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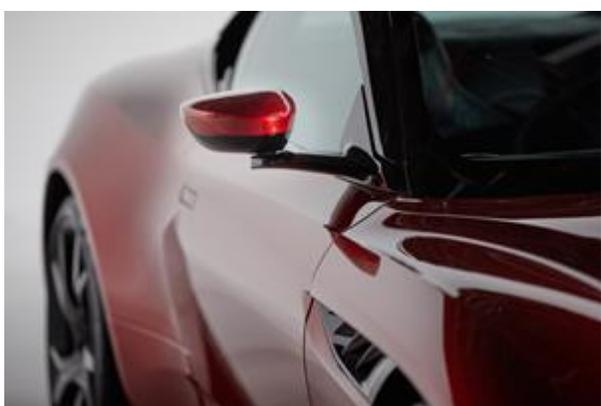
Gentex Debuts State-of-the-Art Rear View System for Next-Generation of Aston Martin Vehicles at CES 2020

January 2, 2020

ZEELAND, Mich., Jan. 02, 2020 (GLOBE NEWSWIRE) -- Gentex Corporation and Aston Martin announced today they've jointly developed a camera-based rear vision system for future Aston Martin vehicles that dramatically improves a driver's ability to monitor traffic to the rear and sides of the vehicle. Integrated into an Aston Martin DBS Superleggera for demonstration, the first prototype of the system will be displayed in Gentex's booth at the 2020 Consumer Electronics Show (CES) in Las Vegas, next week.



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This Aston Martin DBS Superleggera features a hybrid camera monitoring system (CMS) that uses three cameras to provide a comprehensive view of the sides and rear of the vehicle. Side-view cameras are discretely housed in each of the vehicle's exterior mirrors; their video feeds are combined with that of a roof-mounted camera and displayed together in multiple composite views that are streamed to the driver via a rear-view mirror-integrated display inside the cockpit.



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The video feed from this roof-mounted camera is combined with the feeds from the exterior-mirror-integrated cameras and displayed in multiple composite views in the Gentex Full Display Mirror (FDM).



Central to the hybrid CMS solution is the Gentex rearview-mirror-integrated display known as a Full Display Mirror (FDM). The FDM can function as either a standard auto-dimming rearview mirror or as an

LCD display. When used as a display for CMS, the driver can choose between various viewing modes that present the three camera feeds in various intuitive combination views.

This unique rear vision system – known as a camera monitoring system (CMS) in the automotive industry – uses three cameras to provide a comprehensive view of the sides and rear of the vehicle. Side-view cameras are discretely housed in each of the vehicle's exterior mirrors; their video feeds are combined with that of a roof-mounted camera and displayed together in multiple composite views that are streamed to the driver via a rear-view mirror-integrated display inside the cockpit.

The Gentex and Aston Martin collaboration is part of an ongoing development program to bring CMS to future Aston Martin vehicles. For the current prototype, Aston Martin provided overall styling and engineering direction; Gentex integrated the system's cameras, image processing software, and mirror-integrated display; and Gentex partnered with exterior mirror supplier Lumatech to engineer the exterior mirrors.

"The solution that Aston Martin chose is a hybrid CMS technology, meaning that the vehicle incorporates both cameras and standard reflective mirrors for side vision," said Gentex Chief Technology Officer Neil Boehm. "We believe a hybrid solution is the most practical and comprehensive because it's engineered to meet automaker, driver, safety and global regulatory requirements."

A key attribute of a hybrid CMS solution is that it enhances safety by ensuring the system is fail safe. Should weather conditions or system failure disrupt the digital view, drivers can still use their traditional interior and exterior mirrors. The new hybrid CMS also supports user preference and acceptance by permitting drivers to use standard mirror views, camera views, or a combination of both. The system can also be tuned to meet the various regulatory field-of-view requirements around the world by using different types of flat and curved glass, combined with simple alterations to the video viewing modes.

The Gentex/Aston Martin CMS solution also includes a unique auto-adjust feature that dynamically alters the video feeds from the exterior-mirror-integrated cameras to adjust for mirror position. When the driver adjusts the exterior mirrors, the system digitally optimizes the camera field-of-view to provide ideal sideward vision.

"As a global luxury brand, our vehicles combine benchmark beauty and quality with performance and driver-assistance features that evoke a sensory response," said Aston Martin Chief Marketing Officer Simon Sproule. "The goal of this development program with Gentex is to ultimately implement a unique CMS solution that enriches the Aston Martin driving experience for our customers around the world."

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Gentex recently began shipping its FDM for use in the 2020 Aston Martin DBS GT Zagato. The FDM was integral in supporting the next evolution of evocative Aston Martin Zagato design language without compromising rearward visibility. Featuring a sharply raked full-length carbon fiber roof that references the voluptuous shapes of the original DB4 GT Zagato, the DBS GT Zagato FDM streams live video from a single, rearward-facing camera to provide a clear, bright, panoramic view behind the vehicle.

CES (the Consumer Electronics Show) is the world's gathering place for all who thrive on the business of consumer technology. Owned and produced by the Consumer Technology Association™, it has served as the proving ground for innovators and breakthrough technologies for over 50 years. This year's show runs January 7-10 in Las Vegas, Nevada.

Gentex technologies will be on display in the Las Vegas Convention Center, Tech East, North Hall, booth #9013.

For more than 106 years, Aston Martin Lagonda has committed itself to the engineering and design of the world's most beautiful hand-crafted high-luxury vehicles; a tradition that continues even today. Its status as one of the world's most recognizable brands was born from a reputation for building segment defining two-door sports cars and grand tourers. As the company enters its second century of manufacturing great British automobiles, its diversified portfolio now includes its first-ever Sport Utility Vehicle, the DBX – available later this year – and a commitment to building a range of mid-engine hypercars and electric vehicles. Visit www.AstonMartin.com for additional information on the current and future portfolio of cars and SUVs.

Founded in 1974, Gentex Corporation (NASDAQ: GNTX) is a supplier of automatic-dimming rearview mirrors and electronics to the automotive industry, dimmable aircraft windows for aviation markets, and fire protection products to the fire protection market. Visit the company website at www.gentex.com.

Photos accompanying this announcement are available at

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