



Shenzhen Elisa LED Co., Ltd

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Innovation Center, Guanghui Road, Longteng Community, Shiyan
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PRODUCT SPECIFICATION

45mm LED Pixel Light

Model No.: XXA-456/459/4512S-360D





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PRODUCT OVERVIEW

This series of 45mm digital LED pixel lights is designed for both outdoor and indoor applications, widely used in amusement parks, shopping malls, streets, billboards, and window displays. These addressable lights can be set to any color or animated with dynamic effects like running water, chasing, and scanning. The modules combine a UV-resistant, thermostable PVC shell with a high-brightness PCB board. They feature IP65/IP66/IP67 waterproofing with silicone glue protection, are easy to install with a 19mm drill hole, and operate on safe low-voltage DC24V/12V power.

MODEL COMPARISON

Parameter	XXA-456	XXA-459	XXA-4512S-360D
Light Source	6 PCS SMD5050 RGB LED	9 PCS SMD5050 RGB LED	12 PCS SMD5050 RGB LED (front 8leds & back 4leds)
Beam Angle	140° (Standard)	140° (Standard)	300°
Operating Voltage	DC24V / DC12V	DC24V / DC12V	DC24V
Power Consumption	1.44W (max)	2.16W (max)	2.86W (max)
Modula Diameter	45 mm	45 mm	45 mm
Drill Hole Diameter	19 mm	19 mm	19 mm
IC Chip	UCS2903 / GS8206	UCS2903 / GS8206	UCS2903
Cover Type	Flat / Spiral / Linear	Transparent / Milky White	Transparent
Waterproof Rating	IP65 / IP67	IP65 / IP67	IP65 / IP67
Working Temperature	-20°C ~ +50°C	-20°C ~ +50°C	-20°C ~ +50°C
Storage Temperature	-30°C ~ +70°C	-30°C ~ +70°C	-30°C ~ +70°C



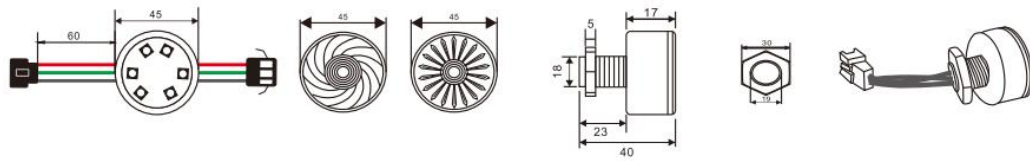
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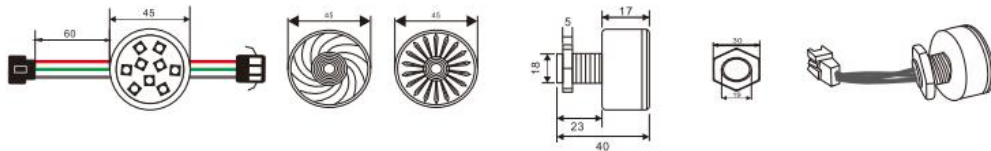
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DIMENSIONS

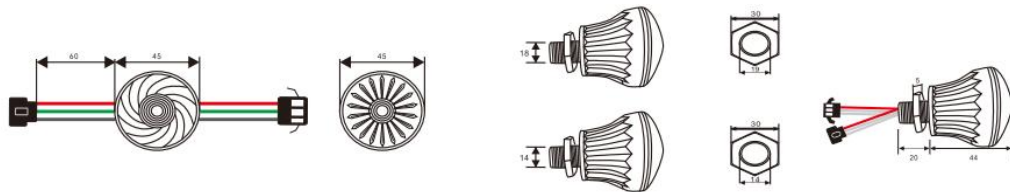
XXA-456



XXA-459



XXA-4512S-360D



ELECTRICAL & CONTROL

Parameter	Specification
Control Type	SD controller, DMX controller, Artnet, etc.
Control Features	Individually addressable; supports dynamic color changing and animation
Connector Type	3-pin / 4-pin JST female and male connectors / waterproof connectors (DAT, DC24V+, GND)
Power Supply	DC24V or DC12V (required)
Power Consumption	1.44W / 2.16W / 2.88W (depending on model)



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FEATURES

1. Individually Addressable

Each pixel light can be set to any color or animated with dynamic effects like running water, chasing, and scanning.

2. Robust PVC Shell

Constructed with a thermostable, cold-resistant, and UV-resistant PVC shell combined with a PCB board for durability.

3. IP65/IP67 Waterproof

Features silicone glue waterproof protection for reliable outdoor and indoor performance across different models.

4. Easy Installation

Standard 19mm drill hole diameter for quick mounting. Aluminum grooves can be customized in color and size.

5. High Performance

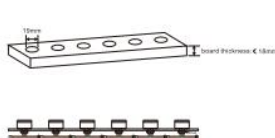
High brightness, low power dissipation, long lifespan (50,000H), low voltage, and low light decline.

6. Optional Covers

Available with Flat, Spiral, and Linear transparent covers (or Milky White) to meet different light distribution needs.

Installation Details: Unit : mm (millimeter)

Install hole diameter :19mm



First insert the aluminum groove and then screw it onto the wall



The color and size of the aluminum groove can be customized





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INSTALLATION ACCESSORIES



Shell and nut



Three caps optional



PCB board



Waterproof and non waterproof connector

APPLICATIONS

Amusement park rides and carousels

Outdoor and indoor architectural lighting

Stage and event lighting

Bar, KTV, and club decoration

Holiday and festival light displays/ Commercial signage and accents





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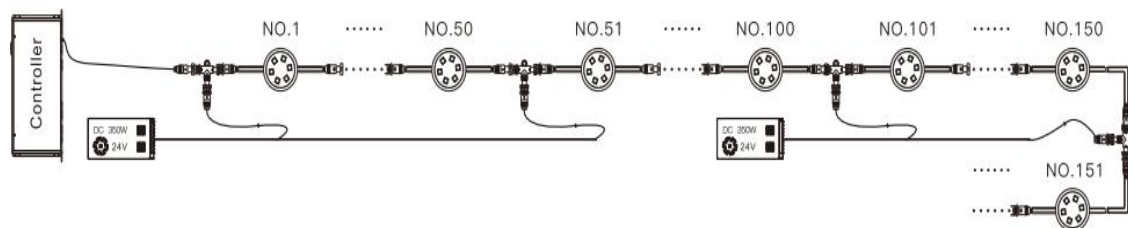
IMPORTANT INSTALLATION NOTES

Consideration	Recommendation
Power Supply	Use a DC24V or DC12V power supply. Do not exceed 25V (for 24V) or 13V (for 12V). Do not short circuit, as this will burn the pixel.
Drill Hole	Ensure the drill hole diameter is exactly 19mm for proper fit.
Mounting	First insert into the aluminum groove, then screw onto the wall.
Connectors	Use 3-pin or 4-pin JST/waterproof connectors (DAT, DC24V+, GND). Ensure proper waterproofing at joints.

SYSTEM SCHEMATIC

Controller → DC24V/12V Power Supply → LED Pixel Light String (XXA-456 / XXA-459 / XXA-4512S-360D)

*Maximum run length dependent on power supply capacity - consult technical support.
The power connection section is for reference only; the actual situation prevails.
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- The power connection section is for reference only. The actual situation prevails.
- Product specifications update, if necessary, please contact us!