



Navigation, Entertainment, and Wireless Abound at CES

Join TRG and a panel of experts as we discuss opportunities in automotive telematics at the Consumer Electronics Show (CES)

January 5, 2006 (1:30-2:30 room #258 LVCC)

MINNEAPOLIS, MN, December 22, 2005 – Telematics is about the wireless delivery of information and content to (and from) autos. From emergency call buttons to satellite radio, telematics is a host of technologies and solutions that bring wireless technology into the car. According Telematics Research Group, the annual Consumer Electronics Show (CES) in Las Vegas is the place to see the greatest variety of telematics-related solutions.

“CES has become the show for telematics,” says Phil Magney, TRG’s principal telematics analyst. According to TRG, there were 51 brands of Bluetooth solutions and 47 brands of portable navigation systems at CES last January. TRG says this year will be bigger and better with close to 100 brands of navigation systems and 75 brands of Bluetooth solutions on display at CES. Other technologies such as satellite radio, HD radio, real-time traffic, and GPS tracking solutions will be in abundance too.

Aftermarket Solutions	2005 at CES	2006 at CES
Portable Navigation	47 Brands	60+ Brands
In-Vehicle Navigation Systems	33 Brands	50+ Brands
Rear Seat Entertainment	20 Brands	30+ Brands
Bluetooth Solutions	51 Brands	75+ Brands

What you can Expect at CES 2006:

Bluetooth -- A common theme at CES, nearly all wireless device manufacturers support Bluetooth in one way or another. The most common applications are hands free phones devices but Bluetooth is just now getting deployed for music players. Expect a handful of first-time Bluetooth audio solutions to make their debut at CES.

Portable Navigation Devices – PNDs include dozens of products based on PDA-like form factors. The key selling point is portability and the ability to travel with these devices from car-to-car. This category is now being characterized by a convergence of technologies and applications—most new devices combine navigation with other features such as MP3 or Bluetooth.

GPS-enabled Mobile Phones -- Most CDMA phones have built-in GPS (Assisted GPS) and we are seeing the emergence of location-based services designed for these devices. The most common applications include off-board navigation, but a host of new devices will support real-time traffic.

Rear Seat Entertainment Systems – Rear seat entertainment is already a big hit for both retailers and automotive OEMs. In-vehicle systems that allow users to transfer video programming from their home to the car will be a trend in rear seat entertainment. Strong competitive pressure from the aftermarket is pulling down premium price points for rear seat system. At the same time, attach rates are growing.

Satellite Radio – Satellite Radio is seeing a breakout year. Nearly all mobile electronics companies support satellite radio with headunits that are XM and/or Sirius enabled. The latest portable satellite receivers are designed to be used inside and/or outside of the car, competing with iPods for obvious reasons.

HDD-based Entertainment/Navigation Systems -- Hard disk drives are used to archive content such as music files and navigation data. The most compelling

application of hard drives is for entertainment although digital rights management (DRM) stands in the way for some OEMs.

Music/iPod Docking Devices – iPod docking devices are responding to pent-up demand in the automotive space. Since the automotive OEMs have not responded fast enough to meet the demand, there are a flood of aftermarket devices that interface the iPod with the audio system. Sophisticated units now support physical connections to the audio (vs. FM) and also include control of the device with some supporting audio titles and track info on the DIS or head unit displays.

About TRG:

TRG (Telematics Research Group, Inc.) tracks and analyzes the automotive telematics, wireless, and entertainment sectors. TRG conducts a global telematics survey profiling the systems used in hundreds of production light vehicles and licenses this intelligence for competitive and market analysis.

For more information come to TRG's CES panel discussion on January 5th in Las Vegas:

Session Title: ***Automotive Telematics: Enabling Vehicles for Wireless***

Date/Place: January 5 (1:30-2:30 pm)

Where: Las Vegas Convention Center (LVCC) room #258

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