

## **Features**

- 1. Adopt FPC material, good stability and reliability performance.
- 2. Flexible and cuttable, stable quality, reliable use.
- 3. To achieve rich light changes like dreaming color chasing effects like magic with external controller
- 4. Cut or connected according to the required length.
- 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



# **Optical & Electrical Parameters**

Model No.	Light Color	Color Temperature(K)	Beam Angle	Typical Luminous Flux value(lm/m)	Ra	Efficacy (lm/W)	Voltage (V DC)	Power (W/m)
		2700		665		63		
		3000		718		68		
DMXN-5050A-40-12	W	4000	120°	760	80+	72	12	10.56
		5000		781		74		
		6500		802		76		
	W	2700		1276	80+	83	12	15.36
		3000	120°	1306		85		
DMXN-5050A-60-12		4000		1321		86		
		5000		1351		88		
		6500		1382		90		
		2700		1291		84		
	W	3000		1310		85	24	15.36
DMXN-5050A-60-24		4000	120°	1337	80+	87		
		5000		1358		88		
		6500		1387		91		

# Temperature-Related Parameters(Normal Working)

Model No.	Power(W/m)	No Brightness Difference MAX(m)	UL Max Run (single feed)(m)	Ta (°C )	Operating Temp MAXTc(°C)
DMXN-5050A-40-12	10.56	2			
DMXN-5050A-60-12	15.36	2.5		-20~+60°C	
DMXN-5050A-60-24	15.36	3.5			

# Other Parameters

Model No.	LED Quantity(pcs/m)	Min Cuttable Length(mm)	Storage Temperature(°C)
DMXN-5050A-40-12	40	50	
DMXN-5050A-60-12	60	50	-20~+70°C
DMXN-5050A-60-24	60	100	



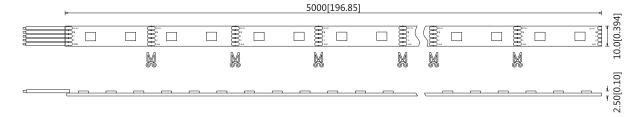
#### NOTE:

- 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 will make luminous flux different.
- 5. The light efficacy is measured value.
- 6. UL max run is in single feed.
- 7. The luminous flux and power tolerance within ±10%.
- 8. Power is tested at the full RGB/RGBW lights normal on and under control.

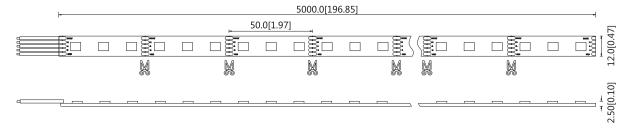
# **Profile Drawings**

Unit:mm[inch]

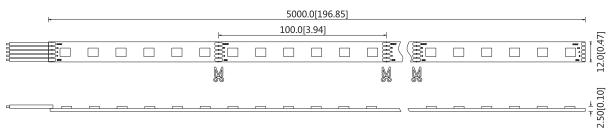
#### DMXN-5050A-40-12



### DMXN-5050A-60-12



## DMXN-5050A-60-24



NOTE: For detailed drawing, please consult sales rep.





# Operating Length VS. Electrical Parameters

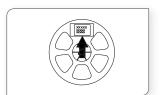
DMXN-5050A-40-12	Operating Length(m)			1)	
Parameters	1	2	3	4	5
Operating Voltage (DC V)	12.0	12.0	12.0	12.0	12.0
Total Current(A)	0.96	1.88	2.48	3.04	3.33
Total Power(W)	11.52	22.56	29.76	36.48	39.96
Head voltage(V)	11.92	11.90	11.84	11.75	11.63
Tail voltage(V)	11.73	11.22	10.84	10.42	10.08
Head Current(mA)	44.00	44.00	44.00	44.00	44.00
Tail Current(mA)	44.00	44.00	44.00	29.00	21.00
Head-to-tail Voltage Drop Rate(%)	1.60	5.70	8.50	11.32	13.33
Head-to-tail Current Drop Rate(%)	0.00	0.00	9.10	34.00	53.00
Single/Double feed	Single feed	Single feed	Double feed	Double feed	Double feed

DMXN-5050A-60-12	Operating Length(m)					
Parameters	1	2	3	4	5	
Operating Voltage (DC V)	12.0	12.0	12.0	12.0	12.0	
Total Current(A)	1.28	2.49	3.49	3.95	4.16	
Total Power(W)	15.44	29.91	41.92	47.40	49.92	
Head voltage(V)	11.87	11.84	11.80	11.78	11.76	
Tail voltage(V)	11.61	10.70	9.49	8.84	8.21	
Head Current(mA)	64.00	64.00	64.00	64.00	64.00	
Tail Current(mA)	64.00	64.00	54.00	40.00	29.80	
Head-to-tail Voltage Drop Rate(%)	2.19	9.63	19.58	24.96	30.19	
Head-to-tail Current Drop Rate(%)	0.00	0.00	10.00-15.63	24.00-37.50	34.20-53.44	
Single/Double feed	Single feed	Single feed	Double feed	Double feed	Double feed	

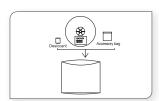


DMXN-5050A-60-24	Operating Length(m)						
Parameters	1	2	3	4	5		
Operating Voltage (DC V)	24.0	24.0	24.0	24.0	24.0		
Total Current(A)	0.63	1.22	1.70	1.93	2.03		
Total Power(W)	15.07	29.19	40.91	46.24	48.70		
Head voltage(V)	23.85	23.79	23.71	23.67	23.63		
Tail voltage(V)	23.45	21.61	19.16	17.85	16.58		
Head Current(mA)	64.00	64.00	64.00	64.00	64.00		
Tail Current(mA)	64.00	64.00	64.00	55.00	41.00		
Head-to-tail Voltage Drop Rate(%)	1.70	9.18	9.18	24.58	29.84		
Head-to-tail Current Drop Rate(%)	0.00	0.00	0.00	9.00-14.06	23.00-35.94		
Single/Double feed	Single feed	Single feed	Single feed	Double feed	Double feed		

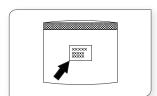
# packing



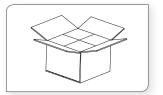
Label the reel;



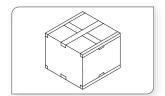
Put reel, accessory bag and desiccant together into static shielding bag;



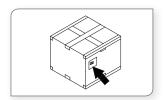
Seal and label the static shielding bag;



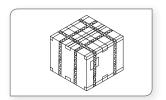
Put the packed static shielding bag into carton box;



Seal the carton box;



Label the box;



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



### Packaging information

Model No.	Product Size L*W(mm)	Carton Size(mm)	Meter/Reel	Reel/Carton	Net Weight(kg)	Gross Weight(kg)
DMXN-5050A-40-12	5000*10				11.60(1±10%)	16.30(1±10%)
DMXN-5050A-60-12	5000*12	550X400X340	5	80	11.60(1±10%)	16.30(1±10%)
DMXN-5050A-60-24	5000*12				12.20(1±10%)	16.90(1±10%)

#### Note:

Every 5m for a reel, one reel for 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

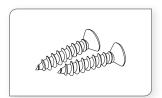
## 1.Products and Tools



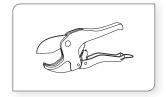
DMXN-5050A-XXX-XX



LED power supply



Self-tapping screw



Cutting tool



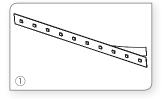
Clips



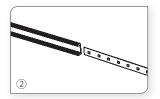


#### 2.Installation Methods and Steps

### Aluminum channel installation



Peel away the self adhesive tape on the back of strip.



Cut off the excess part based on the installation position.



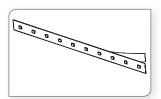
Evenly arrange the strips with appropriate space in the track.



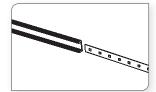
Install the cover and end cap.

#### 2.Installation Methods and Steps

#### Aluminum channel installation



Peel away the self adhesive tape on the back of strip.



Cut off the excess part based on the installation position.

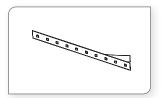


Evenly arrange the strips with appropriate space in the track.

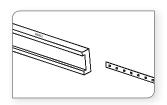


Install the cover and end cap.

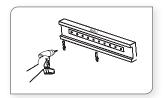
## Covered channel installation



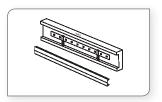
Peel away the self adhesive tape on the back of strip.



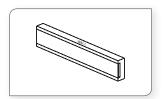
Cut off the excess part based on the installation position.



Evenly arrange the strips with appropriate space in the track and fix them with clips.



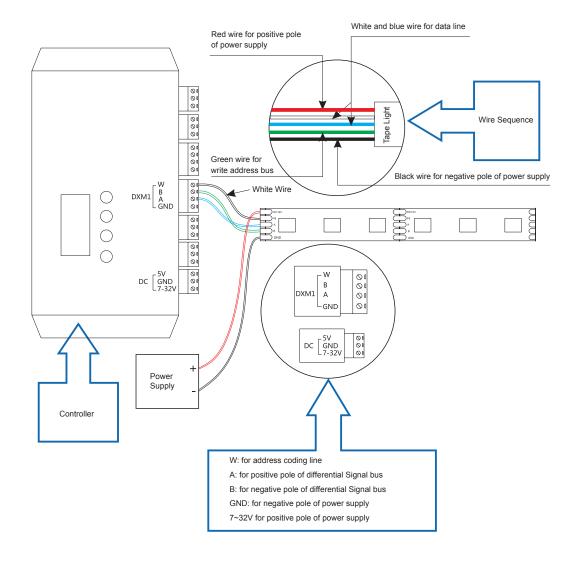
Install the cover and end cap.



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 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 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					
	No electric supply.	Power on					
All LEDs can not light on.  Automatic power protection from the open or short circuit in output of the power supply.  Wrong connection of power supply.	from the open or short circuit in output of the power	Fix the short circuit problem.					
	Some switching mode power supplies are not powered.	Check the power supply					
LEDs can not light on partly.	Power supply line error.	system to fix it.					
ingini on partiy.	Mistaken wire connection of some of products	Correctly connection					
	Power overloaded.	Replace with more powerful power					
Brightness of LED excessive consumption.		Make sure the working voltage of the product within ±5% of standard voltage, or keep balance by circuit power consumption.					
tor insufficient.	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

### Recyclina

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