MEETING NOTICE & INVITATION
Pacific Northwest Chapter • Society for Information Display

Automotive Aftermarket Head-Up Display (HUD) Needs, Challenges, and Future Success Factors

Barton Jenson, Founder and CTO
LightSpeed Interfaces, Inc.

Wednesday, Nov 30th at 6:00 P.M.

Esterline Control Systems
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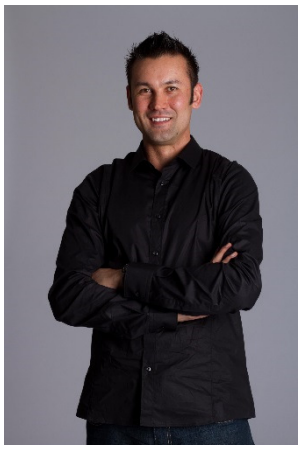
Everett, WA 98204

Abstract

Head-up Displays, originally developed for fighter jets and aviators, have slowly made their way into the automobile over the last three decades. In 2014, approximately 1.2M automobiles worldwide were equipped with an original equipment manufacturer (OEM) head-up display (HUD). With over 500M vehicles in North America and Western Europe, this leaves a huge number of drivers without the benefits of HUD technology. Many reasons account for this including, but not limited to: the need for a special windshield, display technology maturity, high system cost, integration challenges in the automobile, regulatory issues, and limited relevant content available for viewing. Recently, several companies attempting to address the needs of the driving masses are developing aftermarket HUDs. Aftermarket HUDs can be retrofit into existing vehicles without a special windshield. However, many of the challenges for OEM HUDs listed above remain, and several new challenges arise. This talk discusses the need, and challenges for aftermarket HUD products. Additionally, key requirements are outlined along with a survey of potential solutions. Finally, success factors are discussed for the future of aftermarket HUDs. The primary focus will be on automotive aftermarket HUDs, with some discussion about other vehicle platforms.



Speaker Biography

Barton has 20 years of engineering and technical leadership experience in the fields of electro-optics, lasers, head-up displays, and electronics systems. Previously at Lockheed Martin Laser Systems (formerly Aculight), he led multi-million dollar development programs that resulted in the deployment of numerous products around the world including; commercial and military mapping LiDAR lasers, space docking laser (TriDAR STS-128, STS-131), laser electronics for IRCM systems (CH-47 Chinook, UH-60 with documented saves in Afghanistan and Iraq) and other products in use around the world. Barton has also implemented state of the art manufacturing infrastructure for high volume production of free space optical communication transceivers, commercial aircraft, and LED Lighting products.

Barton founded LightSpeed in 2010 to pursue his passion for creating revolutionary optics and electronics products. LightSpeed focuses on the development of novel aftermarket head-up display (HUD) and human machine interface (HMI) products for retrofit into automobiles, industrial vehicles and aircraft.

Barton holds a M.S. degree in Physics, as well as a B.S. in Mathematics and B.S. in Physics from the University of Washington.

Seminar

The Seminar is free. Please join the speaker for a no-host dinner after the seminar. Directions to the restaurant will be provided at the seminar. Non-Members are welcome. RSVP to Gary Johnson at Gary.Johnson@tek.com or (503) 627-1985. Please indicate if you plan to participate in the dinner.

The Pacific Northwest Chapter of the Society for Information Display was established for the following purposes:

- To support the activities and purposes of SID.
- To encourage and contribute to the scientific and educational advancement in the field of information display and to promote its use.
- To provide forums for the exchange and dissemination of ideas and knowledge relating to the field of information display.

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