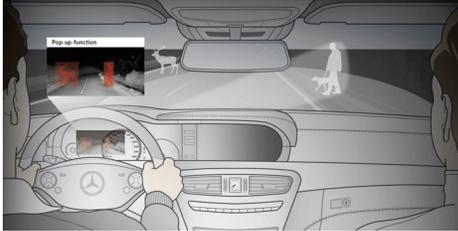


Spotlight on Technology: Night Vision Safety Technology from Autoliv Can Help You See Better at Night!



If you've ever driven on a poorly lit road after twilight, you know how hard it can be to see either animals or pedestrians in the dark. If you've ever seen a fox, deer, or other nocturnal animal flash across your headlights on a desolate road, then you also know how scary -- and potentially dangerous -- poor night visibility can be.

Deer-vehicle collisions cost an estimated \$3.5 billion in the U.S. each year, resulting in more than 25,000 driver injuries. In Europe, the costs are estimated to exceed a billion Euros annually. Collisions with pedestrians are a major cause of death, with more than 100,000 people killed each year worldwide. In fact, the National Highway Traffic Association says that the risk for fatal pedestrian accidents is almost four times greater at night than during the day, and each year more than 40,000 pedestrians are killed at night, just in the United States.

Autoliv's third-generation night vision system with animal detection can help drivers avoid these collisions -- reducing death and injury as well as costly vehicle repairs. In fact, the company claims its safety technologies save as many as 25,000 lives each year, and can prevent ten times that many injuries. (Not to mention eliminating the emotional trauma that comes with such collisions.)

These systems work using Far Infrared imaging (much like the optics used in military-issue night-vision goggles) that scans the road for pedestrians and other moving objects up to four times beyond the headlight range. The infrared camera registers people and animals based on their body heat and movements, then alerts the driver and displays their enhanced images on a screen positioned in either the dash, instrument cluster, or heads-up display (depending on how the manufacturer implements the display). It even works to identify objects that may be hidden by fog or smoke. The systems typically alert the driver to moving people and animals --even bicyclists -- along the road edges, hidden among tree lines along the road path, and in front of the vehicle about 100 to 150 yards ahead of the vehicle, and depending on the speed of travel, give the driver up to 10 seconds to react.

It's very scientific and can seem complicated, so if you're the curious type, we recommend additional reading the detailed explanation of how it works at [HowStuffWorks](#). In Europe, some of these systems will also illuminate a path to the feet of the moving object to help the driver locate it in the dark. (Unfortunately, United States safety regulations do not allow such a system in American vehicles... YET. Autoliv is cooperating with NHTSA to include the strobe in future systems.)

I recently had the opportunity to meet with Autoliv Night Vision General Manager Richard Seoane and Managing Director Stuart Klapper of the largest automotive safety company in the world, at their offices in Santa Barbara, California.

The pair described years of research in numerous parts of the world -- even including animal sanctuaries -- during which more than 200 engineers and scientists joined to study animal shapes and behaviors to develop a product that will work for many different species around the world.

"Pedestrians are a lot easier to detect because they're more predictable," said Klapper. "There are so many different types of sizes and shapes of animals, and they all act differently," Klapper explained. Plus, animals don't exactly comply with testing protocol: Their research had to detect animals hiding behind rocks and bushes, not just walking alongside the road.

After that, they gave us a chance to drive a specially equipped BMW at night, so that we could see how the system works in real life. First we tested it using a deer decoy hidden in their parking lot; then we took it out on the dark roads around Santa Barbara. It was amazing to see bodies walking in traffic, and even bicyclists in the roadway, highlighted on the car's display screen. At one point, Klapper even ran back and forth across the street in front of the car to demonstrate how the system works, and to prove his confidence in how WELL it works. I must say, even on a planned route with a willing participant, intentionally driving a car straight at a person without hitting the brakes is really hard to do. Don't try this at home, folks! It's impressive technology that definitely contributes additional safety assistance to the driver under conditions of poor visibility and darkness.

Which Cars Currently Offer Night Vision Technology by Autoliv?

Mercedes-Benz Night View Assist Plus

•Mercedes-Benz is debuting animal detection as part of the Night View Assist PLUS system offered on its 2014 S-Class sedan. The cost of the system adds about \$2260 to the luxury sedan's base price of \$93,825 (not including destination), and uses infrared sensors and cameras to detect pedestrians and animals up to 500 feet away, then displays the image on the instrument panel in front of the driver. [To see how the Night View Assist PLUS system works on the Mercedes S63, click here.](#)

Audi Night Vision Technology

•Audi will add animal detection to its Night Vision Assistant package on 2014 Audi A6, A7, and A8 (and the S models); depending on the model, this option can add from \$2300 to \$2800 to the cost of the vehicle. The Audi system alerts the driver if an object moves into the car's path and can deploy other driver assistance technologies, such as the braking guard, which jolts the car to alert the driver and then preloads the brakes for immediate effectiveness under emergency stopping. [Click here to see how the Night Vision Assistant works on an Audi.](#)

BMW's Connected Drive night vision

•BMW's Connected Drive night vision option has been available on the 7-Series since 2005, and will expand to include animal detection in its 2014-model-year 5-, 6-, and 7-Series sedans and coupes. The option, which uses a camera in the front grille to detect pedestrians from 10 to 100 yards away and alerts the driver with a sound and warning on the control display, adds about \$2600 to the cost of the vehicle. [To see how Night Vision technology works on a BMW, click here.](#)

Ready to Go Shopping for a New Car with Night Vision Technology?

These systems may seem costly right now and are only available on select premium and luxury vehicles, but as with any technology, we can expect those costs to drop as the product becomes more widely implemented into more mainstream vehicles. What's more important is the lives these night vision systems can save and damage they can prevent.

If you're interested in buying a vehicle with Night Vision pedestrian and animal detection, be sure to visit TrueCar.com to receive eligible incentives and upfront guaranteed savings off MSRP (in most states). You can shop with confidence at a Certified Dealer and experience a hassle-free shopping experience.