

INTEGRATED LED WARNING TRIANGLE SYSTEM
Rear Window Mounted Emergency Visibility Solution

Visibility Saves Lives

From Passive Warning to Active Protection



Executive Summary

This document introduces an innovative rear-window integrated LED warning triangle system designed to enhance vehicle safety in emergency situations.

Unlike conventional external warning triangles this system is permanently installed inside the vehicle enabling instant activation and significantly improving visibility and response time.

Market Problem

- Traditional warning triangles require manual setup outside the vehicle
- High risk exposure for drivers during roadside emergencies
- Delayed visibility in low-light or high-speed traffic environments
- Increasing global focus on vehicle safety and intelligent systems

Solution Overview

The integrated LED warning triangle system is installed inside the rear window of the vehicle, allowing immediate activation during emergencies without requiring driver exit.

Key Advantages

- Instant deployment
- Enhanced visibility
- Driver safety protection
- Seamless OEM integration

Product Features

- High-intensity LED strobe lighting
- Wide-angle visibility coverage
- Interior-mounted design
(no external setup required)
- Durable automotive-grade materials
- Low power consumption
- Flexible integration with vehicle electrical systems

Installation Concept

- Mounted on rear window
(upper left & right corners)
- Connected to vehicle power system
- Optional integration with hazard or emergency signals
- Designed for OEM or aftermarket adaptation

Application Scenarios

- Vehicle breakdown on highways
- Emergency stops
- Poor visibility conditions (rain, fog, night)
- Fleet safety and commercial vehicles
- Emergency Roadside Stop Condition
- Short-Duration Vehicle Stop

Competitive Advantages

- Eliminates need for manual triangle placement
- Reduces driver exposure risk
- Faster response time compared to traditional solutions
- Differentiated safety feature for OEM vehicles
- Patent protection under application in multiple countries

OEM Integration Value

- Enhances vehicle safety rating potential
- Adds smart safety feature differentiation
- Compatible with global vehicle platforms
- Supports future intelligent vehicle development

Intellectual Property

Patent Pending in 5 Countries

2073TW Taiwan Patent
Applying No.:114202140
Register No.:M675674
Patent No.: M675674

2073CN China Patent
Applying No.: 2025204588567
Patent No.:Z L 2025 2 0458856.7

2073DE Germany Patent
Applying No.: 202025101662.1
Patent No.: 202025101662

2073PPA U.S.A Patent(Pending)
Application No.:63/762,659

2073JP Japan Patent(Pending)
Applying No.:2025-001031

Company Information

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Know Your Ride Before It Arrives

50 Meters. Zero Confusion

One Light. Three Functions

Warning ▪ Identity ▪ Communication

Windshield Upper-Corner Integrated Design



Front Windshield Smart Interaction Module

Integrated at the upper left
and right corners of the front windshield.

- Enables DRL and Robotaxi
signaling without affecting visibility

Robotaxi Passenger Identification (50M)

Green LED strip activates within 50 meters
when approaching passenger.

Enhances identification and safety

Dual Function DRL+Interaction

White LED functions as DRL during driving

Same module supports green interaction signal

Control System

ECU / CAN controlled

Software-defined behavior

OTA ready

OEM & Glass Value

OEM: No redesign needed

Glass Supplier: Smart value-added integration

Strategic Position

Defines new category:

Vehicle-to-Human Communication