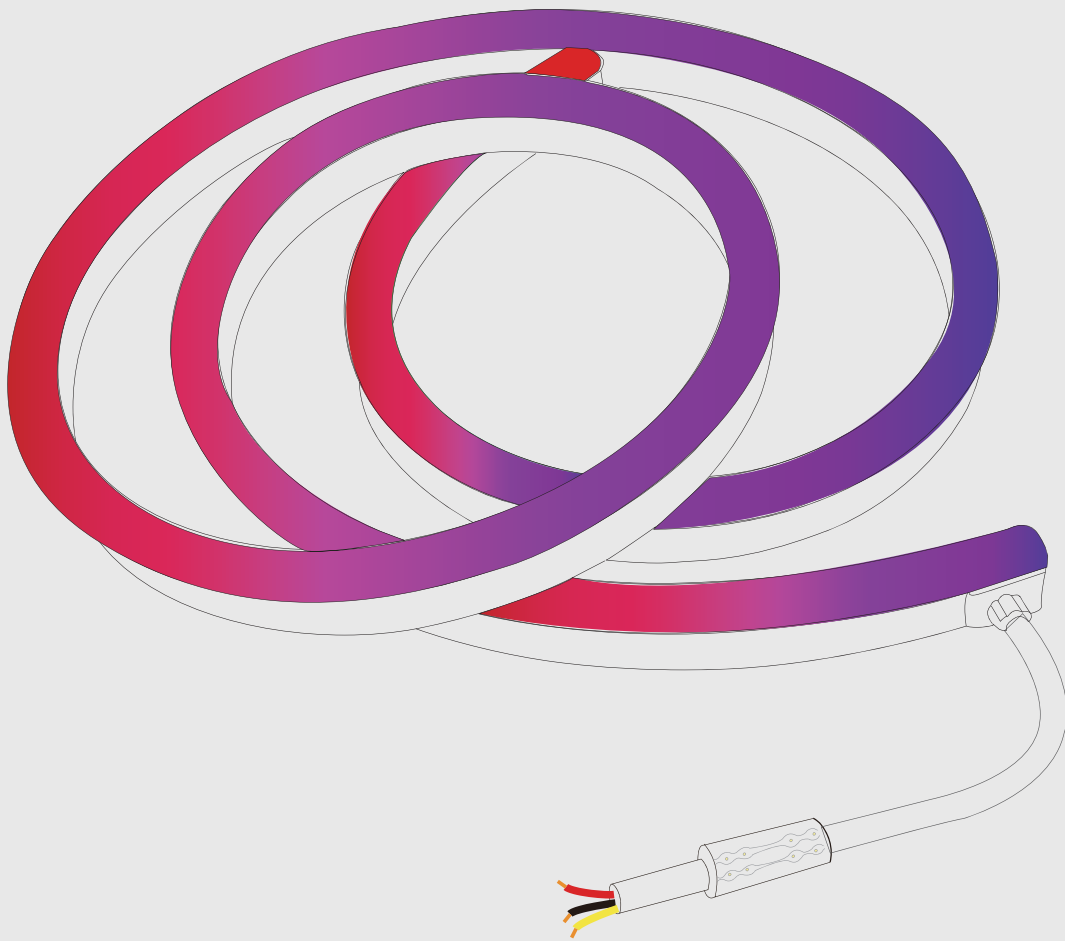








**NEONLED**



# **F21 SPI Pixel chasing Neon Flex**

## **Specification**

### Dimension

-  Gross weight: 0.52kg/m
-  Controlled: SPI controller
-  Installation Temp.: 0°C to +55°C
-  Ambient Temp.: -25°C to +55°C
-  Min. Bending : 120mm
-  Beam Angle : 270 degree

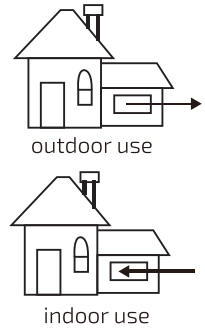


### Features

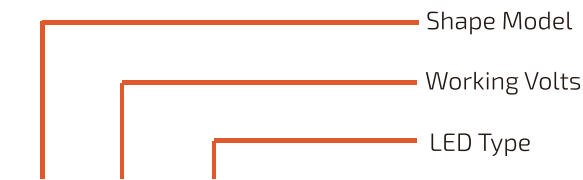
- Uniform and even light output
- Dome surface with 270 degree beam angle
- UCS8903, 8904 IC built in
- Connect with SPI/TTL Signal Controller
- Full encapsulated with IP68 Level
- High Reliability
- 3 or 5 Years warranty

### Applications

- Building facade, outline
- Cove lighting
- Sign and advertising lighting
- Linear lighting
- Additional lighting
- Decorative lighting



### Model Encoding



F21-24V-5050-56-SPI-RGB



MJ D3 S02SM  
MJ-21-D3-S02SM  
1 2 3 4 5

- 1 Mold injection
- 2 Pixel chasing
- 3 Connector entry type
- 4 Connector direction
- 5 Cable connector type

- 01----- right
- S----- Side entry
- 02-----left
- D-----Direct entry
- 03-----double
- B-----Bottom entry
- SM----- male connetor cable
- SF-----female connector cable
- SMF-----male & female connector cable
- D3-----3 wires cable

For more information

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Or visit www.neonled.sk



# F21 Pixel chasing series led neon flex

## Technical Specification

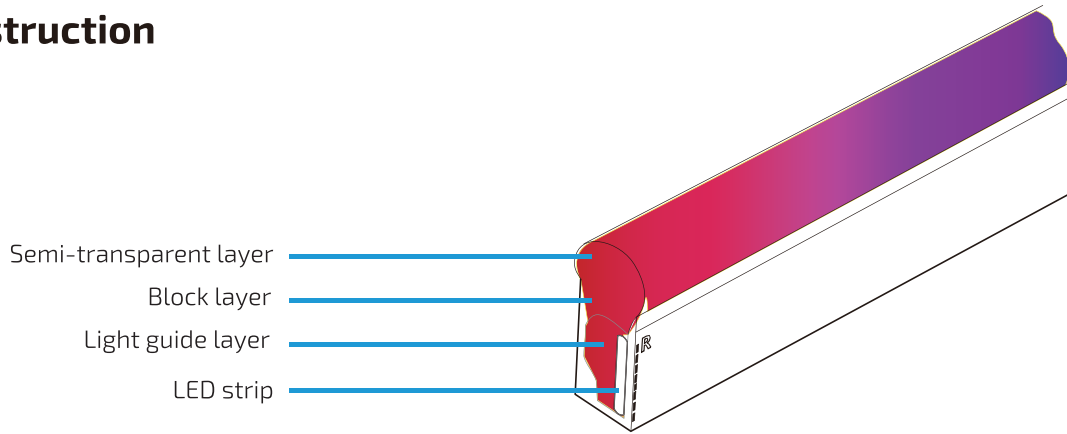
|                          |   |                          |
|--------------------------|---|--------------------------|
| Model                    | F21-24V-5050-56-SPI-RGB                       | F21-24V-5050-70-SPI-RGBW |
| Operating voltage        | 24V   | 24V                      |
| Power consumption        | 15W/M   | 16W/M                    |
| Working Mode             | SPI(8904)                                     | SPI(8903)                |
| LED type                 | SMD5050                                       | SMD5050                  |
| LED Quantity             | 56 pcs/m                                      | 70 pcs/m                 |
| Available Color          | RGB/3000K/DW                                  | RGBW(2200K/3000K/4000K)  |
| Min. cutting Unit        | 7 LEDs  | 7 LEDs                   |
| Min. cutting length      | 12.5cm  | 10cm                     |
| Pixels Qty/m             | 8 Pixels                                      | 10 Pixels                |
| Max. length single feed  | 8m  | 8m                       |
| Max. length double feed  | 16m   | 16m                      |
| Bending direction        | Horizontally                                  |                          |
| Lumen maintenance        | 70 000 Hours L70 25°C , 50 000 Hours L70 50°C |                          |
| Housing material         | Eco PVC                                       |                          |
| Installation temperature | 0°C to -55°C                                  |                          |
| Ambient temperature      | -25°C to +55°C                                |                          |
| Ingress protection       | IP68 wet location submersible* to 2m          |                          |
| Warranty                 | 3 years as standard, 5 years warranty maximum |                          |

[For more information](#)

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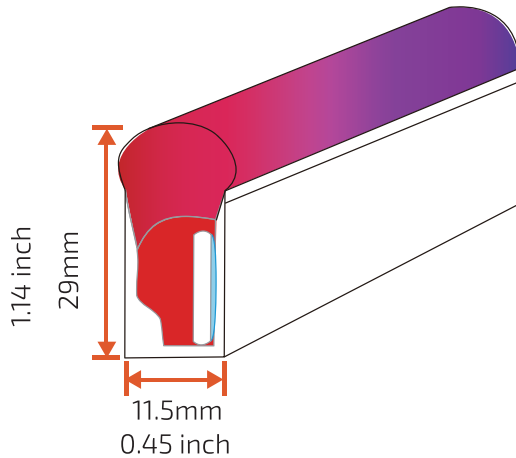
Or visit [www.neonled.sk](http://www.neonled.sk)

### Construction

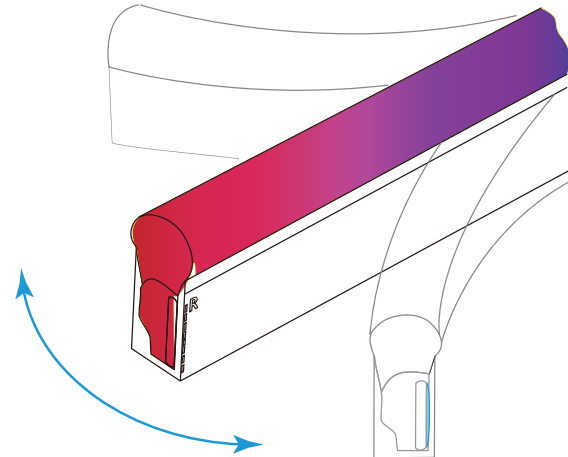


### Physical Specification

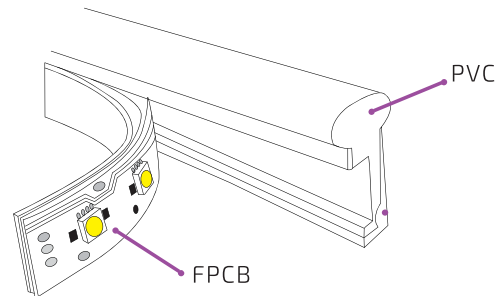
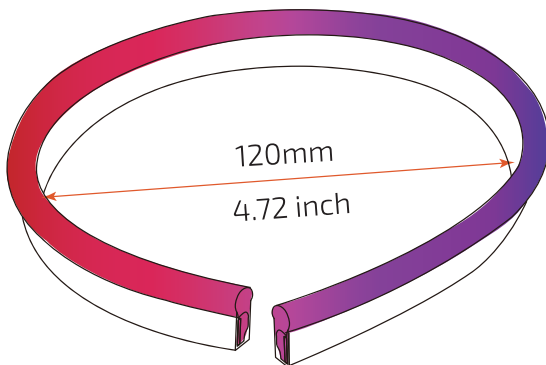
Light profile



Bending direction



Min. bending diameter



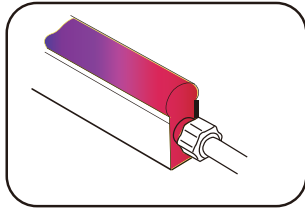
[For more information](#)

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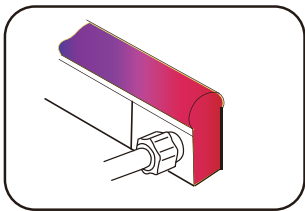
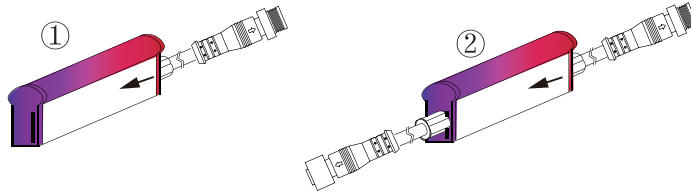
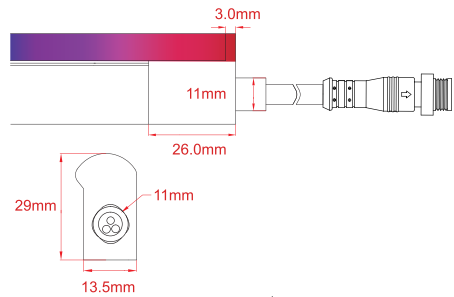
### Mold injection connector

(IP68 Factory Assembly only)



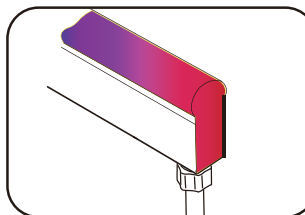
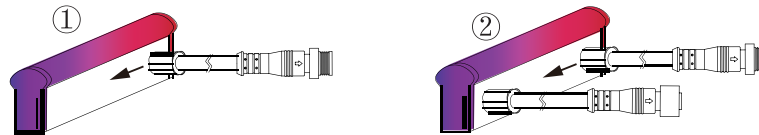
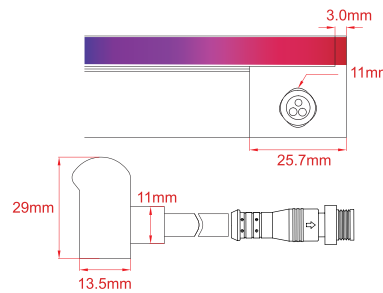
Direct entry Connector

- ① MJ-21-D3-D02SM
- ② MJ-21-D3-D03SFM



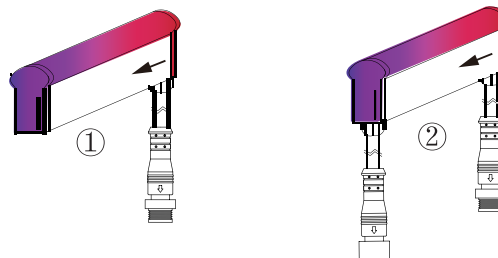
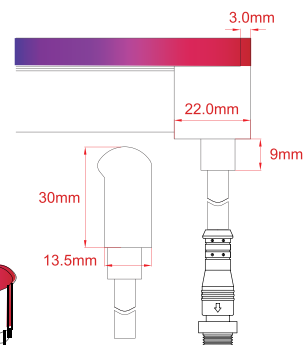
Side entry Connector

- ① MJ-21-D3-S02SM
- ② MJ-21-D3-S03SFM



Bottom entry Connector

- ① MJ-21-D3-B02SM
- ② MJ-21-D3-B03SFM

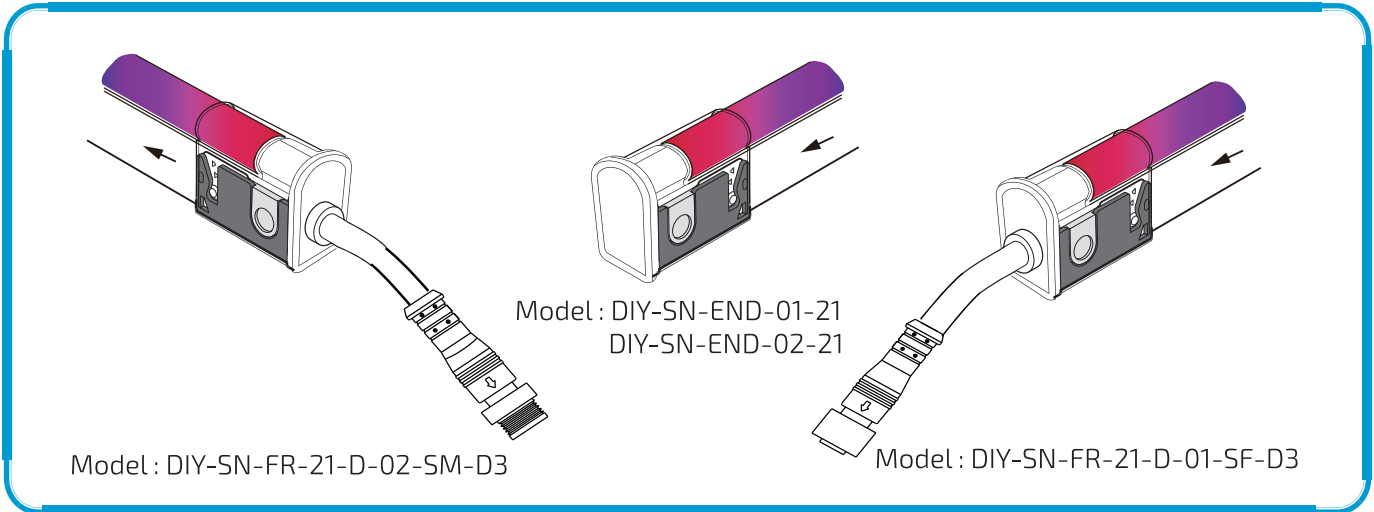


For more information

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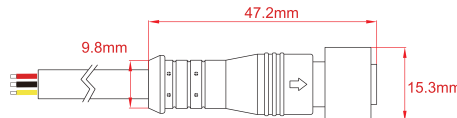
Or visit [www.neonled.sk](http://www.neonled.sk)

DIY snap front connector & end cap kit (IP67 Only)

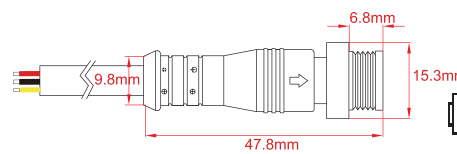


### Other Accessories

Female & Male Connector

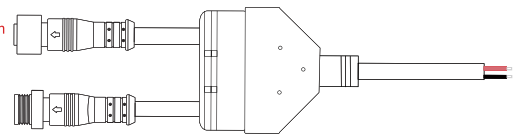


Female connector wire  
SYZ-M12-F-3C-05-W

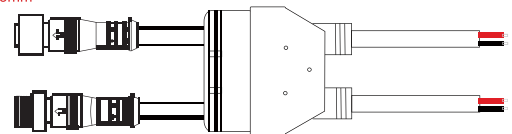


Male connector wire  
SYZ-M12-M-3C-05-W

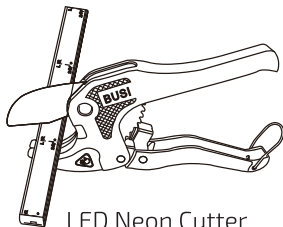
Middle power connector



MID-CNR-8904-1T2



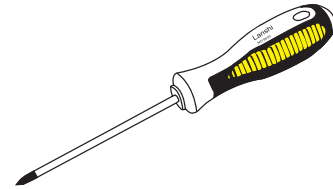
MID-CNR-8904-2T2



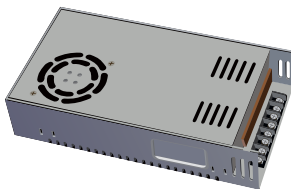
LED Neon Cutter  
ACC-TOOL-C1



Silicone Rubber  
K-5905



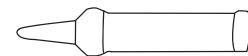
Screwdriver  
ACC-TOOL-C2



Mean Well Transformer  
Non-waterproof Series



Mean Well Transformer  
Waterproof Series



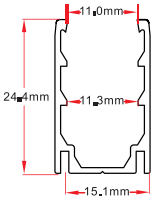
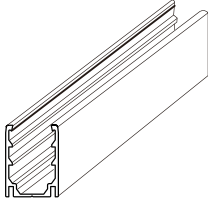
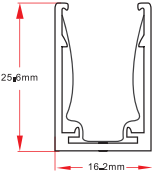
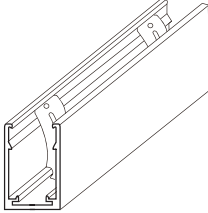
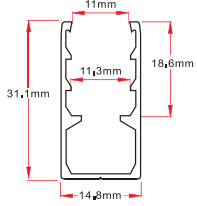
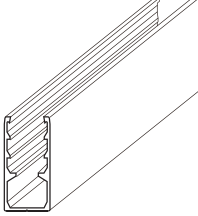
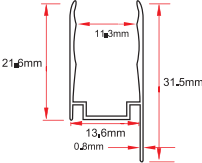
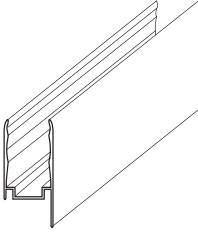
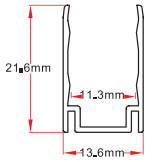
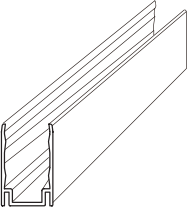
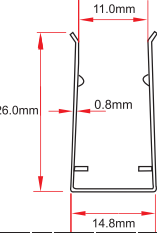
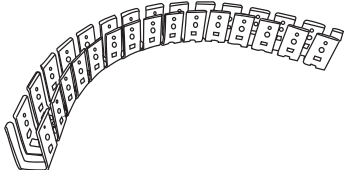
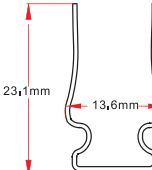
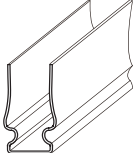
Assistant Tool  
ACC-TOOL-C3

For more information

Email: [info@neonled.sk](mailto:info@neonled.sk)

Or visit [www.neonled.sk](http://www.neonled.sk)

### Mounting Channel

| Model    | Description   | Dimension   | Drawing   |
|----------|---|---|---|
| ALC15S01 | Use for : F15 & F21<br>Length option:1m,2m,35mm<br>Material:Aluminum alloy<br>Optional color:AS/AB/PW<br>Type: Standard                               |    |    |
| ALC15S02 | Use for : F15 & F21<br>Length option:1m,2m,35mm<br>Material:Aluminum alloy<br>Optional color:AS/AB/PW<br>Type: Anti-drop for upside down installation |    |    |
| ALC15H01 | Use for : F15 & F21<br>Length option:1m,2m,35mm<br>Material:Aluminum alloy<br>Optional color:AS/AB/PW<br>Type: Cable hiding                           |   |    |
| ALC15V01 | Use for : F15 & F21<br>Length option:1m,2m,35mm<br>Material:Aluminum alloy<br>Optional color:AS/AB/PW<br>Type: Vertical installation                  |  |  |
| ALC21S01 | Use for : F15 & F21<br>Length option:1m,2m,35mm<br>Material:Aluminum alloy<br>Optional color:AS/AB/PW<br>Type: Standard                               |  |  |
| SSC15FLX | Use for : F15 & F21<br>Length option:10cm,30cm,50cm,100cm<br>Material: Stainless steel<br>Optional color: Polished<br>Type: Flexible                  |  |  |
| SSC15S01 | Use for : F15 & F21<br>Length option: 5cm<br>Material: Stainless steel<br>Optional color: Natural color<br>Type: 316 stainless steel                  |  |  |

For more information

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### Packing

Standard: Carton ( Paper reel inside)



Fixture Length

787.4in(20m)

Paper Reel

D12.99\*H6.18in(33\*15.7cm)

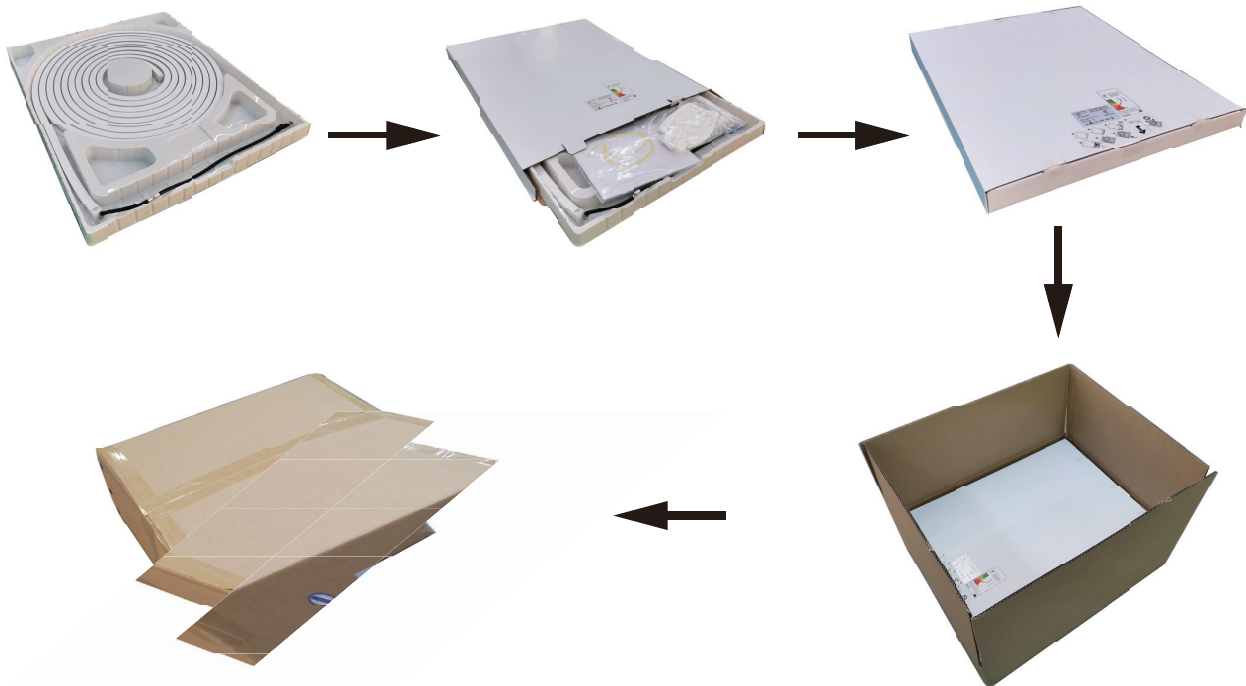
Carton Dimension

33\*33\*18cm

Gross Weight

17.63 lbs ( 10.4 kg )

Custom: Carton ( White box+plastic plate inside)



Fixture Length

393.7in(10m)

White box Dimension

21.6\*1.38\*18.9in(55\*3.5\*48cm)

Carton Dimension

57\*49\*19cm

White box Quantity

Max 5pcs

Gross Weight

57.32 lbs ( 26 kg )





## F21 Pixel chasing series led neon flex

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### Testing

1. Please note it is under normal range if there is 20-30% yellowing of PVC housing material when the product is used under direct sunlight or long-term high temperature & wet environment in 3 years.
2. About the tolerance range of optical parameters (luminance, CCT, Watt, RA) for all product, the volume is plus and minus 10% fluctuation referring to IEC Standard.
3. It's normal for the tolerance range in total length, it occurs from the different production technology, environmental temperature and installation. the volume would be 0.1-5M $\pm$ 7mm, 5.1-10M $\pm$ 15mm, 10.1-20M $\pm$ 30mm.

---

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## Loading Chart

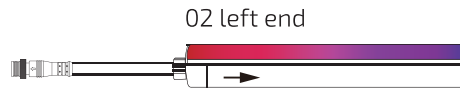
### Power supply

| Rated power | 35W  | 60W  | 75W | 80W  | 100W | 120W | 150W | 185W  | 240W | 320W |
|-------------|------|------|-----|------|------|------|------|-------|------|------|
| 12W         | 2m   | 4m   | 5m  | 6m   | 7.5m | 8m   | 10m  | 12.3m | 16m  | 20m  |
| 15W         | 1.5m | 3m   | 4m  | 4.3m | 5m   | 6m   | 6.5m | 9.5m  | 15m  | 17m  |
| 18W         | 1.5m | 2.5m | 3m  | 3.5m | 4m   | 5m   | 6m   | 8m    | 10m  | 14m  |

Single Feed

Double Feed

### Lead Type



Signal and DC input



Signal and DC input

DC input/Signal output

Note: These are the max recommended run lengths based on power supply, the signals transfer from the left end. For example: It is recommended to use one 80W power supply for a single-feed run of 6m at 12W/m.

## Recommendation of extension wire

Maximum extension wire length according to Light power

| Watts of light | 22AWG<br>0.34mm <sup>2</sup> | 20AWG<br>0.53mm <sup>2</sup> | 18AWG<br>0.82mm <sup>2</sup> | 17AWG<br>1.04mm <sup>2</sup> | 16AWG<br>1.38mm <sup>2</sup> | 14AWG<br>2.07mm <sup>2</sup> | 12AWG<br>3.29mm <sup>2</sup> | 10AWG<br>5.62mm <sup>2</sup> |
|----------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| 10W            | 36m                          | 60m                          | 100m                         | 120m                         | 140m                         | 240m                         | 400m                         | 600m                         |
| 20W            | 18m                          | 30m                          | 50m                          | 60m                          | 70m                          | 120m                         | 200m                         | 300m                         |
| 30W            | 12m                          | 20m                          | 30m                          | 38m                          | 45m                          | 80m                          | 130m                         | 200m                         |
| 40W            | 8m                           | 15m                          | 22m                          | 28m                          | 35m                          | 60m                          | 95m                          | 140m                         |
| 50W            | 6m                           | 12m                          | 18m                          | 22m                          | 28m                          | 48m                          | 75m                          | 105m                         |
| 60W            | 5m                           | 10m                          | 15m                          | 18m                          | 22m                          | 36m                          | 60m                          | 88m                          |
| 70W            | /                            | 8m                           | 12m                          | 14m                          | 18m                          | 30m                          | 50m                          | 72m                          |
| 80W            | /                            | 6m                           | 10m                          | 11m                          | 14m                          | 24m                          | 40m                          | 58m                          |
| 90W            | /                            | 4m                           | 7m                           | 8m                           | 10m                          | 18m                          | 30m                          | 45m                          |
| 100W           | /                            | /                            | 5m                           | 6m                           | 7m                           | 12m                          | 22m                          | 32m                          |
| 110W           | /                            | /                            | 3m                           | 4m                           | 5m                           | 8m                           | 15m                          | 22m                          |
| 120W           | /                            | /                            | 2m                           | 2.5m                         | 3m                           | 0m                           | 8m                           | 12m                          |

Note:

1. The values doesn't include the 0.6m cable connected to the front connector.

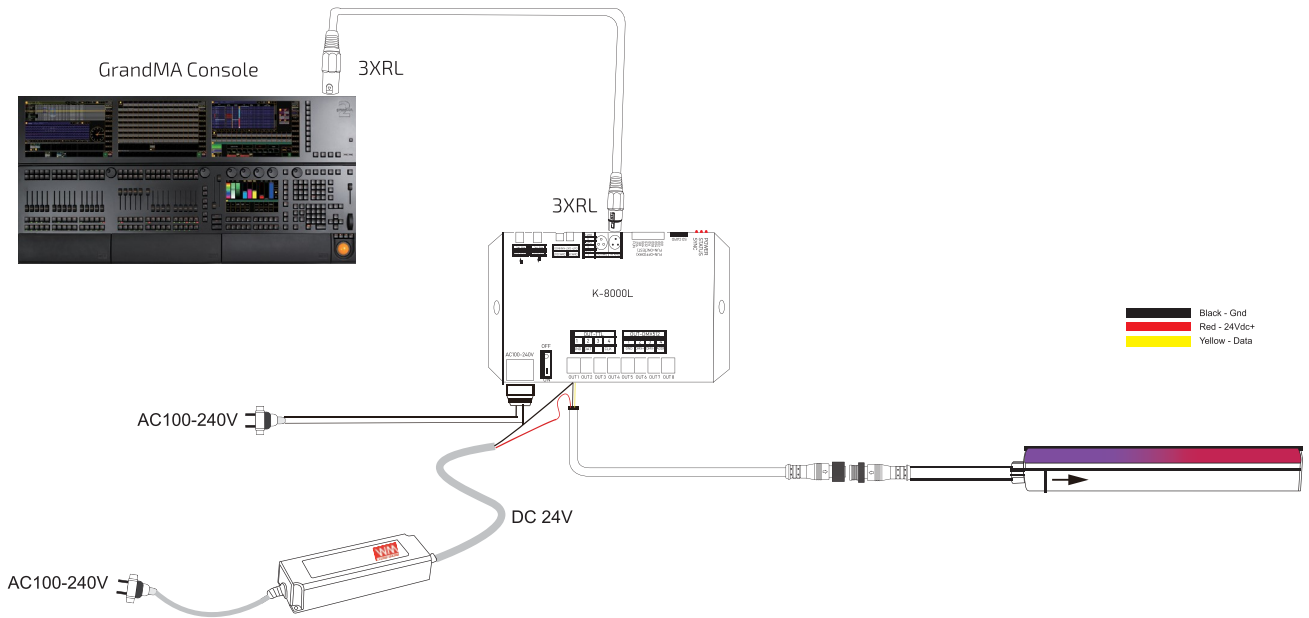
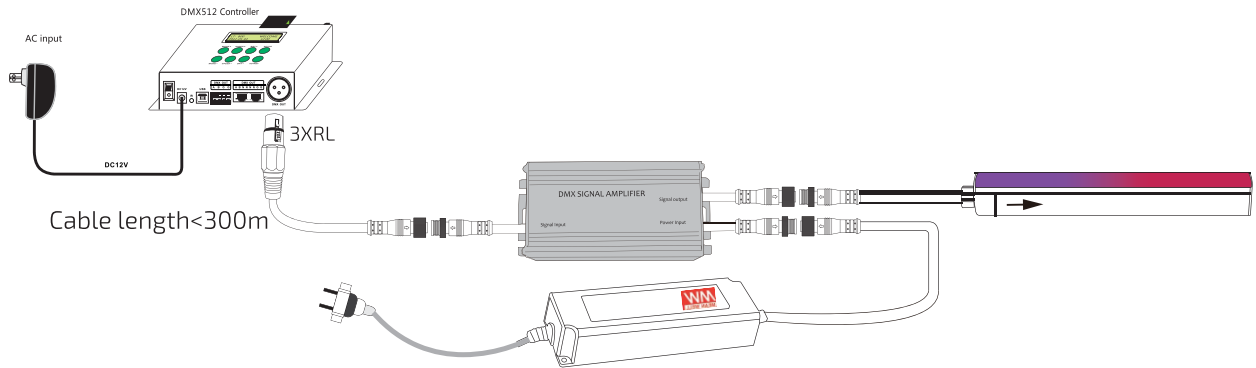
2. To ensure the reliability of wire connection and avoid problem of voltage drop, the extension wire length should be smaller than the above recommended values.

[For more information](#)

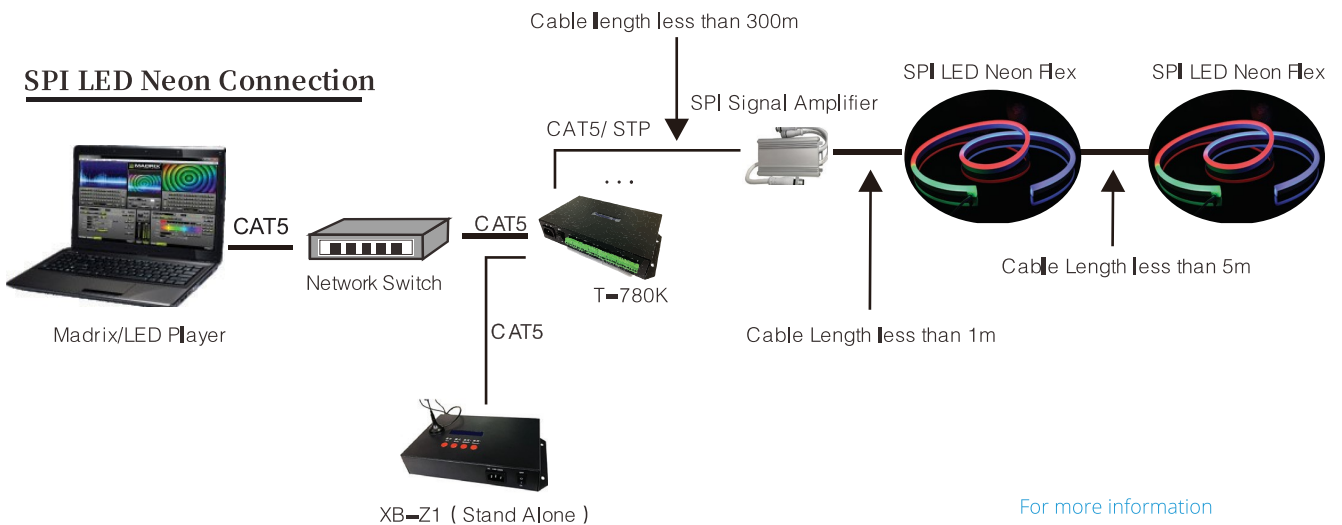
Email: [info@neonled.sk](mailto:info@neonled.sk)

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### Connection Diagram



### SPI LED Neon Connection



For more information

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Or visit [www.neonled.sk](http://www.neonled.sk)