



TraffiClair Monthly Updates

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New Product Release

ClairSaf-LS Laser Signal Smart Crosswalk Warning System



Laser sensor
(Detection range for pedestrians: 0-20m)

Close-range detection
(When detecting a human body within 30cm, the laser shuts off)

Voice broadcasting
(Content and volume adjustable)

Built-in tilt protection
(Device automatically shuts off in case of accidental displacement or tilt)

Red laser group
(Laser light group composed of 28 red lasers at 635nm, projecting laser lines in a 90-degree fan shape, with a total height of 40cm)

Designed to enhance nighttime pedestrian safety at crossings without traffic lights.

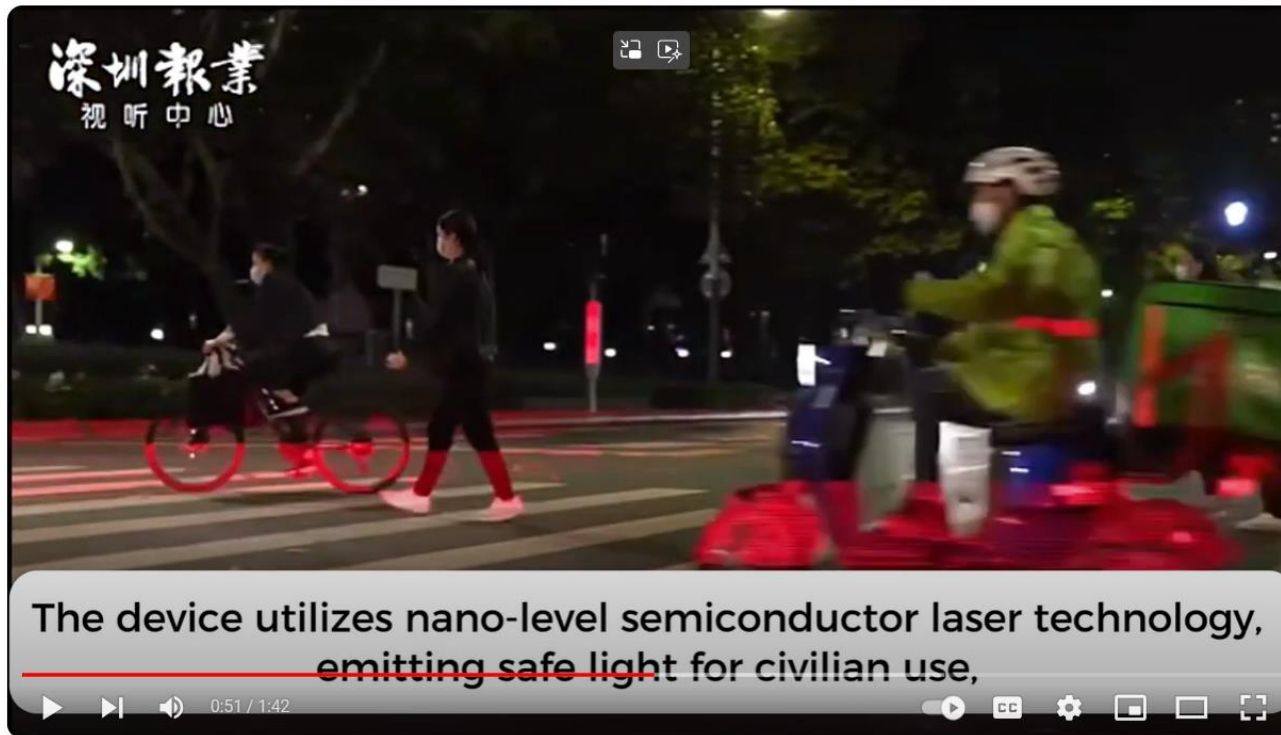
- Overview
- Key Features
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[Check LinkedIn introduction](#)

[Check product webpage](#)

Product Presentation Video

ClairSaf-LS Laser Signal Smart Crosswalk Warning System



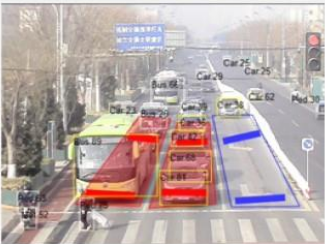
When a pedestrian approaches, the system projects 28 red laser lines onto their shins, creating a visible red area. This warns drivers from a distance, especially in low visibility conditions, and alerts pedestrians to ensure they cross safely. Perfect for city roads, suburban streets, and intersections, the ClairSaf-LS system effectively balances traffic efficiency and pedestrian safety, addressing critical urban road safety challenges.

[View full video on Youtube](#)

Solution Introduction

Brilliantly Compact Traffic Video Detection

Brilliantly Compact Traffic Video Detection



- AI Powered Super Intelligence
- Superior Vision and Video Quality
- Efficient Design and Connectivity
- A Plug-and-play Tool for Signal Optimization



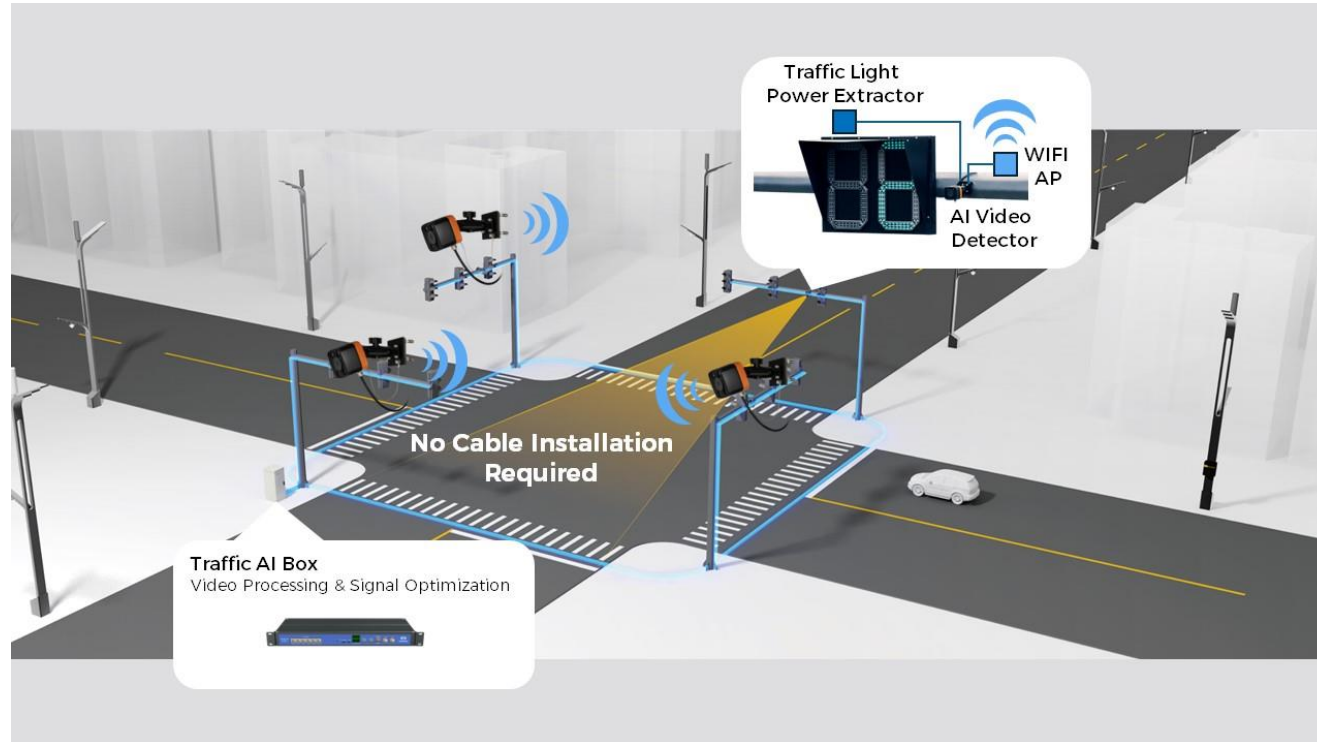
The ClairEye-i is an advanced HD traffic video detector, leveraging cutting-edge neural network processing technology to ensure dependable traffic monitoring even in intricate urban settings. With its sleek and compact design, it allows for effortless installation while maintaining energy efficiency by consuming less than 3 watts.

- AI Powered Super Intelligence
- Superior Vision and Video Quality
- Efficient Design and Connectivity
- A Plug-and-play Tool for Signal Optimization

[Check detail introduction](#)

Solution Introduction

Cable-free Installation: Ultimate Minimalist Signal Control Optimization Solutions



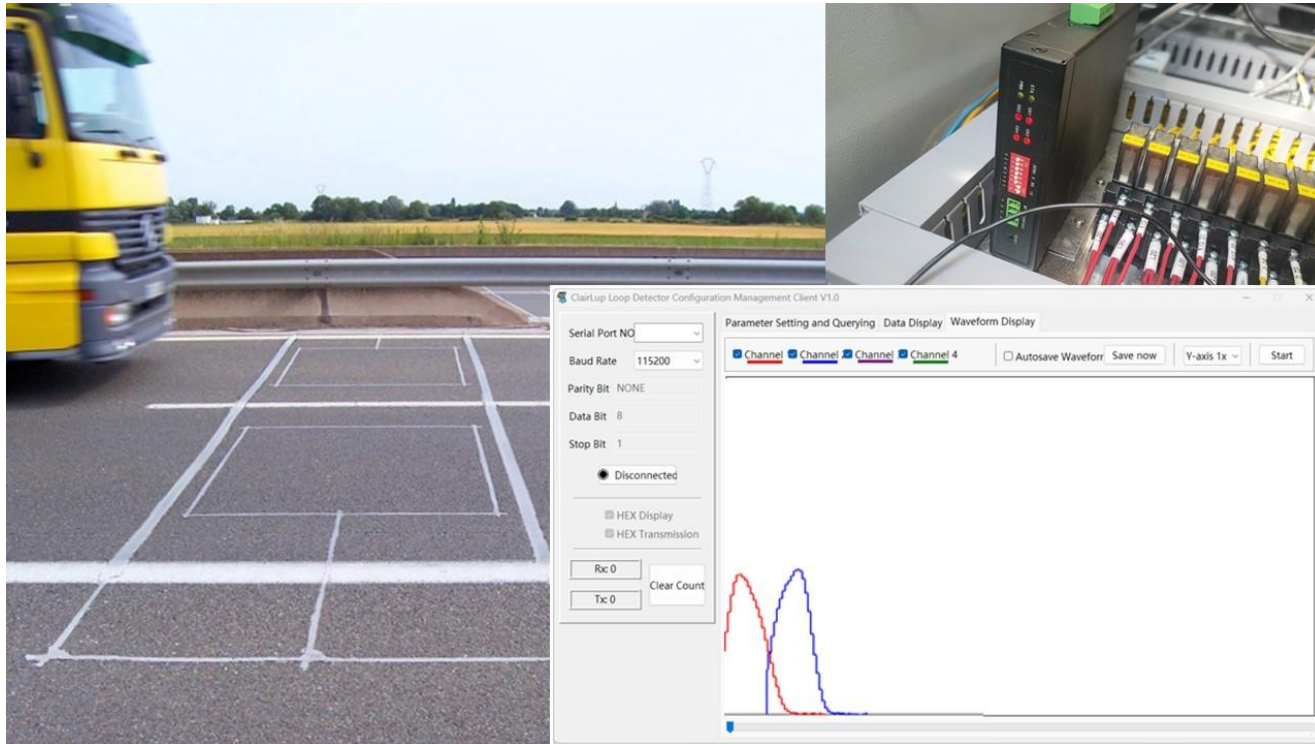
The Ultimate Minimalist System

By integrating AI-driven video detection with advanced signal scheme optimization, our system delivers unparalleled traffic management efficiency. The minimalist design, requiring no cable installation and leveraging existing infrastructure for power and communication, makes it the ultimate solution for modern signal optimization. This innovative approach not only simplifies the implementation but also ensures continuous, adaptive, and intelligent traffic control, paving the way for safer and more efficient roadways.

[Check detail introduction](#)

ClairLup Presentation

ClairLup loop detectors feature a unique real-time waveform display for effortless analysis



The ClairLup loop detector series includes Configuration Management Client software, offering parameter settings, serial output data display, and waveform visualization. The real-time waveform display interface captures inductance changes as vehicles pass through the loops. By continuously monitoring these waveforms, it significantly aids in on-site issue analysis and location tracking, making installation and environmental problems immediately evident.

[Check detail introduction](#)

ClairLup Presentation

ClairLup loop detectors feature cascading for perfect interference resistance



To avoid the interference between loops of closely installed detectors, other brand products will offer different frequency bands for selection. However, it is not a foolproof solution due to limitations in available frequencies, changing environmental conditions, added complexity, and regulatory constraints.

ClairLup loop detectors feature cascading as an ideal solution to avoid interference. By cascading multiple devices, the loops operate on different time slots, effectively preventing signal overlap. This approach ensures clearer signals, enhances detection accuracy, provides scalability, and reduces costs. Additionally, cascading simplifies installation, maintenance, and troubleshooting, resulting in more reliable and efficient traffic detection and monitoring.

[Check detail introduction](#)

ClairLup Presentation

Case Study: ClairLup Loop Detectors Achieve Interference Resistance in Complex Environments

Interference Resistance in Complex Environments



The client's project site is near a railway with a complex surrounding power grid, making it difficult for various detector products to work reliably. By using our detectors and utilizing the waveform display function, we observed severe interference at the site. This interference causes two issues: 1) When there are no vehicles, the interference generates false vehicle presence signals; 2) After a vehicle leaves, the interference prevents the signal from ending, resulting in a continuous vehicle presence signal. By enabling the detector's interference filtering function, we can filter out the superimposed signals, reliably detecting vehicle entry and exit, perfectly meeting the client's application needs.

[Check detail introduction](#)

ClairLup Presentation

Resolving Dead Lock Issues Caused by Heavy Vehicles with ClairLup Loop Detectors



At the client's project site, there was a recurring issue where the output signal would persist even after a vehicle had left, causing the detector to enter a locked state. After replacing the existing detectors with ClairLup detectors, we discovered that the inductance variation caused by certain vehicles, particularly heavy trucks, was significantly skewed. This skewing prevented the original detectors from correctly recognizing when a vehicle had departed, resulting in the lock state. By utilizing the waveform characteristics, ClairLup detectors can accurately determine whether a vehicle has truly left, even with significant inductance variations. This capability ensures that the signal ends correctly, effectively resolving the lock state issue. As a result, our detectors can quickly output a departure signal, preventing lock states and ensuring reliable operation.

[Check detail introduction](#)

ClairLup Presentation

Intelligent algorithms successfully addressed the challenge posed by the weak signal of high-chassis vehicles



In the client's project, there was a recurring issue of intermittent signal loss when high-chassis vehicles passed over the loops, resulting in multiple vehicle detections from a single vehicle. Upon switching to our product, we observed that the inductance variation from high-chassis vehicles was minimal, with some positions showing changes close to or below zero. Conventional detectors would inevitably experience signal loss in such scenarios. However, our algorithm effectively identifies this situation and ensures uninterrupted signal output.

[Check detail introduction](#)

ClairLup Presentation

ClairLup loop detectors feature a response time less than 10ms



ClairLup features a response time less than 10ms

The response time of ClairLup loop detectors is less than 10ms, whereas similar products in the market typically have response times ranges from 24ms to 100ms. A response time of less than 10ms provides significant advantages in terms of accuracy, efficiency, safety, and the ability to support advanced traffic management and smart city applications. While a response time of 24ms to 100ms is adequate for many current needs, the faster response time is critical for high-precision, real-time applications and future-proofing traffic management systems.

[Check detail introduction](#)

ClairLup Presentation



ClairLup Inductive Loop Detectors

For Traffic Control and Car Parking Counting

Response time <10ms

Interference resistance

Anti-lock algorithms

Advanced detection algorithms



Fast fundamental frequency refresh

Adaptive to a wide inductive range

Real-time waveform display

Capture rate > 99.9%

[Download Presentation-V2](#)

Join the journey towards the future of mobility.

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Thanks

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