

OEM Solutions Intelligent Vehicle Safety Systems

AssistWare
TECHNOLOGY
www.assistware.com

KEY FEATURES

- **Data Interface** transfers information to / from vehicle bus, including: turn signal & brake states, velocity, and warning messages.
- **Low False Alarm Rate** improves usability and driver acceptance.
- **Modular Design** supports a variety of form-factors and hardware interfaces.
- **Alertness Indicator** warns driver of decreased performance prior to a lane departure.
- **All Weather Operation** provides protection during a wide range of driving situations including: night driving, snow and rain.
- **Adjustable Sensitivity** allows driver to customize system performance.
- **Black-box** recorder provides video log and performance data timeline prior to an incident.
- **Scalable Architecture** supports additional functionality such as rain sensing, ambient light detection and adaptive headlights.

SafeTRAC Lane Tracker

SafeTRAC is an in-vehicle safety system that uses a forward-looking video camera to monitor the road ahead. It tracks road features to determine a vehicle's position and trajectory and generates a warning if a vehicle begins to drift out of its lane. SafeTRAC also detects drowsy or distracted driving by sensing weaving or erratic lane keeping.



▲ **Package Options:** A modular design enables flexibility in packaging including: On-dash (left), custom in-dash (right) and embedded (center).

◀ **Seamless Integration:** SafeTRAC can easily be interfaced to an existing vehicle information center.



▲ **Camera View:** By monitoring lane markings SafeTRAC can determine if a road or lane excursion is imminent. In addition to calculating lane position, road geometry and other parameters are also available

WARNINGS

- Roadway Departure
- Unsignaled Lane Change
- Alertness Indicator

TRACKS

- Lane Position
- Road Geometry
- Lateral Velocity
- And More...

TRUCK
FLEETS



PASSENGER
VEHICLES



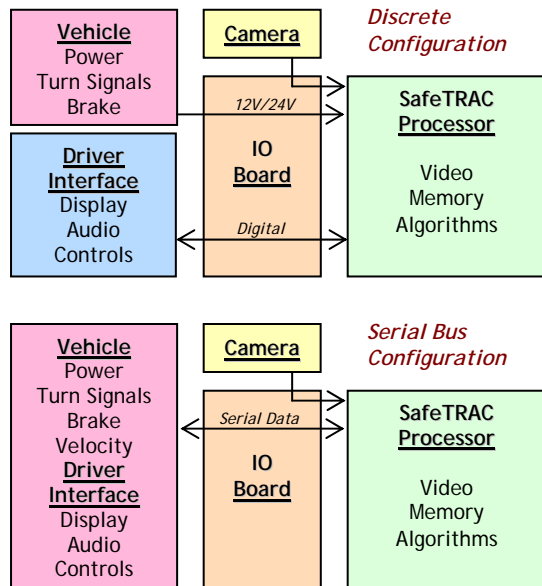
OEM
SOLUTIONS



SafeTRAC Lane Tracker

Modular Design

SafeTRAC's unique design enables OEMs to implement a vehicle-specific interface without effecting the core processing hardware or algorithms. This greatly reduces implementation costs and time.



- SafeTRAC processor is an independent board that contains all of the core lane tracking and communications functionality
- IO board provides interface to vehicle systems and hardware and may be provided by Assistware or implemented by OEM.
- SafeTRAC supports both discrete and/or serial communication interfaces
 - Discrete Inputs: 12V or 24V turn signal & brake inputs
 - Serial Inputs: J1708, J1939, CAN, etc. turn signal, brake, and velocity
 - Serial outputs: Status, warning indicators and diagnostics.

◀ **Configurations:** SafeTRAC can be integrated by discretely connecting to vehicle signal lines, or by tying directly to the vehicle's serial communication bus.

Installation & Integration

SafeTRAC is provided as a fully connectorized assembly for fast integration into existing wiring harnesses.

- A proprietary self-calibrating feature enables SafeTRAC to be setup without special tooling or alignment.
- A programmable vehicle configuration file allows SafeTRAC to be pre-programmed for a specific vehicle model, or customer specification without any hardware changes.
- Small form-factor camera can be mounted directly to the windshield, headliner or embedded in the rear-view mirror (when applicable).

◀ **Customization:** SafeTRAC can be easily customized to fit the mounting requirements for a variety of vehicles including passenger cars, commercial trucks, R/Vs and buses.

