













## **Features**

- 1.Adopt high quality 5050 LED.
- 2.Flexible and cuttable every 3 or 6 LEDs.
- 3.To achieve rich light changes like dreaming color chasing effects like magic with external controller.
- 4. Multiple specifications for options, customized available.
- 5. Long lifespan with great lumen maintenance.

Bending radius: Rmin=20mm



# Application

landscape lighting, decorative lighting and cove lighting etc.

# Installation

Fix by screws or 3M self adhesive tape

# Pulin Global

# Optical & Electrical Parameters

| Model No.                    | Light Color | Color<br>Temperature<br>(K) | Beam<br>Angle | Typical Luminous<br>Flux value<br>(lm/m) | Ra        | Efficacy<br>(lm/W) | Voltage<br>(V DC) | Power<br>(W/m) |
|------------------------------|-------------|-----------------------------|---------------|--|-----------|--------------------|-------------------|----------------|
|                              | R           | 615-630                     |               | 52                                       |           | 15.5               | 12V               | 3.36           |
| DMXN-5050-30-1               | G           | 515-530                     | 120°          | 76                                       |           | 22.5               |                   | 3.36           |
| 2-RGB                        | В           | 460-470                     |               | 20                                       |           | 5.8                |                   | 3.36           |
|                              | R+G+B       | 100000                      |               | 153                                      |           | 19.9               |                   | 7.68           |
|                              | R           | 615-630                     | 52            |  |           | 15.5               |                   | 3.36           |
|                              | G           | 515-530                     |               | 119                                      |           | 35.5               | 12V               | 3.36           |
| DMXN-F5050-30-12-<br>RGBW    | В           | 460-470                     | 120°          | 29                                       |           | 8.6                |                   | 3.36           |
|                              | W           | 2700-6500                   |               | 134-202                                  | 80+       | 40-60              |                   | 3.36           |
|                              | R+G+B+W     | 100000                      |               | 295-443                                  |           | 30-45              |                   | 9.84           |
|                              | R           | 615-630                     | - 120° -      | 104                                      |           | 15.5               | - 12V/24V -       | 6.72           |
| DMXN-5050-60-12/2            | G           | 515-530                     |               | 152                                      |           | 22.5               |                   | 6.72           |
| 4-RGB                        |             | 460-470                     |               | 39                                       |           | 5.8                |                   | 6.72           |
|                              | R+G+B       | 100000                      |               | 306                                      |           | 19.9               |                   | 15.36          |
|                              | R           | 615-630                     | 120°          | 105                                      |           | 15.5               | 12V/24V           | 6.72           |
| DMXN-F5050-60-12/24-<br>RGBW | G           | 515-530                     |               | 238                                      |           | 35.5               |                   | 6.72           |
|                              | В           | 460-470                     |               | 58                                       |           | 8.6                |                   | 6.72           |
|                              | W           | 2700-6500                   |               | 269-403                                  | 80+ 40-60 |                    |                   | 6.72           |
|                              | R+G+B+W     | 100000                      |               | 590-885                                  |           | 30-45              |                   | 19.68          |

# Temperature-Related Parameters(Normal Working)

| Model No.                 | Power(W/m) | No Brightness<br>Difference MAX(m) | UL Max Run<br>(m) | TA (°C)   | Operating Temp MAXTc(°C ) |
|---------------------------|------------|------------------------------------|-------------------|-----------|---------------------------|
| DMXN-5050-30-1<br>2-RGB   | 7.68       | 4.5                                |                   |           |                           |
| DMXN-F5050-30-12-<br>RGBW | 9.84       | 4                                  |                   |           |                           |
| DMXN-5050-60-1<br>2-RGB   | 15.36      | 3                                  |                   |           |                           |
| DMXN-F5050-60-12-<br>RGBW | 19.68      | 2.5                                | <del></del>       | -20~+60°C |                           |
| DMXN-5050-60-2<br>4-RGB   | 15.36      | 4                                  |                   |           |                           |
| DMXN-<br>F5050-60-24-RGBW | 19.68      | 3.5                                |                   |           |                           |

# **Other Parameters**

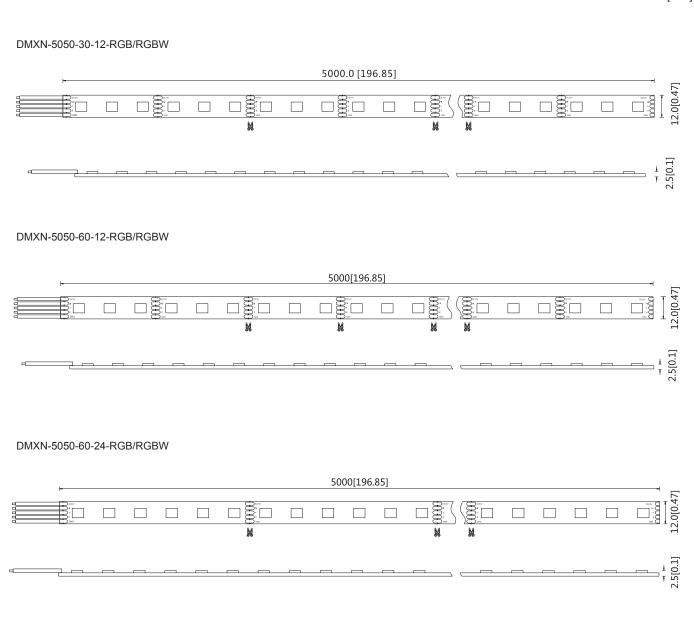
| Model No.                 | LED Quantity(pcs/m) | Min Cuttable Length(mm) | Storage Temperature(°C ) |  |
|---------------------------|---------------------|-------------------------|--------------------------|--|
| DMXN-5050-30-1<br>2-RGB   | 30                  | 100                     |                          |  |
| DMXN-F5050-30-<br>12-RGBW | 30                  | 100                     |                          |  |
| DMXN-5050-60-1<br>2-RGB   | 60                  | 50                      | -20~+70°C                |  |
| DMXN-F5050-60-12-<br>RGBW | 60                  | 50                      | -20~+70 C                |  |
| DMXN-5050-60-2<br>4-RGB   | 60                  | 100                     |                          |  |
| DMXN-F5050-60-24-<br>RGBW | 60                  | 100                     |                          |  |

## NOTE:

- 1.Test environment temperature : 25±2°C.
- 2. Figures above are typical figures. Actual figures could be different with typical figures, and the data is subject to change without notice.
- 3. The luminous flux is tested with corresponding color light on.
- 4.Different color temperature or wavelength will make luminous flux different.
- 5. The luminous efficiency is measured value.
- 6.Max run is in single feed.
- 7. The luminous flux and power tolerance within ±10%.
- 8. Power is the measured power at the normal full light on of the RGB/RGBW lights.

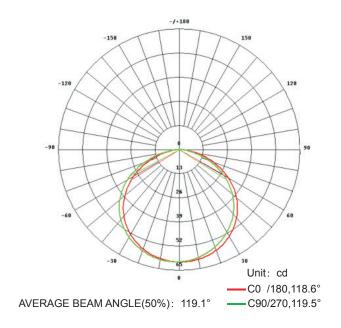
# Profile Drawings

Unit:mm[inch]

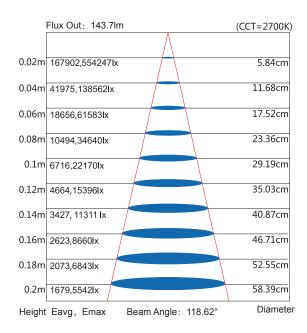


NOTO:For detailed drawing, please consult sales rep.

# Luminous Intensity Distribution Diagram



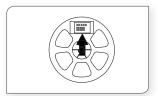
# Average Illumination



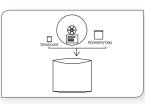
Note: please contact sales for other data.

# 5050 LED STRIP LIGHT DMXN-5050-XXX-XX

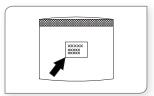
## packing



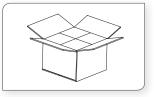
Label the reel;



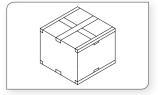
Put reel, accessory bag and desiccant together into static shielding bag;



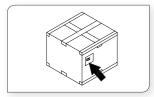
Seal and label the static shielding bag;



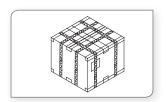
Put the packed static shielding bag into carton box;



Seal the carton box;



Label the box;



Use packing belt to pack. Add edge protectors if necessary.

## **Packaging information**

| Model No.             | Product Size<br>L*W(mm) | Carton Size(mm) | Meter/Reel | Reel/Carton | Net Weight(kg) | Gross Weight(kg) |
|-----------------------|-------------------------|-----------------|------------|-------------|----------------|------------------|
| DMXN-5050-30-12-RGB   |                         |                 |            |             | 10.8(1±10%)    | 15.5(1±10%)      |
| DMXN-F5050-30-12-RGBW |                         |                 |            |             | 10.8(1±10%)    | 15.5(1±10%)      |
| DMXN-5050-60-12-RGB   | 5000X12                 | 550X400X340     | 5          | 80          | 11.6(1±10%)    | 16.3(1±10%)      |
| DMXN-F5050-60-12-RGBW | 5000X12                 |                 |            |             | 11.6(1±10%)    | 16.3(1±10%)      |
| DMXN-5050-60-24-RGB   |                         |                 |            |             | 12.2(1±10%)    | 16.9(1±10%)      |
| DMXN-F5050-60-24-RGBW |                         |                 |            |             | 12.2(1±10%)    | 16.9(1±10%)      |

## Note:

Five meters for a reel and packed in a static shielding bag.

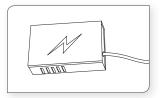
The above quantity and weight are only for the illustrated packaging method. There will be differences in the quantity and weight with other packaging methods.

## Installation

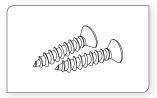
## 1.Products and Tools



DNXN5050-XXX-XX



LED power supply



Self-tapping screw



Cutting tool

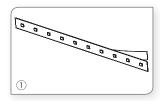


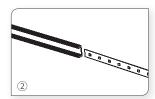


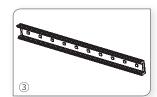
Electric drill

## 2.Installation Methods and Steps

#### Aluminum channel installation



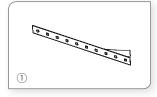


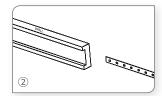


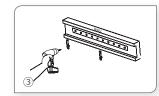


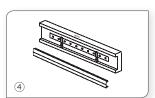
- 1. Peel away the self adhesive tape on the back of strip.
- 2. Cut off the excess part based on the installation position.
- 3. Evenly arrange the strips with appropriate space in the track.
- 4. Install the cover and end cap.

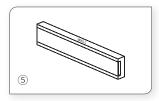
## Covered channel installation





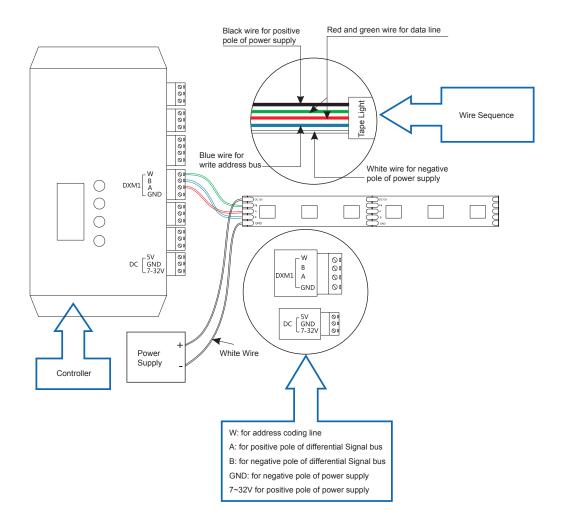






- 1. Peel away the self adhesive tape on the back of strip.
- 2. Cut off the excess part based on the installation position.
- 3. Evenly arrange the strips with appropriate space in the track and fix them with clips.
- 4. Install the cover and end cap.
- 5. Finished

# **Controller Wiring Diagram**



#### Note:

- 1. The controller is MR-502.
- 2. Single port of MR-502 can drive 512 pixels
- 3. The working voltage of the controller is DC 12V
- 4. This example chooses 12V product as an example, if it is 24V product, then choose 24V power supply;
- 5. For additional information, please refer to the MR-502 Instruction Manual.

## **Attentions before installation**

Before installation, check that the product parameters are consistent with the requirements (Seeing product specificationsor 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 insulation, waterproof and anti-corrosive treatment.

If the working length exceeded the max run length, make sure to have extra power supply.

If it needs higher current of a LED, make sure having extra cooling.

## **Common Faults and Troubleshoot**

| Quick Guide  |  |   |  |  |
|--|--|---|--|--|
| Problems   | Reasons  | Solutions   |  |  |
| All LEDs can not light on.                                   | No electric supply.  | Power on  |  |  |
|  | Automatic power protection from the open or short circuit in output of the power supply. | Fix the short circuit problem.  |  |  |
|  | Wrong connection of power supply.  |   |  |  |
| LEDs can not light on partly.                                | Some switching mode power supplies are not powered.                                      | Check the power supply  |  |  |
|  | Power supply line error.   | system to fix it.   |  |  |
|  | Mistaken wire connection of some of products   | Correctly connection  |  |  |
| Brightness of<br>LED<br>is inconsistent<br>tor insufficient. | Power overloaded.  | Replace with more powerful power  |  |  |
|  | Power supply circuit excessive consumption.  | Make sure the working voltage of<br>the product within ±5% of standard<br>voltage, or keep balance by circuit<br>power consumption. |  |  |
|  | Excessive quantities in series connection of the product                                 | Reduce the quantities of the product in series connection to meet requirement.  |  |  |
|  | Connection point fault.  | Remove bad connection point.  |  |  |
| LED flicker.   | Switching power supply failure.  | Replace a new power supply.   |  |  |
|  | Wrong Installation or use of products  | Please follow the instructions  |  |  |

#### **Marning**

- 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.

# **Statements and Recycling**

#### Statements:

Repair should be operated by a qualified technician, 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.