



Autoliv Electronics Night Vision makes night driving safer

Two top-tier vehicles I recently reviewed- the BMW 750Li and Rolls-Royce Wraith share the best night vision system fitted to a vehicle.

Although there are some systems out there that will illuminate the road in the infotainment display, the system by Autoliv takes the distance seen a step farther by using an algorithm that detects the heat signatures of pedestrians and animals. It then in turn warns the driver in the Heads Up Display. I recently had the opportunity to sit down with Richard Seoane, General Manager at Autoliv Electronics Night Vision.

Autoliv has been a Tier One safety supplier for over 60 years, but they are especially proud of the new Night Vision systems. The systems use infrared to detect the heat signature of humans and animals at a distance far greater than the human eye is capable of. Seoane pointed out some of the hurdles necessary to keep the system working for years flawlessly: “We have to pay special attention to distortions because of rain,” he said. Additionally, when the snow is coming down, and night vision can come in the most handy, is typically when the lens gets the most road salt and snow occlusion. Autoliv has teamed up with BMW and Mercedes to add a high-pressure washer jet to make sure the lens remains clean.

Perhaps the best future use of the system has been dubbed Dynamic Spotlight. Rather than use the infotainment screen in the center stack, Dynamic Spotlight uses a special tight beam of light mounted close to where the factory fog light would be. Animals or pedestrians are automatically illuminated. If you notice in the BMW video I linked to above, the illumination goes from steady to a slow pulse to a rapid pulse to alert the driver of the distance between the vehicle and the animal. The effect is amazing, and the driver does not need to look anywhere unnatural — just at the road ahead.

So why don't we see this drool-worthy tech on US models? Ah, the hurdles of getting any new technology passed through the labyrinth of FMVSS and NHTSA regulators. Seoane pointed out the administrative body worried about the potential for the system to blind other drivers. However, the system has already proven itself in Europe. The US has some archaic headlight laws on the books — that is why you don't see laser beam headlights at four-circle showrooms. Yet. By the way, Autoliv has partnered with Audi and can make the system work just by illuminating different LEDs in the OEM headlight! We hope NHTSA opens its eyes and sees the light (sees the dark?!) and allows the Dynamic Spotlight technology in the US. There are more than 1 million deer-vehicle collisions in the US every year. Much more happen that aren't even reported. That's just deer. More importantly, there are pedestrians out there, too. Any technology that makes it so easy to save lives should be strongly considered by our government.