

GENTEX CORPORATION

Gentex to Showcase New Tech at CES 2020

January 6, 2020

Gentex CES Booth Highlights

- **All-new Full Display Mirror features, including touch screen, active illumination and lane-line projection**
- **Mirror-integrated digital video recorder (DVR)**
- **Hybrid and fully digital camera monitoring systems**
- **Dimmable sunroofs, visors, side windows and pillar displays**
- **New in-vehicle smoke detector for autonomous vehicles and rideshare operators**
- **Concept smart lighting, cabin sensing and biometric systems for aerospace**

LAS VEGAS, Jan. 06, 2020 (GLOBE NEWSWIRE) -- At CES 2020, [Gentex Corporation](#) (NASDAQ: [GNTX](#)), will demonstrate a host of new features and technology concepts that dramatically expand the Company's digital vision, car connectivity and sensing, and dimmable glass product lines.

Gentex is a long-time supplier of electro-optical products for the global automotive, aerospace and fire protection industries. It's best known for supplying nearly every major automaker with connected-car technologies and advanced electronic features that optimize driver vision and enhance driving safety.

"2020 stands to be a hallmark year for us," said Gentex Chief Executive Officer Steve Downing. "As a tech company, we're committed to leveraging our skill sets in unique ways, so at CES, we're debuting new features in every product category – features ready for immediate vehicle integration along with technology concepts ideal for new mobility models and the coming autonomous age."

Digital Vision

One such product category is digital vision, a space Gentex leads with its [Full Display Mirror](#) (FDM), an intelligent rear-vision system that uses a custom camera and mirror-integrated video display to optimize a vehicle's rearward view. The system captures video from a rearward-facing camera and streams it to a unique mirror-integrated LCD that provides the driver with an unobstructed, panoramic view behind the vehicle.

The FDM offers bi-modal functionality. In mirror mode, the product functions as a standard rearview mirror, but with the flip of a lever, the mirror enters display mode, and a clear, bright, LCD display appears through the mirror's reflective surface, providing a wide, unobstructed rearward view.

This year at CES, Gentex is demonstrating all-new FDM features, including a touch-screen that allows the driver to adjust the display's view with the touch of a finger. The Company is also demonstrating two concepts that enhance nighttime driving: active illumination, which uses rearward-facing infrared emitters to illuminate the FDM's rearward view, and lane-line projection, which overlays the rearward scene with digitally generated lane lines to enhance lane keeping and awareness.

Gentex's FDM is central to the Company's camera monitoring systems (CMS), which use three cameras to provide comprehensive views of the sides and rear of the vehicle. At CES, Gentex will demonstrate [hybrid CMS](#), which integrates the side-view cameras into the vehicle's exterior mirrors, and fully digital CMS, which replaces exterior mirrors with side-view camera pods and curved interior OLED displays.

The Company is also showcasing a mirror-integrated digital video recorder (DVR), or dash cam, which is designed to capture road scenes, accidents, vandalism, and other traffic events. The system is capable of recording from forward- and rearward-facing cameras and comes with an integrated SD card slot for transferring video files.

Dimmable Glass Systems

Gentex is the world's leading supplier of dimmable devices, shipping over 42 million units annually. The Company's current product portfolio consists of glare-eliminating interior and exterior rearview mirrors, and electronically dimmable windows for the aerospace industry.

This year at CES, Gentex will continue to demonstrate large-area dimmable devices for in-vehicle lighting, sunload, and privacy control. The Company's booth will feature multiple vehicles equipped with fully functioning dimmable sunroofs, which can darken on demand or in conjunction with system intelligence. Gentex will also demonstrate dimmable head-up displays, privacy panels, and sensor shrouds.

New for this year's CES are dimmable side windows, fully-integrated dimmable windscreen visors, and a unique pillar display that provides the driver with helpful alerts as they approach the vehicle, such as charging status, tire pressure, or security system

notifications.

Car Connectivity & Sensing

Gentex is a long-time supplier of connected car features, including HomeLink, the industry's most widely used and trusted car-to-home automation system. More than 100 million HomeLink-equipped vehicles are on the road around the world today.

HomeLink consists of vehicle-integrated programmable buttons that can operate virtually any type of home automation device. It utilizes two transmission modes: radio frequency (RF) to activate entry-critical appliances such as garage doors and security gates, and cloud-based wireless transmission to operate home lighting, thermostats, smart outlets, security systems, and other IOT devices.

At CES, Gentex will demonstrate [HomeLink Connect](#), its new home automation app that pairs with the vehicle and allows drivers to operate home automation devices from the vehicle's touch screen or Bluetooth-enabled rearview mirror, which was recently launched in the aftermarket.

Gentex's CES lineup will also include [Integrated Toll Module](#) (ITM), a nationwide toll collection technology for factory integration into new vehicles. The system uses a mirror-integrated, multi-protocol toll tag that provides motorists with access to toll roads throughout the U.S.

To enhance the security of connected car features, Gentex will demonstrate an in-vehicle [biometrics system](#) that authenticates the driver with an iris scan to deliver customized security, comfort and convenience features. The system consists of a mirror-integrated display, near-infrared emitters, an iris-scanning camera, and system-level intelligence.

Gentex will also debut a developmental [in-cabin sensing](#) unit that uses a variety of methods to detect smoke, vape, VOCs and other airborne contaminants in the vehicle. These units will become increasingly important for autonomous vehicle operators in order to keep passengers safe and vehicles clean. At CES, Gentex will showcase the first smoke detector designed to detect smoke and vape within the vehicle environment. The Company is currently working with an autonomous vehicle manufacturer to fine tune the system, which consists of a sensing unit placed within the vehicle's ductwork where it continuously samples the air quality. Once smoke or vape is detected, the vehicle operator could be notified, the vehicle flagged for cleaning, and the offending passenger assessed a fine.

The Company's emerging sensing technologies stem from its experience in fire protection, an industry in which Gentex has operated for nearly 50 years. Gentex pioneered the world's first dual-sensor photoelectric smoke detector, a device less prone to false alarms yet quick to detect slow, smoldering fires. Today, millions of Gentex smoke detectors and signaling devices can be found in hospitals, hotels, office buildings and other commercial properties around the world.

Aerospace

Gentex is the world's leading supplier of [electronically dimmable windows](#) (EDWs) for the aerospace industry. EDWs allow passengers to selectively darken the aircraft windows as desired while still enabling them to view the scenery outside. Not only do EDWs eliminate the need for traditional window shades, but they also incorporate a heat control solution which blocks infra-red energy from entering the cabin from outside – thus lessening dependence on air-conditioning systems.

Gentex EDWs feature high-speed transition between clear and dark and a new ultra-dark low-end transmission. Compared to previous designs, the latest EDWs darken twice as fast and become 100 times darker, effectively eliminating more than 99.999% of visible light.

At CES, Gentex will display its latest EDW solutions along with new aerospace concepts that leverage technologies originally developed for the automotive industry, including an [in-cabin sensing](#) system tuned to identify explosive or incendiary components during the boarding process. The system could also monitor cabin air quality while detecting smoke, vape and other airborne contaminants. Another concept is [smart lighting](#) that uses a machine vision camera to monitor flight crew activities and control focused LED pods that selectively illuminate crew task areas without bothering passengers.

All of [Gentex's CES technology](#) will be integrated into hands-on product displays, functional vehicles, and an all-new Gentex-designed [vehicle simulator](#) that allows customers to experience the Company's technology in a vehicle-like setting. It will all be incorporated into a new 1,700 square-foot, multi-story booth in the Las Vegas Convention Center, Tech East, North Hall, stand #9013.

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.

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.

Gentex Media Contact

Craig Piersma
(616) 772-1590 x4316

Gentex Investor Relations Contact

Josh O'Berski
(616) 772-1800 x5814

craig.piersma@gentex.com

josh.oberki@gentex.com



Source: Gentex Corporation