YSENLED
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Opple Light Strip Led Low Voltage 24V Bare Board Patch Self-Adhesive Tape Backing Embedded Living Room Aluminum Slot Linear Light Strip

Our Product Introduction

Basic Information

- Place of Origin: SHENZHEN CHINA
- Brand Name: YSENLED
- Certification: CE ROHS LVD EMS
- Model Number: YSR60X5630RA-F3
- Minimum Order Quantity: 10
- Price: Negotiable
- Packaging Details: 10*1000*20
- Delivery Time: 2DAYS
- Payment Terms: L/C, D/A, D/P, T/T, Western Union, MoneyGram
- Supply Ability: 100,000 meters per week

Anodized Aluminum Light Trough
Low voltage 24V anti-electric shock
uniform light transmission

Product Specification

- Size: 1m
- Led Type: SMD 2835
- Certifications: CE, RoHS
- Led Chips: High-power
- Lifespan: 50,000 Hours
- Wattage: 14.4W
- Light Color: White
- Power: 4W/m
- Warranty: 2 Years
- Product: Led Aluminium Profile
- Application: Decorative Lighting
- Price Range: From A Few Yuan To Dozens Of Yuan
- Lamp Power: 14.4W/M
- Shape: Square, Flat, Angle
- Heat Dissipation Design: Good Thermal Conductivity

24V Low Voltage LED Light Strip Product Introduction
**1. Product Overview
24V Low Voltage LED Light Strip (Light Strip LED Low Voltage 24V) is a flexible, energy-saving, safe and versatile lighting product. It uses 24V DC low voltage power supply and achieves uniform light emission through densely arranged LED lamp beads. Compared with traditional 220V high voltage light strips, the 24V low voltage design greatly reduces the risk of electric shock and is suitable for scenes with high safety requirements, such as homes, commercial spaces and humid environments.
2. Core Technical Parameters
- **Voltage Input**: 24V DC (needs to be used with an adapter or transformer, does not support direct access to the mains).
- **Power Range**: 4.8W/m~14.4W/m (depending on the density and brightness level of the lamp beads).
- **Color Temperature Options**:
- Monochrome: 2700K (warm white), 4000K (neutral white), 6000K (pure white), RGB color (adjustable 16 million colors).
- Dual color temperature: 2700K-6000K stepless dimming and color adjustment.
- **Color rendering index (CRI)**: ≥80 (high color rendering model can reach CRI≥90, suitable for art galleries and retail displays).
- **Protection level**:
- IP20 (no waterproof, suitable for dry indoor environments).
- IP65 (silicone encapsulation, dustproof and splashproof, suitable for kitchens, bathrooms, outdoor eaves).
- IP67/IP68 (fully sealed and waterproof, can be used in water, such as swimming pools and waterscapes).
- **Light strip length**: standard 5 meters/roll, supports cutting (each section of cutting interval is 3~6 lamp beads, depending on the model).
- **Lamp bead density**: 60 lamp beads/m, 120 lamp beads/m, 240 lamp beads/m (high-density models have more continuous light without dark areas).
- **Service life**: 50,000 hours (calculated at 8 hours a day, about 17 years).
3. Product Advantages
- **Safety and Low Voltage**: 24V voltage complies with international safety standards (SELV), without the risk of electric shock, especially suitable for children's rooms and metal frame scenes.
- **Energy-saving and High-efficiency**: LED luminous efficiency reaches 100-150lm/W, which is 80% more energy-saving than traditional halogen lamps.
- **Flexible Installation**:
- Can be bent at will (minimum bending radius 3cm), suitable for curved furniture and round decorations.
- 3M tape + buckle slot design on the back, supports pasting or aluminum slot fixing.
- **Smart Control**: Compatible with Wi-Fi, Bluetooth, Zigbee protocols, brightness, color and dynamic effects (gradient, breathing, music rhythm) can be adjusted through mobile phone APP and voice assistant (such as Tmall Genie, HomeKit).
- **No Flicker Design**: Constant current drive solution, stable light without eye damage, suitable for long-term lighting.
- **Low Voltage Drop**: The 24V system has a smaller voltage drop than the 12V light strip, and can still maintain uniform brightness when installed over a long distance (more than 10 meters).
4. Application scenarios
- **Home lighting**:
- Cabinet/wardrobe built-in lighting (high color rendering type improves the color authenticity of clothing).
- Ceiling suspended light trough, stair step light, bed bottom atmosphere light.
- Mirror front light (IP65 waterproof type moisture-proof).
- **Commercial space**:
- Store shelf key lighting, museum display cabinet fill light.
- Restaurant bar decoration, hotel corridor guide light strip.
- **Outdoor/semi-outdoor**:
- Courtyard trails, garden fences (IP67 waterproof type rainproof).
- Car modification (in-car atmosphere light, trunk lighting).
5. Installation precautions
- **Power supply matching**: 24V DC power supply is required, and 20% power reserve is reserved (for example, the total power of 5-meter light strip is 60W, and a power supply of 72W or above is required).
- **Cutting rules**: Cut according to the scissors icon marked on the light strip to avoid damaging the circuit.
- **Heat dissipation design**: It is recommended to use aluminum profile heat sink for high-power light strips (>10W/m) to extend the life.
- **Fixation method**: After cleaning the installation surface, paste 3M glue. In humid environments, additional clips or silicone can be used to fix it.
- **Extension and splicing**: The maximum length of a single light strip is no more than 10 meters. If it is too long, it needs to be powered in parallel (not in series) to avoid voltage drop.
- **Waterproof treatment**: When installed outdoors, waterproof glue or heat shrink tube should be used to seal the joints.
6. Maintenance and care
- **Cleaning method**: Wipe with a dry cloth after power off. Waterproof models above IP65 can be cleaned with a wet cloth.
- **Troubleshooting**: If a single segment does not light up, it is usually because the welding point is disconnected, which can be repaired with a solder-free connector.
- **End of life**: It is recommended to replace it when the light decay reaches 70% to avoid color temperature deviation.
7. Purchase suggestions
- **Select models according to purpose**:
- High brightness requirements (such as main lighting): choose models with 120 lamp beads/m or more and color rendering index CRI ≥ 90.
- Humid environment: IP65/IP68 waterproof model + anti-corrosion power supply.
- Smart home integration: choose models that support DALI or DMX512 protocol.
- **Recommended accessories**:
- 24V dimmable power supply (matching PWM or 0-10V dimmer).
- Aluminum alloy lamp trough (improves heat dissipation and light diffusion effects).
- Wireless controller (such as RF remote control or Wi-Fi gateway).
8. Market positioning
- **Target users**: mid-to-high-end home users, interior designers, commercial space planners, DIY enthusiasts.
- **Competitive product comparison**: Compared with 12V light strips, 24V models are more suitable for long-distance installation; compared with 220V high-voltage light strips, safety is significantly improved but requires additional power supply

costs.

9. FAQ

- **Q: Can the light strip be cut short and then reconnected? **

A: It can be cut, but the rewiring needs to use a waterproof connector, not simply welded.

- **Q: Is it normal for the light strip to heat up? **

A: Slight heat (<50) is normal. If it continues to be high temperature, check whether it is overloaded or has poor heat dissipation.

- **Q: How to detect flicker? **

A: Aim the light strip with the mobile phone camera. If there is no black rolling stripe, it means there is no flicker.

- **Q: Can the waterproof light strip be soaked in water? **

A: The IP68 model can be immersed in water for a short time (such as a fish tank), but long-term underwater use requires special customization.

10. Summary

The 24V low-voltage LED light strip has become a core component of modern lighting design due to its safety, flexibility and high compatibility. Whether it is to create an immersive home atmosphere or enhance the texture of commercial space, precise light effects can be achieved through customized solutions. With the intelligent control system, it can unlock unlimited creative possibilities.