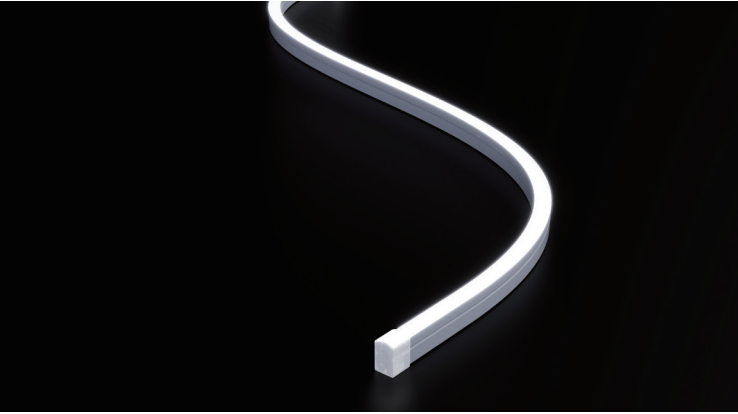


LED

NEON FLEX

NSF1017





Features

- Color option: single color, WN, RGB, RGBW;
- Adopt high quality components with stable and reliable performance;
- Side bending, suitable for many shapes and good weather adaptability;
- Single color does not support dimming (If using Mean Well ELG/HLG power supply, it supports PWM dimming within 2KHz);
- Warranty: 5 years indoor, 3 years outdoor;
- Multiple specifications, support customization;



Optical & Electrical Parameters

Model No.	Voltage	Beam Angle	CRI	Color	Lm/m	Lm/W	Rated Power (W/m)
NSF1017-Single color	24V DC	120°	>90 >80	2300K	320	28.0	11.5
				2700K	482	41.8	
				3000K	485	42.4	
				4000K	500	43.4	
				5000K	499	43.3	
NSF1017-Single color	24V DC	120°	/	Red	146	12.2	11.5
				Green	293	24.1	
				Blue	61	14.9	
				Yellow	291	24.0	
				Orange	122	10.8	
NSF1017-WN	24V DC	115°	>80	2700K	263	36.6	7.2
				6500K	278	38.5	7.2
				W+N	528	36.8	14.4
NSF1017-RGB	24V DC	120°	/	Red	35	7.8	5.7
				Green	66	11.6	5.7
				Blue	17	2.7	5.7
				RGB	112	6.8	17.2
NSF1017-RGBW	24V DC	120°	>90 /	3000K	172	29.2	5.04
				Red	42	9.4	5.04
				Green	150	28.2	5.04
				Blue	34	6.5	5.04
				RGBW	394	19.2	20.16

Note: "RGBW" data is obtained when 4 chips are all lit

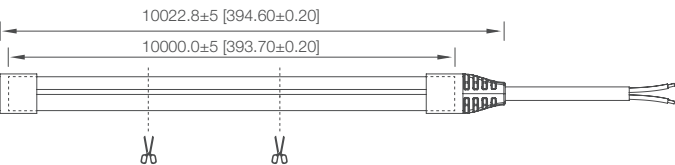
Other Parameters

Model No.	LED QTY	Standard Run	Min. Cuttable Length	Working Temperature	Storage Temperature
NSF1017-Single color	112 pcs/m	10000.0mm	62.5mm	-20~+60°C	-20~+70°C
NSF1017-WN	240 pcs/m	10000.0mm	50.0mm		
NSF1017-RGB	108 pcs/m	5000.0mm	55.6mm		
NSF1017-RGBW	84 pcs/m	5000.0mm	71.42mm		

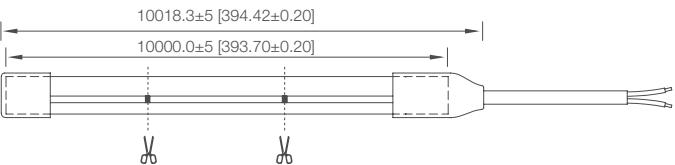
Profile Drawings

Unit:mm[inch]

Glue Process

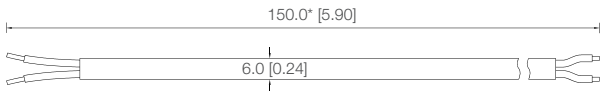


Molding Pressed

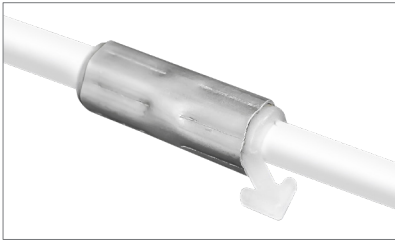
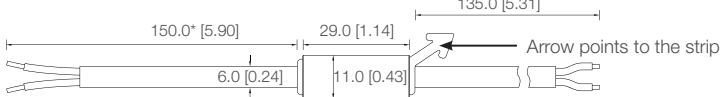


Wire Spec

General Wire

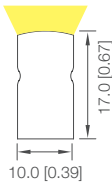


Wire with anti-wicking ferrule

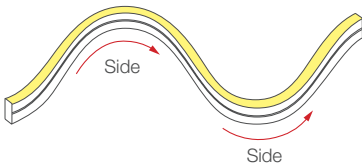


- Notes:
- You can choose one of the above two wires.
 - 2/3/4/5 cores are available.
 - The wire length marked with "*" supports customization.
 - Don't suggest ferrule in the water avoiding Oxidation.
 - Do not disassemble or reprocess the ferrule; otherwise, we will not be responsible for the consequences.

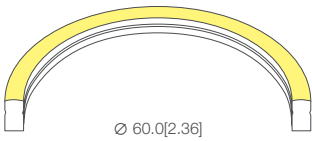
Sectional view



Bend direction

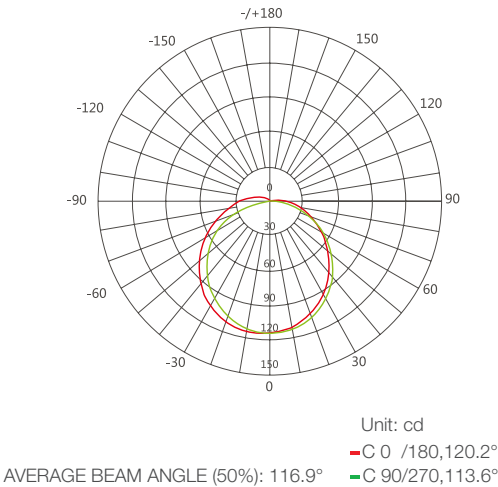


Bending Diameter



Luminous Intensity Distribution Diagram

Average Illumination



Flux Out: 259.2lm		(5200K)	
Height	Beam Angle: 110.83°	Diameter	
0.5m	150.1, 507.0lx	145.05cm	
1.0m	37.5, 126.8lx	290.10cm	
1.5m	16.7, 56.3lx	435.15cm	
2.0m	9.38, 31.7lx	580.20cm	
2.5m	6.01, 20.3lx	725.25cm	
3.0m	4.17, 14.1lx	870.30cm	
3.5m	3.06, 10.4lx	1015.35cm	
4.0m	2.35, 7.92lx	1160.40cm	
4.5m	1.85, 6.26lx	1305.45cm	
5.0m	1.50, 5.07lx	1450.50cm	

Note: The data is the test result of Single color at CCT of 5200K. For other data, please consult sales rep.

Recommended power supply upon working length

NSF1017-Single color					
Working Length	Measured Current	Rated Voltage	Measured Power	Recommended Power Supply	Power Supply Mode
1m	0.48 A	24DC V	11.5 W	20 W	Single Feed
5m	2.4 A	24DC V	57.6 W	80 W	Single Feed
10m	4.8 A	24DC V	115.2 W	150 W	Single Feed

NSF1017-WN					
Working Length	Measured Current	Rated Voltage	Measured Power	Recommended Power Supply	Power Supply Mode
1m	0.6 A	24DC V	14.4 W	25 W	Single Feed
5m	3.0 A	24DC V	72.0 W	100 W	Single Feed
10m	8.0 A	24DC V	114.0 W	200 W	Single Feed

NSF1017-RGB					
Working Length	Measured Current	Rated Voltage	Measured Power	Recommended Power Supply	Power Supply Mode
1m	0.72 A	24DC V	17.28 W	24 W	Single Feed
5m	3.24 A	24DC V	77.76 W	100 W	Single Feed

NSF1017-RGB-R					
Working Length	Measured Current	Rated Voltage	Measured Power	Recommended Power Supply	Power Supply Mode
1m	0.19 A	24DC V	4.56 W	7.2 W	Single Feed
15m	2.57 A	24DC V	61.56 W	100 W	Single Feed

NSF1017-RGB-G					
Working Length	Measured Current	Rated Voltage	Measured Power	Recommended Power Supply	Power Supply Mode
1m	0.23 A	24DC V	5.52 W	7.2 W	Single Feed
15m	3.11 A	24DC V	74.52 W	100 W	Single Feed

NSF1017-RGB-B					
Working Length	Measured Current	Rated Voltage	Measured Power	Recommended Power Supply	Power Supply Mode
1m	0.26 A	24DC V	6.24 W	7.2 W	Single Feed
15m	3.51 A	24DC V	84.24 W	120 W	Single Feed

NSF1017-RGBW					
Working Length	Measured Current	Rated Voltage	Measured Power	Recommended Power Supply	Power Supply Mode
1m	0.84 A	24DC V	20.16 W	30 W	Single Feed
5m	3.78 A	24DC V	90.72 W	120 W	Single Feed

NSF1017-RGBW-R					
Working Length	Measured Current	Rated Voltage	Measured Power	Recommended Power Supply	Power Supply Mode
1m	0.18 A	24DC V	4.32 W	7.2 W	Single Feed
20m	3.24 A	24DC V	77.76 W	100 W	Single Feed

NSF1017-RGBW-G					
Working Length	Measured Current	Rated Voltage	Measured Power	Recommended Power Supply	Power Supply Mode
1m	0.22 A	24DC V	5.28 W	7.2 W	Single Feed
20 m	3.96 A	24DC V	95.04 W	120 W	Single Feed

NSF1017-RGBW-B					
Working Length	Measured Current	Rated Voltage	Measured Power	Recommended Power Supply	Power Supply Mode
1m	0.22 A	24DC V	5.28 W	7.2 W	Single Feed
20m	3.96 A	24DC V	95.04 W	120 W	Single Feed

NSF1017-RGBW-W					
Working Length	Measured Current	Rated Voltage	Measured Power	Recommended Power Supply	Power Supply Mode
1m	0.24 A	24DC V	5.76 W	7.2 W	Single Feed
20m	4.32 A	24DC V	103.68 W	150 W	Single Feed

Product accessories



ASY-NSF1017-N00NNH-EC

Item: Front cap
Dimensions L*W*H: 33*12*17mm
Quantity (10/15m): 2-4pcs
Free/Optional Free



ASY-NSF1017-N00NNX-EC

Item: Closing End-cap
Dimensions L*W*H: 13*12*17mm
Quantity (10/15m): 2-4pcs
Free/Optional Free



ASY-NSF1017-N00NNL-EC

Item: Front cap(Left)
Dimensions L*W*H: 26.1*19.2*18.2mm
Quantity (10/15m): --
Free/Optional Optional



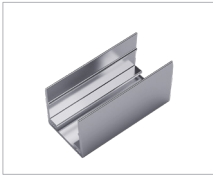
ASY-NSF1017-N00NNR-EC

Item: Front cap(Right)
Dimensions L*W*H: 26.1*19.2*18.2mm
Quantity (10/15m): --
Free/Optional Optional



ASY-NSF1017-N00NNB-EC

Item: Front cap(bottom)
Dimensions L*W*H: 26.1*24.2*12.2mm
Quantity (10/15m): --
Free/Optional Optional



ASY-NSF1017-A3NN0025-MT

Item: Aluminum track
Dimensions L*W*H: 25*12.3*17mm
Quantity (10/15m): --
Free/Optional Optional



ASY-NSF1017-MNN0500-MT

Item: S-type track
Dimensions L*W*H: 500*11*14.6mm
Quantity (10/15m): --
Free/Optional Optional



ASY-NSF1017-A1NN1000-MT

Item: Aluminum channel
Dimensions L*W*H: 1000*12.3*17mm
Quantity (10/15m): --
Free/Optional Optional



PA3

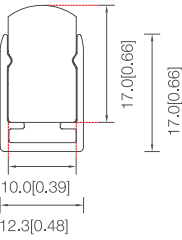
Item: Screws
Dimensions L*W*H: PA3*10
Quantity (10/15m): --
Free/Optional Optional



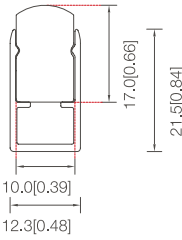
WR-7516

Item: Silicone Glue
Dimensions: 45g/pc
Quantity (10/15m): --
Free/Optional Optional

Profile Drawings (neon + aluminum channel)

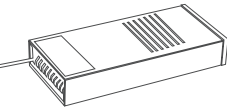


Aluminum channel
(Aluminum clip)
ASY-NSF1017-P1NNXXX-MT



Aluminum channel
(Aluminum clip)
ASY-NSF1017-A1(A3)NNXXX-MT

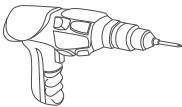
Products and Tools



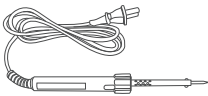
LED power supply



Cutter



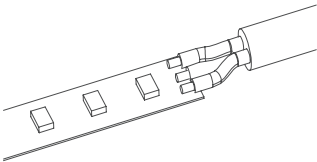
Electric drill



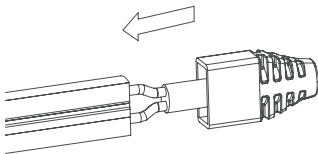
Electric iron

Installation Methods and Steps

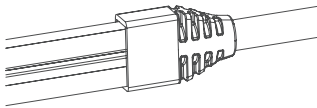
Details of installation operation at input end



Weld the wire to the PCB board.

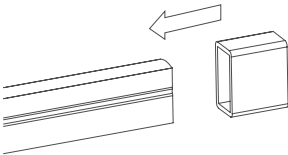


Apply waterproof glue to the front cap, then push the cap into the strip.

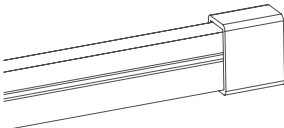


Wipe off the excess glue and wait for the glue to solidify.

Closing-end cap installation

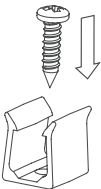


Apply waterproof glue to the end cap, then push the cap into the strip.

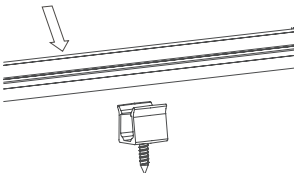


Wipe off the excess glue and wait for the glue to solidify.

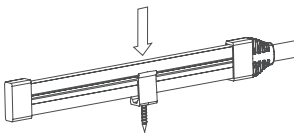
PC clip installation



Fix the clip with screw



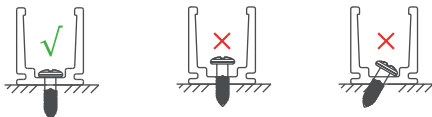
Put the strip into the clip



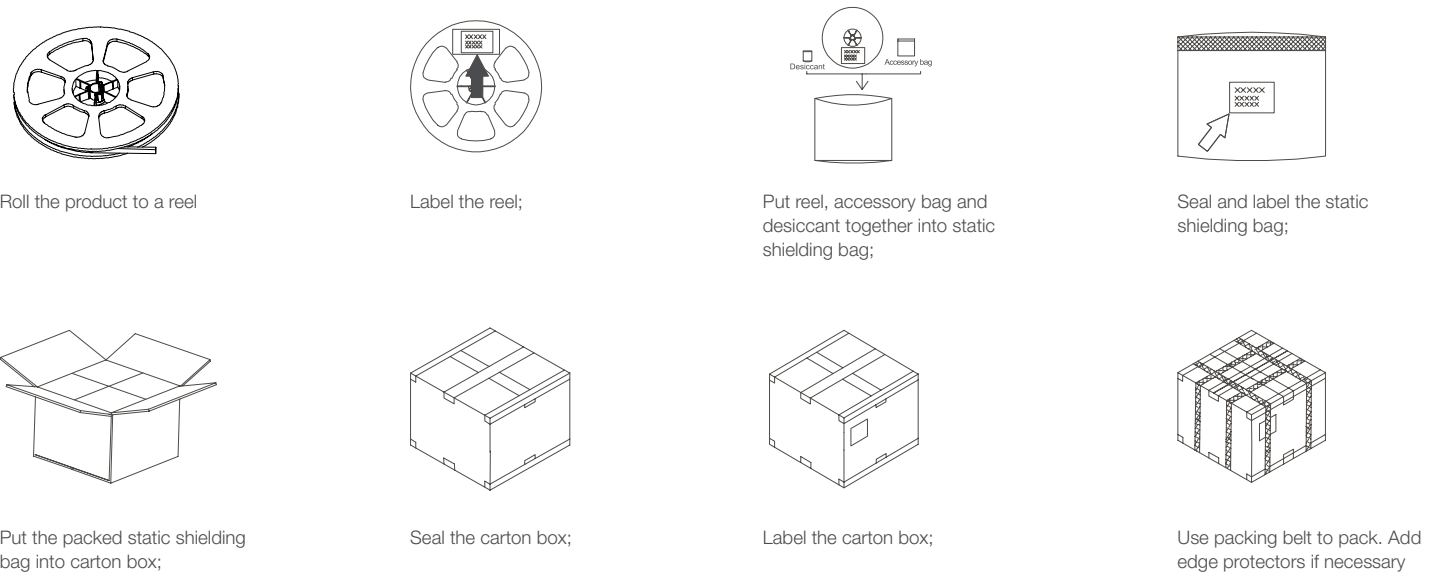
Finished

NOTE:

- During welding, 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

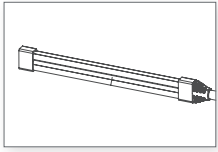
Model No.	Product Size L*W*H (mm)	Carton Size (mm)	Meter/Reel	Reel/Carton	Net Weight (kg)	Gross Weight (kg)
NSF1017-Single color	10000*10*17	390*390*325	10	3	/(1± 10%)	6.80 (1± 10%)
NSF1017-WN	10000*10*17	380*380*325	10	6	/(1± 10%)	14.15 (1± 10%)
NSF1017-RGB	5000*10*17	390*390*325	5	12	/(1± 10%)	15.50 (1± 10%)
NSF1017-RGBW	5000*10*17	390*390*325	5	10	/(1± 10%)	12.50 (1± 10%)

- 5/10m per reel, and the reel is packed in an aluminum foil bag, and finally in an outer box
- 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.

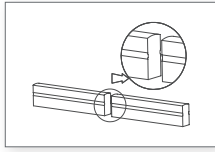
Reliability test

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	
		Temperature cycling test	Th = 60°C/4h, Ta =20°C/1H, TL=- 40°C/4h,continuous cycle lighting	
		High temperature resistance test	Simulated TH=60 °C, continuous power on	
Mechanical strength testing	Blueview standard	Room temperature bending test	Bending diameter 10cm, T=25°C, continuous power on	Pass
		Tensile test	Fix the ends of the sample on the tension machine, then power on and record the tension value when the sample is turned off.	
		Twisting test	24V light on; rotate 360° forward and reverse, if the sample still OK, increase the degree of rotation until the sample broken.	

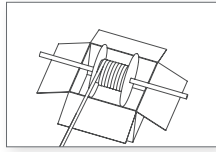
Warning Mark



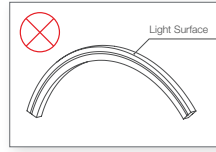
Cuttable identifier.



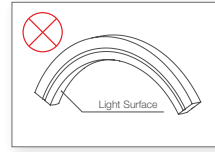
Neat and smooth cut.



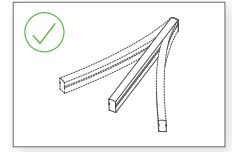
Slide a spindle into the roll and then place the roll with spindle on top of the box provided.



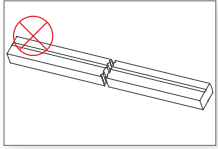
Do not use in convex direction.



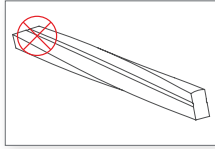
Do not use in concave direction



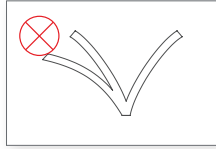
Side bending



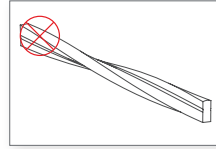
Do not make irregular cuts.



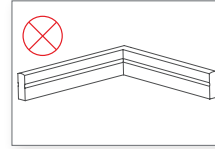
Do not use in distortions.



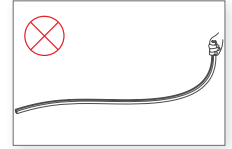
Do not bend many times, for it can endanger electronic lines.



Do not use on wringing (twist).



Do not bend at right angles.



Do not throw or pull when taking products.

Note:

The cutting mark is on the PCB, and the cutting position can be identified in the product cutting line window or the laser mark on the product surface; After unpacking, use warning signs during handling and installation, and rigorous operation can bring a pleasant experience;

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

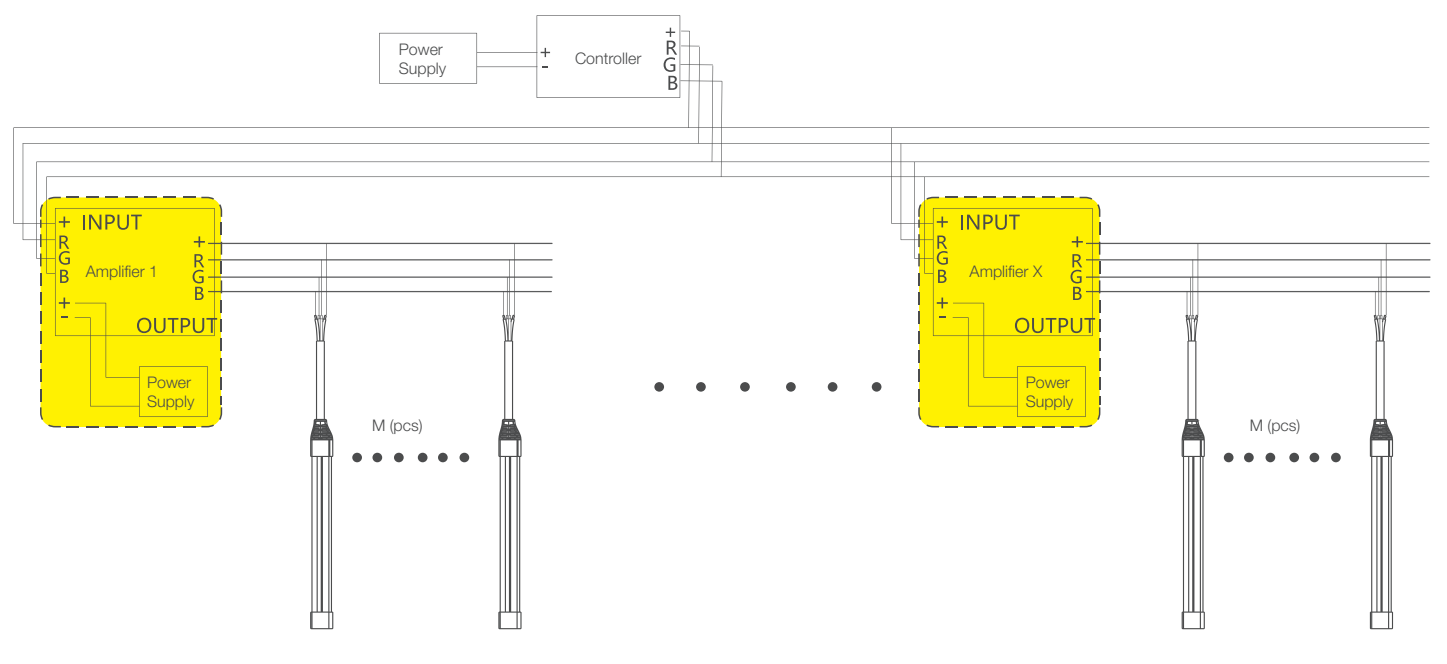
Statements

- 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.

Connection Diagram of Controller



Rated power of the amplifier's power supply (W): P
Rated power of the strip (W): P(strip)
Amplifier load: M(pcs)
Max run length: MAX

$$M=\frac{P*0.8}{P_{(strip)}*MAX}$$

For example: Take the NSF1017 as an example, P(strip)=17.3W/m, power supply 400W, Max run length(single feed)=4m, so the amplifier load is.

$$M=\frac{P*0.8}{P_{(strip)}*MAX}=\frac{400*0.8}{17.3*4}\approx 5(pcs)$$

Note:
The power supply of the controller must match it's power;
If the distance between the controller and the product is more than 20 meters, an amplifier is needed. As shown above;
The above example adopts single feed mode;

Version	Content	Date
A2.8	Update: product dimension	2024-7-1