

**News:**

CeBIT 2007: Lumio Moves Beyond Laser Projected Keyboards

● **CeBIT 2007: Lumio Moves Beyond Laser Projected Keyboards**

Date: 03-18-2007



Lumio demonstrated a variety of iterations of its virtual keyboard technology at CeBIT in Hannover, Germany this week. Lumio is currently working with tier one automotive suppliers including Magneti Marelli, Valeo and Visteon on automotive grade solutions for innovative human machine interfaces. Chief among its latest offerings are LED projected keyboards, which turn any flat surface into a keyboard with the aid of image detectors, and gesture-based interfaces. Lumio's shift from lasers to LEDs was partially in deference to automotive market requirements for a more robust technology. Lasers are not as long-lived as LEDs. The company's gesture-based interface, also LED-based, will allow users to switch between applications and make selections within automotive applications without touching the display.

**TRG News**

● **CeBIT 2007: Navteq 'Discover Cities' Initiative Facilitating Pedestrian Applications**

Date: 03-17-2007



In addition to capturing 204 attributes on roads around the world - with 60 countries' roadways now mapped - Navteq has commenced capturing pedestrian data as part of an initiative dubbed "Discover Cities." The goal of the new program is to enable pedestrian navigation as portable device makers make their PNDs smaller and more pocketable. Additionally, Navteq is laying the groundwork to serve the location-based services marketplace with its nascent Connected Services effort addressing the needs of connected devices.

**TRG News**

● **CeBIT 2007: Magellan Sets the Standard for Multi-Function Navigation**

Date: 03-17-2007



Magellan described the emerging world of multi-function navigation devices during the Navigation Forum at CeBIT in Hannover, Germany this week. The company's goal is to enable driving, hiking, skiing and sailing applications in a single product in at least part of its product line up. At the same time, Magellan sees the impending arrival of connectivity and the ongoing enhancement of PNDs overall to include the integration pedestrian navigation, topographic content, tourist guides, voice commands and safety and security-type applications. Hurdles yet to be overcome include issues surrounding the user interface, connectivity, database content, form factor, standardization and development tools for integrating new forms of content. In time, Magellan sees the PND as capable of going anywhere and remaining connected at all times.

**TRG News**

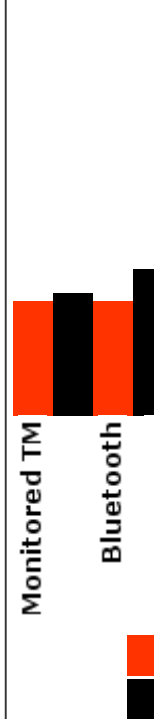
● **CeBIT 2007: Magellan Announced the Introduction of Maestro in Europe**

Date: 03-16-2007



Magellan has announced the introduction of Maestro in Europe. Maestro is a family of three new portable vehicle navigation devices. Available mid-May, the new Maestro series introduce a newly designed user interface with a 4.3" WQVGA touch screen, Bluetooth hands-free calling capabilities and real-time traffic services. The Maestro 4050 is the first portable

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vehicle navigation device to be voice command enable. Maestro also offers users with Marco Polo travel information and photos, text-to-speech, preloaded with full coverage maps of Europe and a database of one million additional points of interest like ATMs, petrol stations and more. The prices for the Maestro family will range from 299 to 449 euros.

**TRG News**

- **CeBIT 2007: Funkwerk Presents Bluetooth Solution for Satellite Navigation Device**

**Date: 03-16-2007**



Funkwerk has announced the introduction of "Ego Drive", a system that combines a hands-free kit, multimedia center and satellite navigation device in one unit. Some of the telephony and communication features include compatibility with all Bluetooth mobile phones, a 4.3-inch touch screen and voice control. The multimedia system offers playback of mp3 files, text message function, picture viewer and video player. The satellite navigation application features a GPS receiver with a SiRF Star III

chipset, TMC and pre-installed Navteq maps of Germany, Western or Eastern Europe. The device will be available in July of this year for €599.

**TRG News**

- **CeBIT 2007: ViaMichelin Launches Two New Additions to Its PND Range**

**Date: 03-16-2007**



ViaMichelin has announced the launch of two new PNDs. The new devices, the X-960 and X-970T, are both equipped with a SiRF Star III antenna, the latest version of ViaMichelin navigation software and simultaneous screen display of the current route and a zoom of the next junction. New maps and guidance modes are provided for bicycle and pedestrian users and each device is available with either UK and Ireland maps or European maps covering 20 countries. Like all ViaMichelin navigation products, both

devices feature Michelin Green and hotel and restaurants guides. The X-970T offers additional features such as a Bluetooth hands-free function and real-time traffic and will enter markets with a suggested retail price of €329.

**TRG News**

- **CeBIT 2007: Navigon Presents Its Own In-House Developed Navigation Systems**

**Date: 03-16-2007**



With the new Navigon 7100 and Navigon 5100 the company has taken its first steps into making its own hardware. Some of the features of the 7100 includes Bluetooth hands-free system, 4.3-inch color display in a 16:9 widescreen format, new "Real View" function, lane assistance, free traffic jam reports, voice input, and PIN code security function. The Navigon 5100 is very similar to the 7100 with the exception of the 3.5-

inch color display. The "Real View" function offers support for drivers as the view mode displays signposts realistically, giving drivers the information they need to move into the correct lane. The Navigon 5100 and 7100 will be available in Europe this summer, with a price range respectively of €329 and €499.

[Article Link](#)

- **CeBIT 2007: ATX Says Content, Connectivity Key Differentiators in a Commodity Category**

**Date: 03-16-2007**

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ATX told CeBIT Navigation Forum attendees this week that connectivity and content will drive product differentiation for both embedded and portable navigation solutions. Connectivity applications such as Web access, ATX's own driver interactive vehicle application (DIVA), enhanced POIs, dynamic content and vehicle resource management are among the tools service providers, OEMs and device makers will use to set themselves apart from a crowded field of competitors. To target these applications ATX is offering offboard POIs, a Web presence, billing and collections capability, wireless management, subscriber management and service design. ATX foresees enhanced levels of interactivity including social networking, PND finders, and personalization along with commercially oriented offerings such as sponsored links.

**TRG News**

● **CeBIT 2007: PTV Launches RoadRunner Version 1, Targets Pay-As-You-Drive**

**Date: 03-16-2007**



PTV launched Version 1 of its RoadRunner software at CeBIT in Hannover, Germany this week. RoadRunner makes incremental map upgrades possible with a push of the button by the user. The RoadRunner software platform also enables a modular solution to navigation and telematics that facilitates applications such as pay-as-you-drive insurance and toll collection. PTV may have the inside line on an RFP from global insurer Allianz for a European-wide pay-per-drive program encompassing a driver monitoring system. PTV is currently working with systems integrator IBM to meet the requirements of the Allianz RFP and approval may be no more than a month away. Time will tell whether pay-per-drive will become a telematics "killer app," but early indications from existing programs elsewhere in Europe suggest strong consumer interest.

**TRG News**

● **CeBIT 2007: Just Talk, No Hands - Says Harman Becker**

**Date: 03-16-2007**



Harman Becker demonstrated its multilingual speech recognition development efforts culminating with the latest version of its voice-based artist and song selection tool. Noting the related challenges of processing destination entries for markets with destinations originating from different languages and for Harman International users with different accents, Harman is working to bring an artist/title selection tool to market within the next year or two. Harman's latest successful implementation of multilingual speech recognition is a full destination input solution for Chrysler. The application of fuzzy logic will be necessary to overcome the artist/title selection which involves not only multiple language challenges but also unusual artist names, the company said.

**TRG News**

● **CeBIT 2007: Intel Architecture Intended to Speed System Development, Connectivity**

**Date: 03-16-2007**



Intel is bringing its x86 architecture to the portable device and automotive system development communities to facilitate product development by allowing manufacturers to design around standardized systems for which connections and software applications already exist. The organization's objectives were described in a presentation during the first day of the Navigation Forum at CeBIT in Hannover, Germany. Intel sees four potential application platforms for its architecture including what it called "loosely coupled" navigation and portable media player solutions as well as head unit and rearseat entertainment applications. The portable media solution is positioned as a digital media hub in conjunction with a Bluetooth connectivity solution from Parrot, while the rearseat entertainment solution utilizes ultramobile PCs (UMPCs) as headrest displays. But the overarching theme is solutions built around industry

standard architecture to shorten the time to market. Current implementations include BMW and EDAG rearseat entertainment prototypes.

**TRG News**

● **CeBIT 2007: Destinator Connecting with Hybrid Navigation Solutions**

**Date: 03-16-2007**



The explosion of content for navigation applications is driving hybrid - on-board/off-board - system development underlying the drive toward connected navigation. Speaking at the Navigation Forum at CeBIT in Hannover, Germany Destinator described the different modes of connectivity currently being deployed, including cellular, wi-fi, PC and memory card, all of which are intended to make more and more up-to-date content available to portable and embedded navigation systems. These developments are cropping up as the interest in location-based services grows, adding to the demand for current location-specific content. Among the content and services already in the market or coming soon are traffic, enhanced POIs, local search, community/blog/user-generated content, friend finder and advanced instant messaging. The explosion of available content is spurring hybrid system development and user-specific content delivery which will finally require content management to minimize distraction.

**TRG News**

● **CeBIT 2007: Elektrobot Sees Growing Role for Speech in Navigation, Other Applications**

**Date: 03-16-2007**



The need for hands-free interfaces and the shrinking of portable product life cycles are accelerating speech application development for Elektrobot. The navigation software supplier described the growing demand for text-to-speech applications including traffic announcements, travel guide information, translation and SMS reading at the first day of the Navigation Forum at CeBIT in Hannover, Germany. Elektrobot was the first company to bring voice destination entry to navigation, currently offering such support for German, French and English, with Spanish, Dutch, Portuguese and Italian to follow shortly. The ultimate goal is to provide full speech dialog interaction without the need of the screen. Speech will soon enable POI selection, full navigation control, access to address books, phone dialing, MP3 title selection and more.

**TRG News**

● **CeBIT 2007: SVOX Heres Voices in Automotive, Portable Navigation**

**Date: 03-16-2007**



SVOX described the dynamics of voice application development for automotive and mobile solutions during the Navigation Forum at CeBIT in Hannover, Germany this week. The company described the interplay of portable (PND and phone-based) and embedded systems and how the competition between these systems is speeding the development and deployment of voice offerings. SVOX once again discussed its SpeechCreate application development tool and its most recent selection as the exclusive text-to-speech supplier to Destinator, which supplies navigation software to LG Electronics. SVOX says the future of voice implementation includes branded voices, voice downloads, a voice design community, the integration of Web content, and, perhaps even further down the road, the integration of the user's own voice in portable and embedded systems.

**TRG News**

● **CeBIT 2007: TomTom Creating Probe Network in The Netherlands**

**Date: 03-16-2007**



TomTom used the occasion of the first day of the Navigation Forum at CeBIT in Hannover, Germany to announce its in-process effort to create a probe network in The Netherlands to serve as a model for similar programs in other regional markets. TomTom laid out its vision of deploying a probe network to give the company a competitive advantage in a crowded European market which it, nevertheless, dominates with an estimated 50% share. The objective of the system is to develop more accurate travel times by combining TomTom user probe data with public data sources. TomTom executives said the identities of individual drivers will remain anonymous, to address privacy concerns. The effort is part of a next generation of services TomTom intends to offer to TomTom users via GSM connectivity including re-routing, the time and length of traffic delays and other inputs. The plan has echoes of the probe network and user community service model proposed by Dash Navigation which will launch its PND in the U.S. later this year.

**TRG News**

● **CeBIT 2007: First Connected Portable with LBS Hits China Market**

**Date: 03-15-2007**



A Linux-based phone with mapping and voice navigation capabilities has gone on sale in China. According to a story in [www.linuxdevices.com](http://www.linuxdevices.com), the Tranzda PM328 performs LBS-tasks such as help users locate nearby businesses, restaurants and gas stations, and then guide them to their destination with voice prompts, based on GPS module supplier U-blox. The Tranzda PM328 phone has a thin form-factor just 0.6 inches (16mm) thick, and includes a USB port and a Bluetooth radio. On top of the Newplus framework, the article says the PM328 appears to run a variety of typical multimedia smartphone applications, including a WAP 1.0/2.0 browser, PC synchronization tools for data and music, messaging and email clients, and PIM (personal information management) software such as a contacts database. U-blox says the PM328 smartphone is now for sale in China, although the image provided makes the design appear to be more of a reference implementation of Newplus than a consumer product.

[Article Link](#)

● **CeBIT 2007: ATX Steps Up Efforts to Address Explosion of PND Market**

**Date: 03-15-2007**



At CeBIT this week ATX is addressing their strategy to offer services for PNDs. As reported several months ago, ATX wants to exploit their opportunities to offer telematics services to PNDs. ATX is making the move on the premise that PNDs will increasingly offer wireless connectivity (a proposition that is not certain by TRG). Nevertheless, ATX sees several applications designed for embedded, in-vehicle systems that can migrate to portable navigation devices (PND). According to ATX, telematics will enable PND owners to have continual connectivity with their vehicles through the Internet, potentially transforming every device into a voice browser. ATX says the car then becomes a smart terminal in a large computing network, enabling it to receive and transfer information for the benefit of the OEM, the dealer and the driver. PNDs for example, will be able to incorporate DIVA or driver interaction vehicle applications, which involve using a connected device to remotely monitor vehicle fluid levels and maintenance schedule and activate in-vehicle functions.

**TRG News**

● **NAVTEQ Adds Visual Content to Maps -- 3D Images of Cities and Landmarks**

**Date: 03-15-2007**



According to a company press release, Navteq has announced the

availability of a new suite of Visual Content to its map database solutions used for personal and in-vehicle navigation systems. According to Navteq, two types of content are being launched: three dimensional models of major cities and three dimensional landmarks of prominent and important structures in and around those cities. TRG thinks the move to visual content may stretch the storage limitations of DVD-based systems and force some navigation system suppliers to switch to hard disk-based solutions in order to take advantage of Navteq's added visual content. Nevertheless, Navteq says they have a flexible design to give our customers the multiple resolution levels and data choices that respect system size constraints and allow for application differentiation.

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