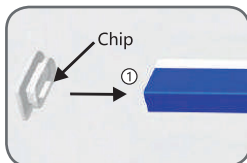


Final picture

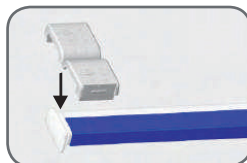
#### End cap



Exploded drawing



Insert the end cap into the strip (Note: The chip has to go to the back of the PCB board)



Put glue at the joint of strip and the housing



Close the housing after putting the glue on the end.



Final Picture

#### Note:

- It has to finish all the silicone glue at every re-connections for waterproof and insulation.
- Give it good attachment when chips and board is attached.

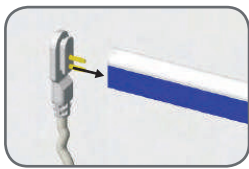
#### Warning:

- To achieve the best waterproof result, MUST FILLING IN THE HOUSING WITH ENOUGH GLUE.

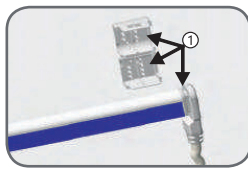
## Appendix: Product Installation Steps

### Simple Version

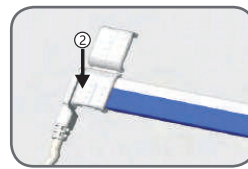
#### Power Connector (Bottom Exit)



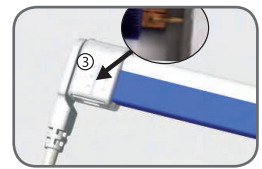
Put the Bottom cable into the Neon Flex.



Put the BV-923 glue into the housing and the connection point.

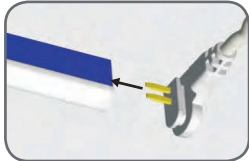


Put the glue filled housing under the connection point and close the housing tidily.

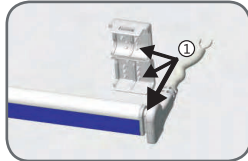


Final picture

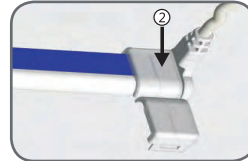
#### Power Connector (Right Side Exit)



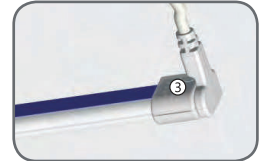
Put the right cable into the Neon Flex.



Put the BV-923 glue into the housing and the connection point.



Put the glue filled housing under the connection point and close the housing tidily.



Final picture

#### Note:

- It has to finish all the silicone glue at every re-connections for waterproof and insulation.
- Give it good attachment when chips and board is attached.

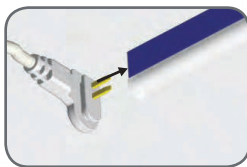
#### Warning:

- To achieve the best waterproof result, MUST FILLING IN THE HOUSING WITH ENOUGH GLUE.

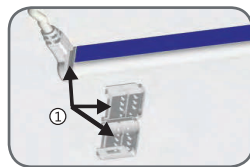
## Appendix: Product Installation Steps

### Simple Version

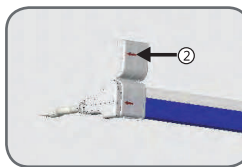
#### Power Connector (Left Side Exit)



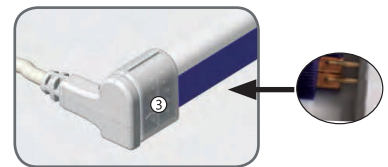
Put the Bottom cable into the Neon Flex.



Put the BV-923 glue into the housing and the connection point.



Put the glue filled housing under the connection point and close the housing tidely.



Final picture

#### Note:

- It has to finish all the silicone glue at every re-connections for waterproof and insulation.
- Give it good attachment when chips and board is attached.

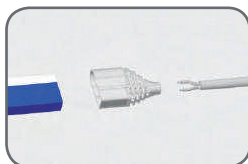
#### Warning:

- To achieve the best waterproof result, MUST FILLING IN THE HOUSING WITH ENOUGH GLUE.

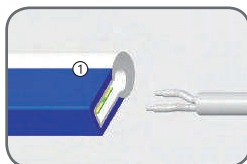
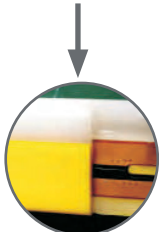
## Appendix: Product Installation Steps

### Silicone End Version

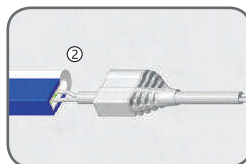
#### Power Connector



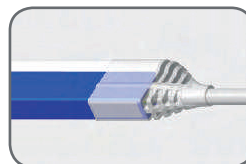
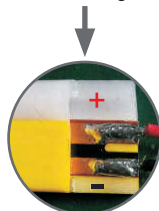
Power connector structure



Solder the power lead on the back of the PCB



Glue the joint of strip and connector housing



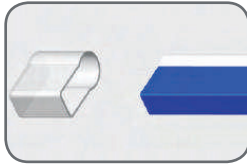
Final Picture



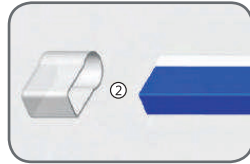
Positive and Negative Instruction

# LED Neon<sup>10</sup> - 1225 RT

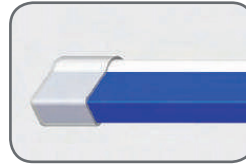
## End Cap



End Cap Structure



Glue at the end of strip, put the end cap



Final picture

### Note:

- It shows where the board is. So when putting the chips, Please give it good attach.
- It has to finish all the silicone glue at every re-connections for waterproof and insulation.

### Warning:

- To achieve the best waterproof result, MUST FILLING IN THE HOUSING WITH ENOUGH GLUE.

## Example: Power connector installation

### Simple Version



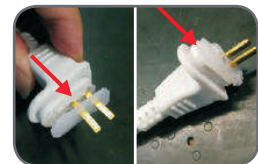
Cutting from the cutting mark



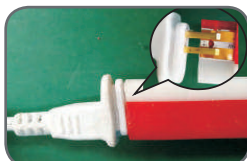
Insert O-ring



Insert gasket



Apply glue on the joint



Keep the connector tightly against the strip. As the above picture showed there is bare copper foil on the back of the PCB



Apply glue and make sure no air bubbles.



Put on the snap cover, press it tightly after the glue is solidified, and then close the snap cover.



Power the light to ensure that it is working properly after the glue is completely solidified.

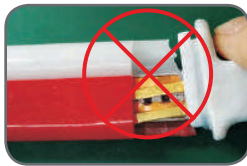
### During the operation, please note:

It is possible that the cutting mark on the rubber is not matched with the cutting line on PCB. You could find the cutting mark, along it, cut slightly on top of the light. Follow the line on top, cut open about 4mm depth on the opposite of cutting mark. Gently open the cut and observe where the inside cutting mark (black line) is. Cut off along with the black line.

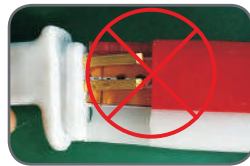


## Example: Power connector installation

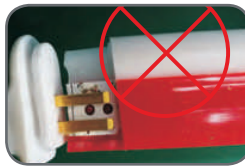
### Incorrect Operation



Wrong cutting position  
may cause short circuit



Pin shift may cause short  
circuit



The pin is contacted with  
LED which may cause a  
short circuit or light failure.