

LED

NEON FLEX

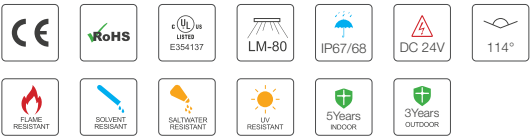
NSF1617





Features

- Color options: Single color, Tunable white , RGB, RGBW and PIXEL.
- High quality components with stable performance.
- Designed with anti-wicking ferrule.
- Good flexibility, side bending.
- All colors except single color support dimming.
- Warranty: 5 years indoor, 3 years outdoor.
- Customization: multiple spec options, can be customized upon requirements.



Optical & Electrical Parameters

Model No.	Voltage	CRI	Color	Lm/m	Lm/W	W/m
NSF1617-Single color	24V DC	>90	2400K	1026	60	17.2
			2700K	1122	63	
			3000K	1141	64	
			4000K	1229	69	
			5000K	1164	67	
			6500K	1144	64	
		/	Red	391	22	17.2
			Green	1020	58	
			Blue	244	14	
			Yellow	268	15	
			Orange	460	26	
NSF1617-48V-Single color	48V DC	>90	2400K	437	47	9.6
			2700K	458	49	
			3000K	470	50	
			4000K	494	53	
			5000K	496	53	
			6000K	491	52	
NSF1617-WN	24V DC	>90	2700K	468	65	7.2
			6500K	487	66	7.2
			W+N	946	66	14.4
NSF1617-RGB	24V DC	/	Red	94	17	5.7
			Green	269	48	5.7
			Blue	56	10	5.7
			RGB	416	25	17.2
NSF1617-RGBW	24V DC	/	3000K	231	43	4.8
			Red	71	15	4.8
			Green	204	42	4.8
			Blue	49	10	4.8
			RGBW	553	28	19.2
(PIXEL) NSF1617-RGB-SPI	24V DC	/	Red	52	8	6.0
			Green	70	11	5.8
			Blue	23	3	6.2
			RGB	142	11	12.96
(PIXEL) NSF1617-RGB-DMX	24V DC	/	Red	50	7	6.8
			Green	91	14	6.8
			Blue	21	3	6.8
			RGB	156	10	15.36
(PIXEL) NSF1617-RGBW-DMX	24V DC	/	3000K	131	20	6.8
			Red	46	7	6.8
			Green	111	17	6.8
			Blue	27	4	6.8
			RGBW	310	16	19.6

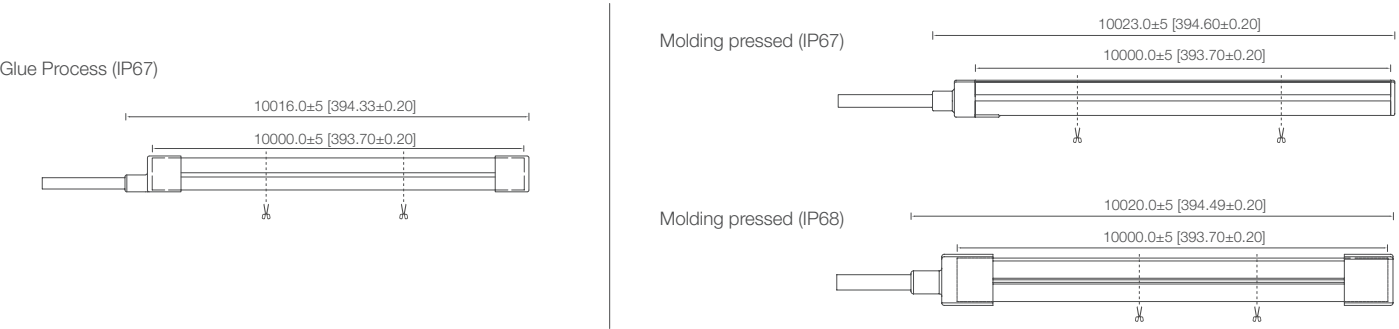
Note: For single color, the current drop 10% from the head to tail

Other Parameters

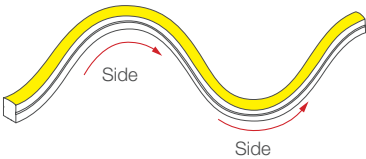
Model No.	LED QTY (pcs/m)	Standard Run	Min. Cuttable Length	Working Temperature	Storage Temperature
NSF1617-Single color	140	10.0m	50.0mm	-20~+60℃	-20~+70℃
NSF1617-48V-Single color	120	35.0m	100.0mm		
NSF1617-WN	224	5.0m	62.5mm		
NSF1617-RGB	120	5.0m	50.0mm		
NSF1617-RGBW	84	5.0m	71.42mm		
NSF1617-PIXEL (RGB)	60	5.0m	100.0mm		
NSF1617-PIXEL (RGBW)	60	5.0m	100.0mm		

Profile Drawings

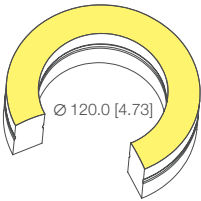
Unit: mm[inch]



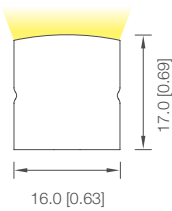
Bend direction



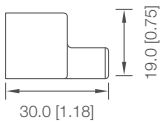
Bending Diameter



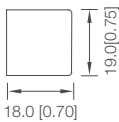
Sectional view



Front cap



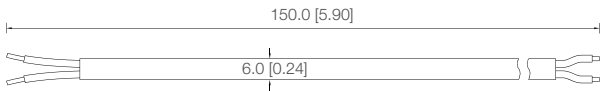
Closing End-cap



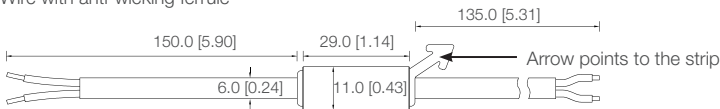
Notes:
IP67: suitable for rainy environment or short-term soaking environment with soaking depth ≤ 1m and soaking time ≤ 1h.(factory assembly only)
IP68: Suitable for rainy environment or short-term soaking environment with soaking depth ≤ 1m. (factory assembly only)

Wire Spec

General Wire



Wire with anti-wicking ferrule

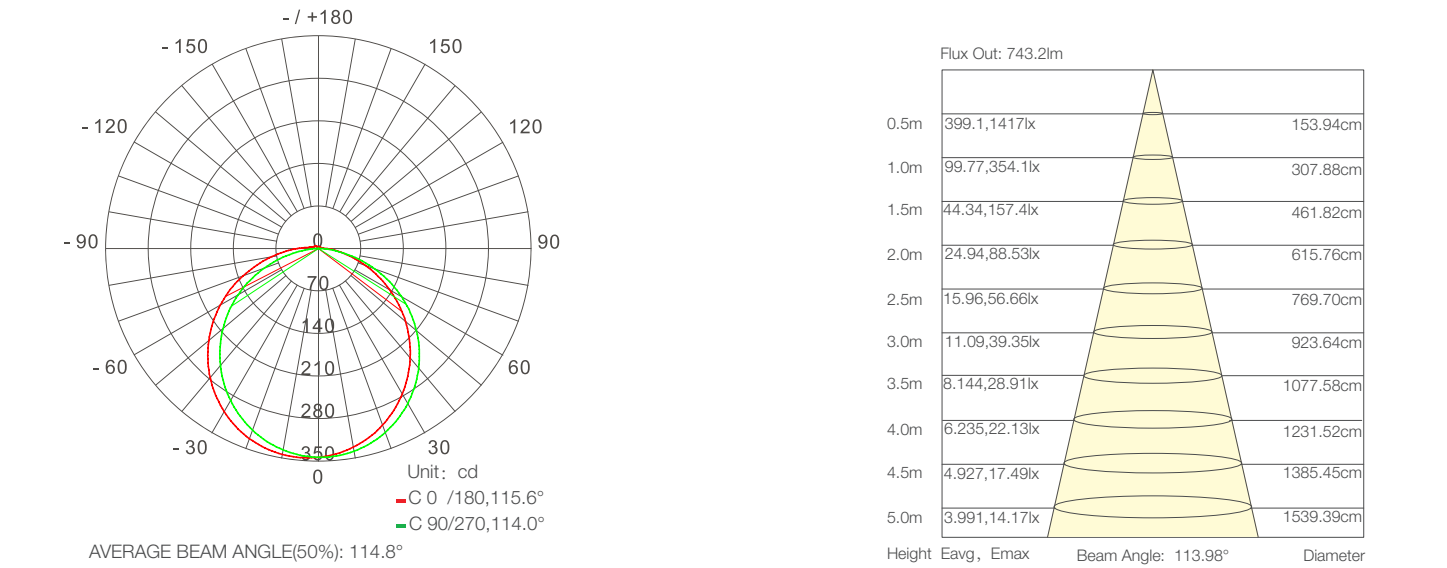


Notes:

- You can choose one of the above two wires.
- 2/3/4/5 cores are available.
- The wire length support customization.
- The anti-wicking ferrule needs to be above water for any underwater applications. Do not disassemble or reprocess the ferrule; otherwise, we will not be responsible for the consequences.

Luminous Intensity Distribution Diagram

Average Illumination

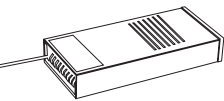


Note: The data based on single color of 2800K. For other data, please consult sales rep.

Recommended power supply upon working length

Model No.	Working Length	Measured Current	Rated Voltage	Measured Power	Recommended Power Supply	Power Supply Mode
NSF1617-Single color	1m	0.72 A	24 V DC	17.28 W	24 W	Single Feed
	10m	6.9 A	24 V DC	165.6 W	220 W	
NSF1617-48V-Single color	1m	0.20 A	48 V DC	9.60 W	24 W	Single Feed
	35m	7.0 A	48 V DC	336 W	600 W	
NSF1617-WN	1m	0.6 A	24 V DC	14.4 W	24 W	Single Feed
	5m	2.7 A	24 V DC	64.8 W	100 W	
NSF1617-RGB	1m	0.72 A	24 V DC	17.28 W	24 W	Single Feed
	5m	3.20 A	24 V DC	76.80 W	100 W	
NSF1617-RGB-R	1m	0.23 A	24 V DC	5.52 W	7.2 W	Single Feed
	15m	3.11 A	24 V DC	74.52 W	100 W	
NSF1617-RGB-G	1m	0.23 A	24 V DC	5.52 W	7.2 W	Single Feed
	15m	3.11 A	24 V DC	74.52 W	100 W	
NSF1617-RGB-B	1m	0.23 A	24 V DC	5.52 W	7.2 W	Single Feed
	15m	3.11 A	24 V DC	74.52 W	100 W	
NSF1617-RGBW	1m	0.80 A	24 V DC	19.20 W	24 W	Single Feed
	5m	3.60 A	24 V DC	86.40 W	120 W	
NSF1617-RGBW-R	1m	0.19 A	24 V DC	4.56 W	7.2 W	Single Feed
	20m	3.42 A	24 V DC	82.08 W	120 W	
NSF1617-RGBW-G	1m	0.20 A	24 V DC	4.80 W	7.2 W	Single Feed
	20m	3.60 A	24 V DC	86.40 W	120 W	
NSF1617-RGBW-B	1m	0.20 A	24 V DC	4.80 W	7.2 W	Single Feed
	20m	3.60 A	24 V DC	86.40 W	120 W	
NSF1617-RGBW-W	1m	0.22 A	24 V DC	5.28 W	7.2 W	Single Feed
	20m	3.96 A	24 V DC	95.04 W	120 W	
NSF1617-PIXEL (RGB)	1m	0.54 A	24 V DC	12.96 W	24 W	Single Feed
	5m	2.17 A	24 V DC	52.08 W	70 W	
NSF1617-PIXEL (RGBW)	1m	0.88 A	24 V DC	21.12 W	24 W	Single Feed
	5m	3.28 A	24 V DC	78.72 W	100 W	

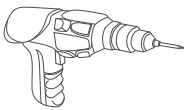
Products and Tools



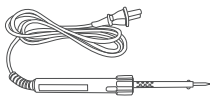
LED power supply



Cutter



Electric drill



Electric iron

Product accessories

Free



Front cap
Model No.: ASY-NSF1617-N00NNH-EC
Quantity(10m): 2-6pcs
Dimensions: 30*18*18mm



Closing End-cap
Model No.: ASY-NSF1617-N00NNX-EC
Quantity(10m): 2-6pcs
Dimensions: 18*18*19mm

Optional



Front cap (bottom/side outlet)
Model No.: ASY-NSF1617-N00NNS-EC
Dimensions: 25*30*19mm



Aluminum clip
Model No.: ASY-NSF1617-A3NN0035-MT
Dimensions: 35*18.7*19.37mm



S-type Track
Model No.: ASY-NSF1617-MNN0500-MT
Dimensions: 500*17.4*16.7mm



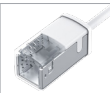
Aluminum Channel
Model No.: ASY-NSF1617-A1NN1000-MT
Dimensions: 1000*19.3*18.7mm



Aluminum clip (with metal spring)
Model No.: ASY-NSF1617-A4NN0035-MT
Dimensions: 35.0*21.2*19.0mm



Aluminum Channel (with metal spring)
Model No.: ASY-NSF1617-A2NN1000-MT
Dimensions: 1000*21.2*19mm



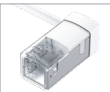
Free welding end cap (straight outlet)
Model No.: ASY-NSF1617-F00NNH-EC
Dimensions: 49*22*23mm



Free welding end cap
Model No.: ASY-NSF1617-F00NNX-EC
Dimensions: 45*22*23mm



Free welding end cap (left outlet)
Model No.: ASY-NSF1617-F00NNL-EC
Dimensions: 53*25*23mm



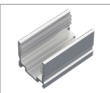
Free welding end cap (right outlet)
Model No.: ASY-NSF1617-F00NNR-EC
Dimensions: 53*25*23mm



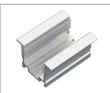
Free welding end cap (bottom outlet)
Model No.: ASY-NSF1617-F00NNB-EC
Dimensions: 53*22*26mm



Splicing connector 2
Model No.: ASY-NSF1617-F01NNM-EC
Dimensions: 57*23*20mm



Aluminum Channel
Model No.: ASY-1617-A6NN0035-MT
Dimensions: 35*20*21mm



Aluminum Channel (with wings)
Model No.: ASY-1617-A7NN0035-MT
Dimensions: 35*20*30mm



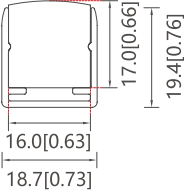
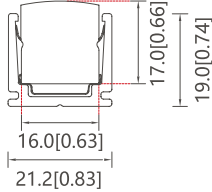
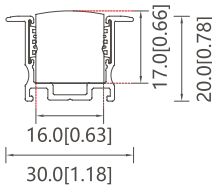
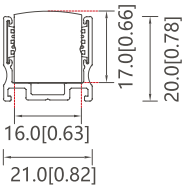
Silicone Glue
Model No.: WR-7516
Dimensions: 45g/pc



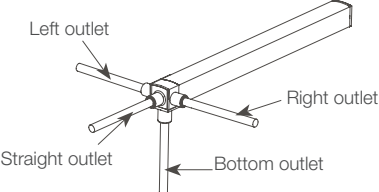
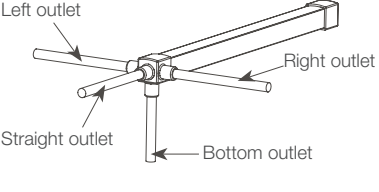
Screws
Model No.: PA3
Dimensions: PA3*10mm

Note:
Accessories can be added according to customers' requirements;
NSF1617-RGBW/PIXEL RGB can not provide molding pressed end cap;

Profile Drawings (neon + aluminum channel)

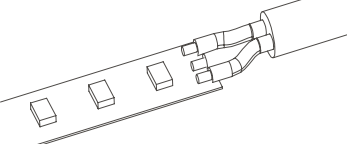
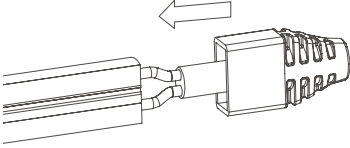
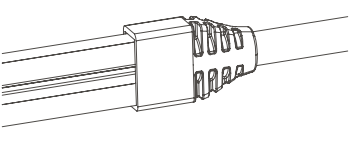
			
Aluminum channel (Aluminum clip)	Aluminum channel (with metal spring)	Aluminum channel with silicone (with wings)	Aluminum channel with silicone (no-wings)
ASY-NSF1617-A1(A3)NNXXX-MT	ASY-NSF1617-A2(A4)NNXXX-MT	ASY-NSF1617-A7NNXXX-MT	ASY-NSF1617-A6NNXXX-MT

End Cap - Outlet Direction

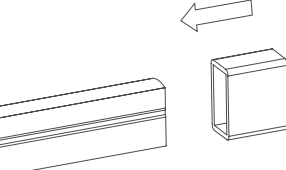
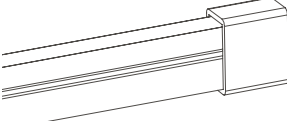
	
Molding Pressed (IP67)	Molding Pressed (IP68)

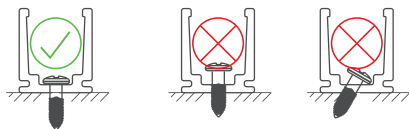
Installation

Front cap installation

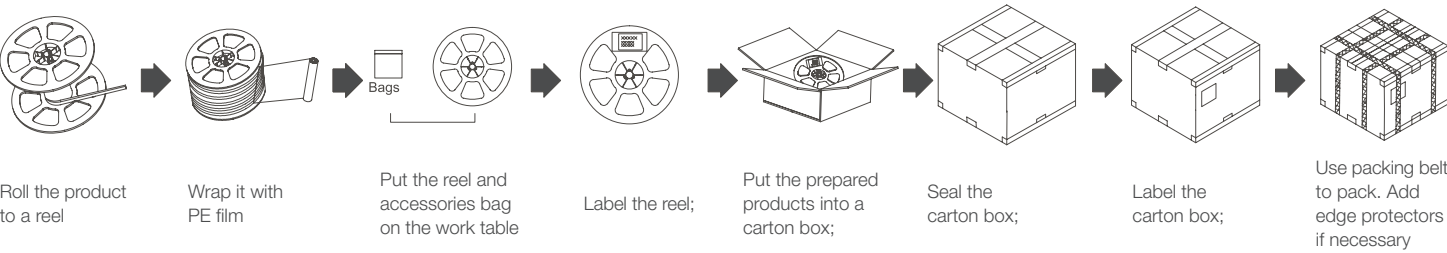
		
Weld the wire to the PCB board.	Filling the cap with glue, then push it into the strip light.	Wipe off the excess glue and wait to dry.

Closing end-cap installation

	
Filling the cap with glue, then push it into the strip light.	Wipe off the excess glue and wait to dry.

- Notes:
- At the welding place, please pay attention to the positive and negative poles of the wire and the strip;
 - Each connection must use 10g silica gel for waterproof and insulating treatment;
 - The screws must be vertical to the mounting surface and be fastened, as shown in the figure on the right;
 - Please choose suitable operation steps according to the actual needs;
 - During mounting, please pay attention to the min bending diameter, and best to use original factory accessories;
 - More information, please feel free to consult us;
- 

Packaging Information



Packaging information

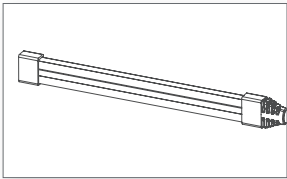
Model No.	Product Size (mm)	Carton Size (mm)	Meter/Reel	Reel/Carton	Gross Weight (kg)
NSF1617-Single color	10000*16*17	390*390*325	10	3	15.50 (1± 10%)
NSF1617-48V-Single color	35000*16*17	390*390*325	35	1	12.85 (1± 10%)
NSF1617-WN	5000*16*17	480*445*370	5	12	16.20 (1± 10%)
NSF1617-RGB	5000*16*17	480*445*370	5	12	16.20 (1± 10%)
NSF1617-RGBW	5000*16*17	480*445*370	5	12	16.70 (1± 10%)
NSF1617-PIXEL (RGB)	5000*16*17	480*445*370	5	12	16.50 (1± 10%)
NSF1617-PIXEL (RGBW)	5000*16*17	480*445*370	5	12	16.20 (1± 10%)

- Notes:
- For other customized length packaging, please ask our sales rep.
 - The above-mentioned packaging quantity and weight are only for the illustrated packaging method. For other packaging methods, the packaging quantity and weight will be different. The actual weight is subject to the actual product.

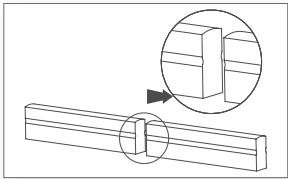
Reliability test

Project	Reference standards	Category	Test conditions	Outcome
Environmental test	Blueview standard	PTC test	Test temperature -40°C to 60°C, cycle once every 2h (temperature holding time 15min, heating and cooling time 45min)	Pass
		Room temperature aging test	TH=25°C, continuous power on	
		High temperature resistant test	TH=60°C working environment, continuous light up	
		Room temperature bending test	Bending diameter 40mm, TH=25°C, continuous power on	
Mechanical strength testing	Blueview standard	Tensile test	Fix both ends of the sample on the upper and lower clamps of the tensile machine and record the tensile value of the product when the light is off.	Pass
		Twist test	24V light on; rotate 360° forward and reverse, if there is no abnormality, increase the degree of rotation until the sample fails.	

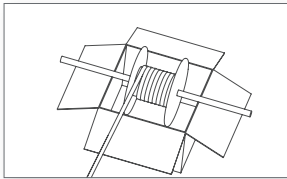
Warning Mark



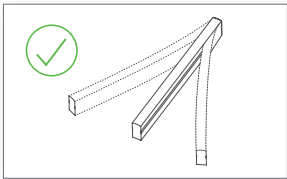
Cuttable identifier



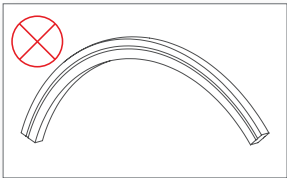
Neat and smooth cut



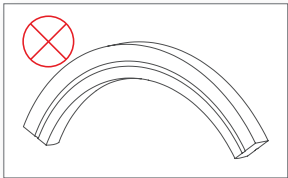
Insert a stick on the reel and place it on the packing box, and rotate the reel to get the product.



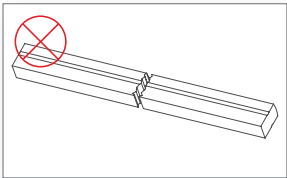
Side bending



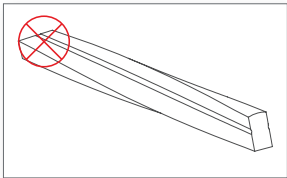
use in concave direction



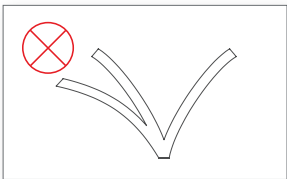
use in convex direction



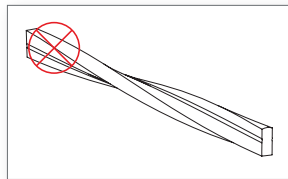
Do not make irregular cuts.



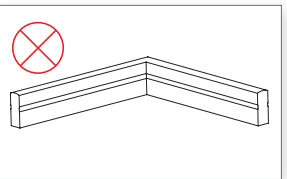
Do not use in distortions



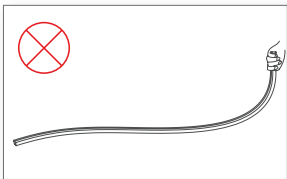
Do not bend many times, for it can endanger electronic lines.



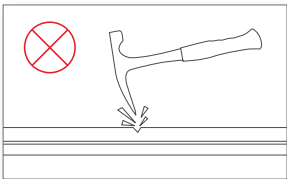
Do not use on wringing (twist)



Do not bend at right angles



Do not throw or pull when taking products

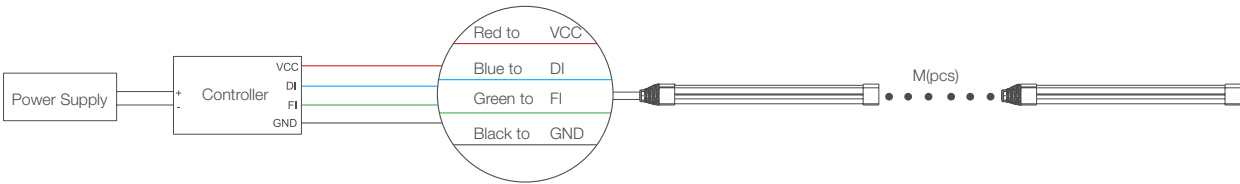


Avoid touching sharp objects

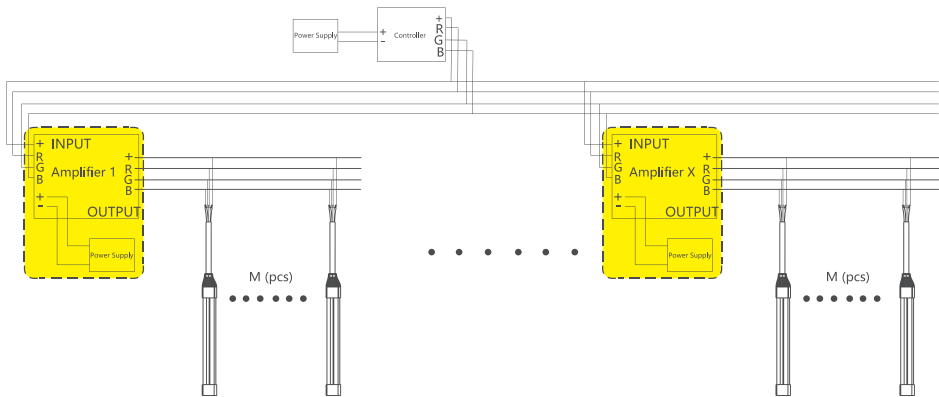
Note:
There are cutting marks on the FPCB;
Please pay attention to the above warnings during transportation and mounting;

Connection Diagram of Controller

Controller wiring diagram for digital strip:



Controller wiring diagram for colorful strip:



Warning

- Do not disassemble or retrofit the light. Do not touch the surface of the light with a sharp object.
- Do not do live-line working during installation,especially for high voltage product.
- Do not use any organic chemical solvents.
- Use neutral glass adhesive to fix this product and it needs to be dried 4 hours in the open environment after operation.
- Treat the ends and the circuit connection points that are not connected to the main line with insulation,waterproof, and anti-corrosion in the installation.
- Use 18AWG (0.75mm2 cross-sectional area) or thicker core wire to avoid adverse consequences caused by overheating, if the power cable need to lengthen.
- Make sure the input voltage meets the requirements and lines are connected correctly before lighting on
- This product is for signage, and do not use as general lighting.
- Series connection within the max run.
- The length of the power cable between the power supply and the led strip should not exceed 2 meters.Otherwise, large circuit loss will lead to inconsistent brightness.
- Installation, maintenance and repair should be operated by a qualified technician.

Attentions before installation

- Before installation, check that the product parameters are consistent with the requirements (Seeing product specifications or product labels)
- Load voltage, current, power and power supply should be matched with the product.
- Follow the instructions of wiring diagram (first connect the load and then the power supply) to avoid short circuit
- Make sure the correct connection of positive and negative poles between products and power supply. Otherwise, the light will not be on.
- Make sure the power cord firmly screwed into the terminal and it should not be pulled out by hands.
- The terminal should have waterproof and anti-corrosive treatment.

Statements and Recycling

Statements

- Repair should be operated by a qualified technician or supplier, if the external circuit or main line of this product is damaged.
- The parameters given in this manual are typical values and for reference only
- All illustrations and drawings in this manual are for reference.
- This product is subject to change without notice.

Recycling

- LED lighting products belongs to electronic products, please do recycling treatment according to the relevant WEEE directives.

Version	Content	Date
A2.6	Update: Add the data of 48V	2024-5-29