

## SafeTrak 1++ Lane Departure Warning (LDW)

### LDW That You Can Count On

*Alerting distracted or fatigued drivers to unintended lane changes could prevent thousands of roadway departure crashes involving large trucks each year. The Takata LDW system combines a small video camera and sophisticated machine vision software to watch the road ahead and warn drivers if they unintentionally leave their lane, or if their driving pattern becomes erratic.*

Takata, the world leader in safety products, provides reliable yet cost-effective LDW to achieve fleet safety and driver-training goals, while reducing the number and severity of large truck crashes and fatalities.

### Unparalleled LDW Performance

Core competencies in image processing, analysis and more than 200 man years of experience allows Takata to achieve a LDW system that maximizes driver safety and promotes good driving habits. The Takata LDW uses advanced image analysis to detect a wide variety of lane markings, such as dividing lines on the highway, regardless of lighting or weather conditions.

Day or night, in sun, rain, or snow, the Takata LDW consistently detects lane position and vehicle trajectory. Even where there are no visible solid, dashed or reflective lane markings, the Takata LDW has the power to detect subtle features such as tracks or the road edge to provide reliable lane tracking and driver alerts under most driving conditions.



Takata LDW fully integrates camera, optics, processor, I/O and power supply into a compact and robust unit, which is installed directly on the windshield.

### Easy Installation

The Takata LDW system fully integrates camera, optics, processor, I/O and power supply into a compact and robust unit, which is installed directly on the windshield in less than one hour.

### Simple Setup and Operation

Automatic calibration refinements and integrated diagnostics simplify setup and operation. The windshield-mounted camera acquires images of the road ahead, while the processing unit continuously calculates lane position and vehicle trajectory. A driver interface warns if the vehicle is about to drift out of the lane.

### Advantages

- Compact, all-in-one design
- Warns of unintended lane changes
- Promotes driver awareness
- Encourages turn-signal use
- Minimizes nuisance alerts
- Detects all types of lane markers
- Tolerates degraded lane markers
- Performs in all weather and lighting conditions
- Provides optional access to driver performance statistics
- Offers extendable architecture
- Includes flexible inputs and outputs
- Enables Telematics interface

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### Flexible Deployment Options

Flexible deployment configurations designed to meet or exceed heavy vehicle industry specifications, provide cost-effective LDW solutions for a variety of OEM and aftermarket applications. The Takata LDW integrates easily with existing display panels in OEM applications. For the aftermarket, Takata provides two options: a display integrated with the windshield-mounted sensor, or a remote display panel.

### Optional Driver Performance Statistics

In addition to monitoring lane keeping performance and providing drowsiness alerts, the Takata LDW offers optional data recording capability to generate statistics. With this feature enabled, the system tallies lane departures, drifts, alerts, turn signal use and other data that can be used to assess driver performance and to improve driver-training programs. The system provides three data-retrieval options for evaluation: via USB to a laptop, existing mobile fleet management systems or using Takata proprietary wireless service.

### Specifications

#### OUTPUTS

Lane Departure Warning	LED visual notification
	Audio notification
	Optional integration with on-board computer and/or on-board display unit
Drowsy Driver Alerts	LED visual notification
	Audio notification
	Optional integration with on-board computer and/or on-board display unit
SYSTEM Status	LED visual notification
	Optional integration with on-board computer and/or on-board display unit

#### INPUTS

Required	Turn signals
Optional	Brake signal, speed signal, wiper status

#### DATA COLLECTION (Optional)

Performance Statistics	Lane departures, drift alerts, turn signal use, alertness scores and other performance values
Data Access	Computer access: Data transmitted over RS-232 Wireless: Data posted to private web page

#### POWER

Operating Voltage	12VDC
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#### MECHANICAL

Size	3.25" (D) x 2.75" (H) x 4.0" (W)
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