

Arguably the most remarkable technology on the new second-generation Volvo S60 is its optional pedestrian detection and automatic braking system.



The key to the system is the Electronic Scanning Radar (ESR) integrated in the grille. The ESR scans for pedestrians in the road or people who may step into the vehicle's path. The radar, which supports other safety systems such as the adaptive cruise control, was developed by Delphi.

While the radar detects objects in front of the car and figures out their distance, images from a camera positioned in front of the rearview mirror help evaluate the type of obstruction ahead. The camera is supplied by Delphi, with Mobileye providing the computing power to analyze the data.

The pedestrian detection and automatic braking system, upon detecting an imminent collision, sounds an alarm, flashes a light in the head-up display provided by Hella, and prepares the brakes to make a hard stop. If the driver fails to stop the car, the system automatically engages the brakes. The technology helps prevent pedestrian collisions at speeds of up to 34 km/h. At higher speeds, the collision will occur if the driver is unresponsive, but with less force, reducing the pedestrian's injuries.

Magna provide an optional camera in the front grille to assist in situations when visibility is obscured, such as when moving out of a garage. Because the camera has a 180-degree field of view, the output—displayed as two images on an interior screen—informs the driver what is to the left and right, enabling the vehicle to be moved forward without the risk of collision.

The S60's other important safety features include a Blind Spot Information System (BLIS), which alerts drivers to vehicles in the rear blind spots on both sides of the car.

This is from Samvardhana, who bought Visiocrp from Schefenacker.