



# LumaLane Presentation

ClairSaf-LumaLane Zebra Projector

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# ClairSaf-LumaLane

Illuminating the path to zero accidents



When traditional paint fades into the darkness or gets lost in headlight glare, the LumaLane steps in. Engineered for extreme conditions and seamless integration, this isn't just a light; it's a comprehensive safety system.

Why the LumaLane changes the game:

- 💡 **Unmatched Visibility:** Whether it's our standard model delivering 14,500 LM or our high-power version blasting up to 38,000 LM, your crosswalk will be seen from every angle.
- ⚙️ **Built to Last:** With an IP65 rating, aviation-grade aluminum-magnesium alloy construction, and operational capacity from -60°C to +50°C, it thrives where other equipment fails.
- 🔧 **Smart & Adaptable:** Featuring a 12-28° zoom, full-range movement (360° horizontal, 270° vertical), and adjustable color temperatures (3200K-6500K), it offers precision for any urban landscape, school zone, or industrial warehouse.
- 🔗 **Traffic System Integration:** Designed to sync with existing traffic control systems via standard interfaces, with customizable pattern playback.

[News](#) [Product Webpage](#) [Product Datasheet](#)

 [Demo Video](#)

# Applications

## Zebra Crossing



# Applications

Zebra Crossing (Shifting green/red color according to the traffic light.)

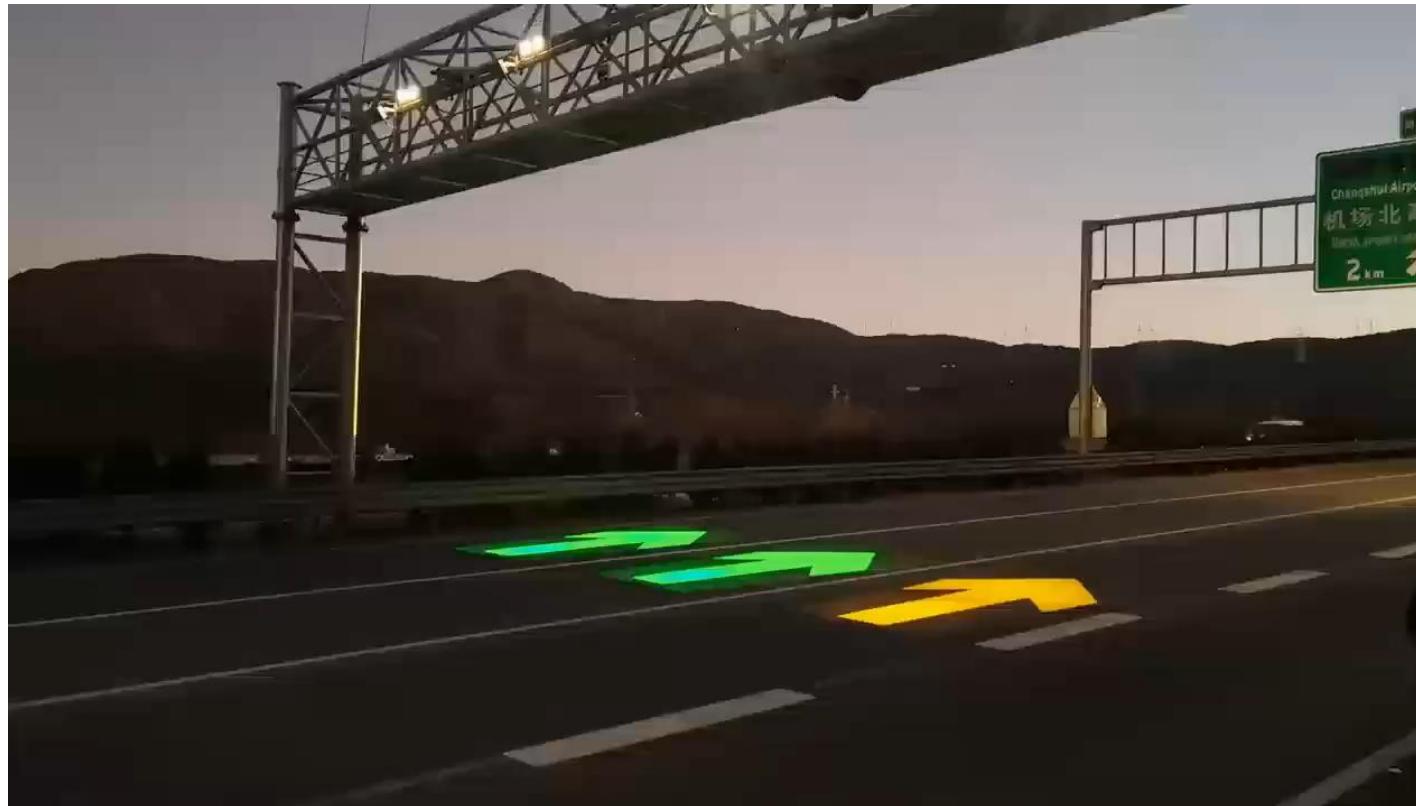
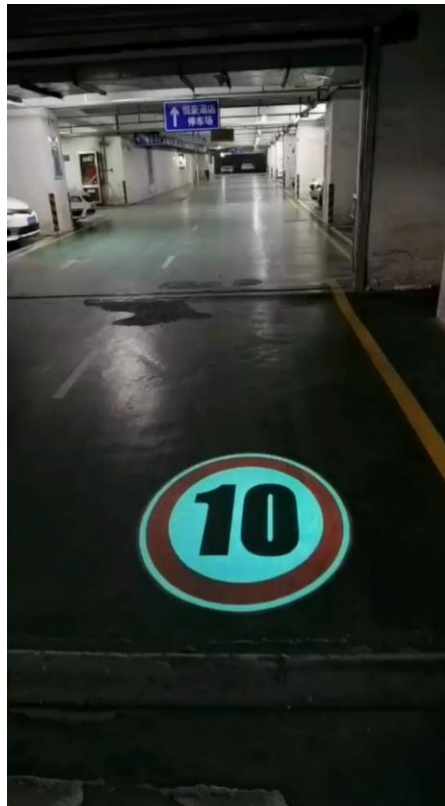
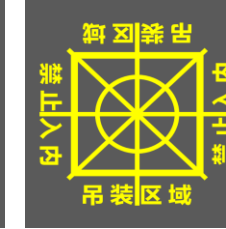
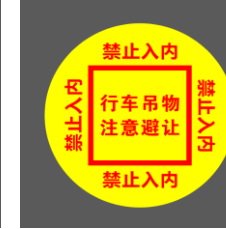


YouTube



# Applications

## Safety Signs



Graphics  
Customizable

...



[YouTube](#)

# Application

## Highway Anti-fatigue Laser Warning Light



# Application

## Outdoor Advertising Projection



# Optional Models

## ClairSaf-LumaLane-6m



This 200W OSRAM LED projector achieves a 3m by 6m coverage area, delivering 14500 LM luminous flux with a 12-28° beam angle and 3200-6500K adjustable color temperature.

| ClairSaf-LumaLane-6m            |                                                                                          |
|---------------------------------|------------------------------------------------------------------------------------------|
| <b>Brightness Adjustment</b>    | Light control, dimming reverse logic, automatic light decay compensation function.       |
| <b>Power Consumption</b>        | 200W, Luminous Efficacy Power: 150W                                                      |
| <b>Operating Voltage</b>        | AC110-240V                                                                               |
| <b>Power Factor</b>             | 0.9                                                                                      |
| <b>Projector Luminous Flux</b>  | 14500 LM                                                                                 |
| <b>Chip Brand</b>               | OSRAM LED Chip Module                                                                    |
| <b>Beam Angle</b>               | 12-28°, Adjustment<br>Angle: Horizontal 360°, Vertical 0-270°                            |
| <b>Optical Maintenance Rate</b> | 97%                                                                                      |
| <b>Color Temperature</b>        | 3200-6500K, Color Rendering Index: Ra>85                                                 |
| <b>Light Source Life</b>        | 60000H                                                                                   |
| <b>Focus Mode</b>               | Manual Linear Focus                                                                      |
| <b>Housing Material</b>         | High-quality aviation-grade aluminum-magnesium alloy, anodized and sandblasted           |
| <b>Cooling Method</b>           | Copper tube refrigerant heat conduction + Active forced-air cooling for heat dissipation |
| <b>Optics Material</b>          | K9 optical glass with yellow-green anti-reflection coating (15μ)                         |

# Optional Models

## ClairSaf-LumaLane-16m



This high-power 1200W projector is designed for a projection distance of 1 to 16 meters, providing a coverage area of up to 16 meters with a wide 73° beam angle and an ultra-high luminous flux of 38000 LM for pedestrian crossing applications.

| ClairSaf-LumaLane-16m            |                                                                                                       |
|----------------------------------|-------------------------------------------------------------------------------------------------------|
| Overall Machine Power            | 1200W                                                                                                 |
| Voltage                          | AC100-240V 50/60Hz                                                                                    |
| LED Driver                       | Separate Constant Current Power Supply                                                                |
| Light Source                     | 1000W Super Engine Module Light Source                                                                |
| Light Source Life                | >20000H                                                                                               |
| Color Temperature                | 8000-8500K                                                                                            |
| Luminous Flux                    | 26000-38000 LM                                                                                        |
| Wavelength                       | 448-455nm                                                                                             |
| Colors                           | Red / Green                                                                                           |
| Dimming                          | Linear dimming with a gradual transition effect from dark to bright                                   |
| Beam Angle                       | 73°                                                                                                   |
| Lens                             | 6-element Ultra HD Optical Lens                                                                       |
| Pattern Playback                 | 0-255S adjustable                                                                                     |
| Control Mode                     | Synchronized operation with traffic control system, compatible with traffic light systems             |
| Channel Quantity                 | Standard pedestrian crossing traffic light: 2 channels                                                |
| Adjustment Angle                 | 180°                                                                                                  |
| Brightness Adjustment            | 1-16 meters<br>Pattern: Customizable imaging pattern                                                  |
| CRI (Color Rendering Index)      | 95Ra                                                                                                  |
| Lightning Surge / ESD Protection | IEC61000-4 (Level 4)                                                                                  |
| Safety Features                  | Lightning protection, overcurrent and overvoltage protection, leakage protection, moisture resistance |
| Pattern Playback Time            | Electronic linear control                                                                             |
| Ambient Temperature              | -60°C to +50°C                                                                                        |
| Fixture Housing                  | Aluminum Alloy, Black (optional)                                                                      |
| Installation                     | Surface-mounted (ceiling), seated                                                                     |
| Protection Rating                | IP65                                                                                                  |
| Product Dimensions               | 34×30×36 cm                                                                                           |
| Product Weight                   | 25KG                                                                                                  |

# Optional Models

Others (Customizable according to your project.)



Input Voltage: AC100-240V 50-60Hz  
**Rated Power: 350W**  
 LED Driver: Custom 300W constant current integrated IP65 waterproof split constant current power supply  
 Color Temperature: 8000-8500K  
 Wavelength: 448-455nm  
 Lamp Life: >20,000 hours, 37,000 LM  
 Effect: Pattern size can be freely designed according to light pole height; patterns can be customized (single color, dual color, full color)  
 Beam Angle: Indicator text size and installation angle can be customized  
 Imaging Lens: Multi-element ultra-high-definition multi-layer coated optical specialty lens  
 GOBO Lens Size: Customizable warning text size and color  
 Pattern Display Time: Adjustable from 0 to 255 seconds  
 Control Mode: On/off switch control  
 Adjustment Angle: 180° vertical adjustment  
**Projection Distance: 1-6 meters**  
 Protection Rating: IP65, suitable for outdoor rainproof use  
 Rotation Drive Type: Silent motor drive  
 Lightning Surge & ESD Protection: IEC61000-4 (Level 4)

Input Voltage: AC100-240V 50-60Hz  
**Rated Power: 300W**  
 LED Driver: Custom 300W constant current integrated IP65 waterproof split constant current power supply  
 Color Temperature: 8000-8500K  
 Wavelength: 448-455nm  
 Lamp Life: >20,000 hours, 35,000 LM  
 Effect: Pattern size can be freely designed according to light pole height; patterns can be customized (single color, dual color, full color)  
 Beam Angle: Indicator text size and installation angle can be customized  
 Imaging Lens: Multi-element ultra-high-definition multi-layer coated optical specialty lens  
 GOBO Lens Size: Customizable warning text size and color  
 Pattern Display Time: Adjustable from 0 to 255 seconds  
 Effect Pattern: Variable speed dual-magnet single Hall magnetic sensor positioning rotary design  
 Control Mode: Standard street light signal protocol & DMX512 protocol, with IP65 touch screen  
 Number of Channels: Customizable  
 Adjustment Angle: 180° vertical adjustment  
**Projection Distance: 1-40 meters**  
 Protection Rating: IP65, suitable for outdoor rainproof use  
 Pattern Change Drive Type: High-speed silent motor drive



**MORE...**

# Project Design Procedure

LumaLane project is highly customizable. Model selection, graphics design, installation location, pattern shifting plan, all need to be designed before the project solution is provided.

So, please provide us with all needed information before you ask for a quote.

## Information Collection

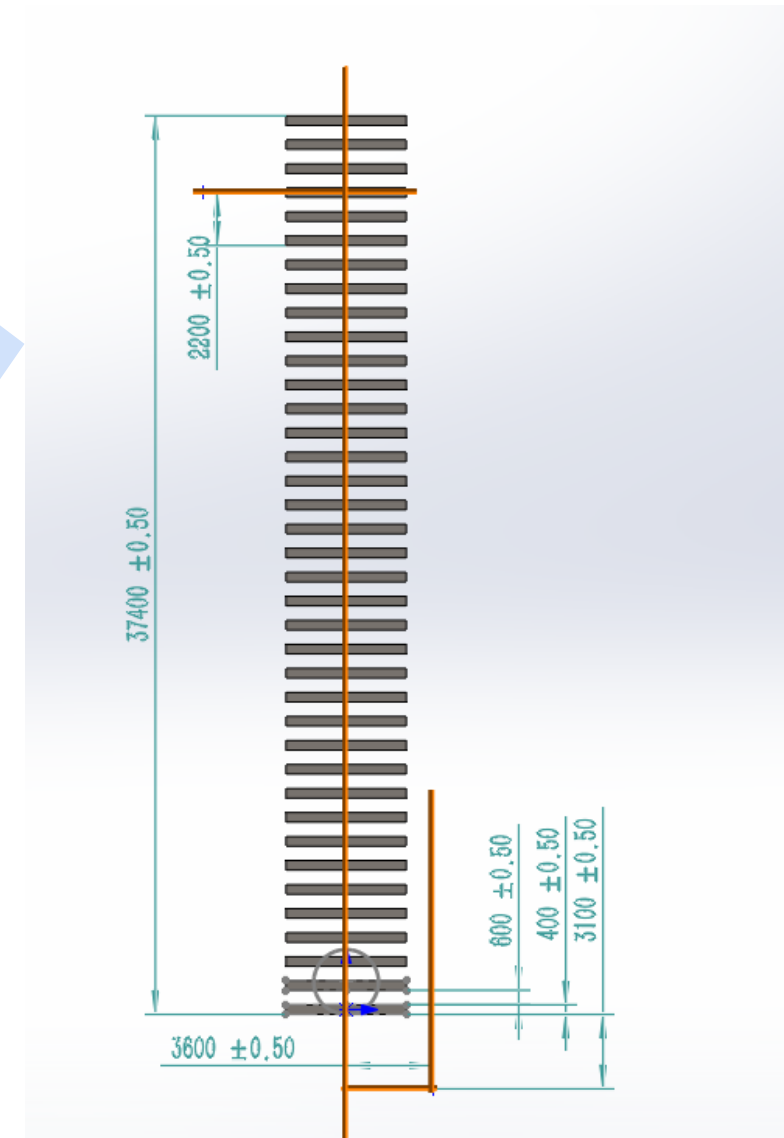
- Provide site drawing including detail dimensions (crossing length, width, pole height, pole location etc.)
- Provide expected graphics in high quality

## Customized Design

- Project design including model selection, installation locations, physical projector slides/lens

## Project Solution

- Provide overall project solution
- Provide overall cost per this project.



# Q&A

## Environmental Limits & Worry of Visual Distraction

Q: Does the projector work effectively during daytime conditions, considering ambient sunlight?

A: The daytime effect is not good due to the strong sunlight. Actually, all our projects done so far (mainly in China) are only for nighttime usage.

Q: How does the projector perform under foggy or low-visibility conditions?

A: It will certainly cause some challenges, but let's say that it will not be worse than the real painted signs on the road.

Q: Have you evaluated whether the laser could cause distraction or discomfort for drivers?

A: Regarding driver visibility, we have validated this through testing. Our lights are installed symmetrically on both sides of the crosswalk, with the projection direction forming a cross pattern relative to the driving direction. This configuration ensures that the light beam is directed primarily across the pedestrian crossing area rather than toward oncoming drivers. As a result, it does not create glare or distraction for drivers.

Q: If we were to project themed images (for example, Christmas or seasonal graphics), will this cause distraction or discomfort for drivers?

A: In our projects, most of the customers have good feedback about this. But we mostly use it to remind the pedestrian or driver for safety messages.

# Q&A

## Graphic Patterns (Slides, Lens)

Q: Can the equipment project other images or graphics besides the zebra crossing?

A: Can be customized for any kind of graphics. You need to provide us with images in good quality, and we will make a projector slide (lens) accordingly.

Q: Regarding the graphics: to change or replace the projection slides, is this only possible manually? From what we understand, these slides are physical objects rather than a fully digital image system?

A: It's a physical projector slide (lens). While we have put all needed physical slides in the projector, it can shift automatically controlled by an internal timer. All pattern slides will be played cyclically. If you need to put a new slide in or change old slides with new, you need to do it manually.

Projector Slides



- Material: Optical Lens.
- Slide compatibility with different projector: Each projector model has its dedicated lens with specific size. It is not compatible between different models.

Q: How many different patterns/slides can be used or stored in a single projector?

A: Different projectors support different numbers of physical projector slides, from 1-6 depends on different models. For example, LumaLane-6m supports 2 and LumaLane-16m supports 6.

# Q&A

## Traffic Light Integration & Timing Plan

Q: When the traffic light is green, does the projected crossing disappear completely, or does it remain visible in another color or pattern?

A: In our design, when the traffic light is green, the crossing is green, and when the traffic light is red, the crossing is red. But it can also disappear while red or green as you demand. see video: <https://bit.ly/4dnKiee>



Q: How to realize traffic light integration?

A: We provide a small control panel hanging on the pole together, realizing traffic light wire integration. The wiring of the traffic signal lights is connected in parallel to enable judgment and synchronization of the signal light status. This setup supports only two phases.

Q: Can the system operate based on a time schedule, meaning that the projection can be activated, deactivated, or switched according to predefined time periods, independently from the traffic light status?

A: It can be realized through the internal timer on the projector. Or complicated timing plan can be realized through the controller. Light sensitive sensor in the controller can help realize automatic plan fully according to environmental light strength.

# Q&A

## Configuration

Q: Does the configuration need to be carried out by your team (for example, remotely)?

A: While it is designed fully according to your requirements, you can realize configuration locally. Don't need our remote support.

Q: Can the configuration be done locally by our team, through software, a control panel, or another interface?

A: If you want to change a new graphic, it needs to be done manually. All other configurations can be done through the touch screen of the projector, or easy configuration to the control panel.



Control Panel  
of the Projector



# Thanks

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