

Guardian Alert™ Microwave Backup Warning Expands from Trucks to Cars

Sense Technologies, Inc. recently announced an agreement with a US automobile OEM to begin comparative testing of the **Guardian Alert™** microwave backup safety device directly against the OEM's currently available ultrasonic production unit.

Success with In-Town Truck Fleets

Guardian Alert is a patented, FCC-approved, environmentally sealed, high-impact unit that provides a driver both visual and audible warnings of the presence of objects up to 9 feet (2.8 m) behind his or her vehicle. The company has had success in selling their devices to truck fleets that operate in urban or suburban environments. "The increasing number of accidents -- frequently involving critical injuries to children -- caused by the inability of vehicle operators to see low objects behind them, has led to intense research

and the developments of revolutionary prevention devices," said **Gerry McIlhargey**, President of Sense Technologies. "With our Guardian Alert back-up warning device, the first available microwave system that detects objects and indicates the distance behind a vehicle, we are offering consumers a solution." The system enables drivers to "see" approaching objects using a combination of visual and audible signals.

"Safety has become a main priority for many of the utility and transportation companies," said distributor John J. J.

Kraus, executive vice president of sales for **S&S Distributing**. "Safety Directors are seeking reliable accident prevention devices for their fleet operations, that are high quality, cost-effective, easy to install and virtually maintenance free — Guardian Alert is the answer." Companies such as **United Parcel Service** and **Alabama Power** are among many that have adopted the system (*see box*).

Designed to be mounted at the rear of a vehicle, the Guardian Alert projects and receives microwave signals within a predefined area behind the vehicle



Guardian Alert's unobtrusive integral license plate mount

a000622_guardian | 2000 June 22

incorporating a unique range gated pattern of detection. The system detection zones are preset to cover up to 12 feet (3.7 m) behind the vehicle, but custom patterns in excess of 40 feet (12.3 m) may be produced upon special order. The unit is powered by a vehicle's back-up light circuitry; this activates it instantly once the vehicle is put into reverse, and shuts it off automatically when in neutral or in a forward gear.

The sensor utilizes a proprietary pattern that covers the entire rear surface, and detects the presence of objects by the doppler shift caused by an object's movement. This method purportedly eliminates false alarms and increases driver responsiveness by boosting confidence in the unit's accuracy. The company claims that their microwave-based system, unlike other types on the market (e.g., ultrasonic), is not adversely affected by rain, snow, mud, light, or other environmental factors.

Aces the Dishwasher Test

Touting the robust system packaging, Kraus relates: "We placed our new unit in a dishwasher and cycled the wash and heat for 60 cycles, then tested

the unit in both a static and road test; the unit performed to 100% of expectation. There aren't many products that can stand up to this sort of treatment and still continue to perform as designed."

The Guardian Alert unit, about the size of a pack of cigarettes, can be integrated within a license plate mount (*see photo*) or bought as a stand-alone unit. Prices range from \$325 for the license plate mount to \$579 for a heavy duty truck mount.

Automotive Playoffs Underway

For the automotive OEM evaluation, the Guardian Alert device has been installed on a regular-production vehicle equipped with an optional ultrasonic backup safety device. The testing process will allow various drivers of the test vehicle to accurately compare the performance of the two units in a variety of driving situations and weather and road conditions.

Sense Technologies is also

developing a program-mable unit for use in testing by any automotive OEM or Tier 1 supplier. This test unit will allow manufacturers to adjust the detection pattern for different vehicle platforms, and to select and modify any combination

"Safety has become a main priority for many of the utility and transportation companies."

*John Kraus, Executive VP
S&S Distributing*

of zones and ranges as the vehicle is being driven. The program-mable unit is being delivered by request to the OEM mentioned above and two additional Tier 1 suppliers.

The Guardian Alert will be installed on the OEM's various other vehicle types for further platform-specific evaluation. All installations will place the sensor unit behind or under the rear bumper cover of each vehicle, which effectively makes the unit invisible, maintaining vehicle aesthetic design integrity. The company says that no



performance impairment occurs from this installation configuration.

Public Awareness Campaign

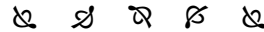
The company is looking to get the word out about the dangers of rearward moving accidents and the solutions available for collision warning.

Toward this end, Sense Technologies has initiated a Public Awareness Program to create

dialogue among government and industry leaders and to solicit public commentary. The company hopes that this might generate support for legislative or regulatory action requiring back-up collision warning systems to be included as standard safety equipment, as are seatbelts and airbags today.

Director **Bruce Schreiner** of Sense Technologies mentions that the

company has mailed a compendium of professional papers and documents related to backing crashes countermeasures to each member of the United States **House** and **Senate** committees on transportation, as well as to key personnel in the **Department of Transportation** and the **National Highway Traffic Safety Administration** (NHTSA).



*For more information,
check out
www.sensetech.com.*