

Embodying Clarion's Cutting-edge Technologies

In this section, we review some of the highlights of Clarion's activities during fiscal 2005.

DVD-AV Entertainment System Fitted in Shanghai GM Minivans

In August 2005, Clarion started deliveries of DVD-AV (Audio Visual) entertainment systems for the "First Land," a minivan for the Chinese market made by Shanghai General Motors Company Limited, a joint venture between General Motors Corporation of the United States and the Shanghai Automotive Industry Group. This is an entertainment system with a 6.5-inch wide DVD center unit for the front seat and a 5.8-inch rear monitor installed behind the driver and front passenger

headrests for enjoying DVDs both by front and rear passengers. It is equipped with an infrared remote control that enables finer control of operational settings for the DVD screens as opposed to using the buttons on the front unit. Clarion regards China as a key market in which the automobile market continues to expand. This product introduction marks an achievement for Clarion in two areas, that is, a step toward a closer partnership with Shanghai GM and a



milestone of Clarion's strategy to supply more products to the Chinese market.

2-DIN AV Navigation System Fitted in Mitsubishi's New Subcompact Model

Mitsubishi Motors Corporation has begun installing Clarion's 2-DIN HDD (Hard Disc Drive)/CD AV navigation system in the "i," its new subcompact ("kei" category) model introduced for sale in January 2006. This system is installed as an option (factory installed). The 2-DIN HDD/CD AV navigation system uses a 7-inch wide display and is equipped with iPod® and ETC (Electronic Toll Collection) compatibilities, AM/FM radio, CD player and built-in TV



tuner. The system is equipped further with an abundance of functions unique to Clarion, such as a data edit function and Music Catcher®, while also offering excellent ease of operation. This AV navigation system has been selected for optional installment in the "Active Field Edition," a special-edition "Pajero Mini" model. This selection marks the first time in the industry for factory installation of an HDD navigation system in vehicles in this category.

Four Types of Integrated AV-HDD Navigation Systems Debut in the Japanese Market

Embodying the brand motto "to be the interface between music and information in the mobile environment," Clarion began the successive introduction of four integrated AV-HDD navigation systems to the domestic market—MAX960HD, MAX860HD, MAX760HD and MAX560HD—starting from May 2006. The new products incorporate the industry's largest 2-DIN 7-inch wide monitor, which enables intuitive operations of the system with large and easily readable text displays for the menus and navigation.

The MAX960HD and MAX860HD are equipped with the new "Fun Ring" 3D-menu and other ease-of-operation functions of highly sophisticated units offering users enjoyment. It is possible to record up to 4,000 pieces of music at a maximum speed of 8x from CDs to HD and to enjoy the diverse latest digital media from CDs/DVDs to AM/FM radio and TV. These models incorporate full acoustic reproduction technology such as a 5.1-ch surround processor, as well as time



alignment control and a parametric equalizer, embodying the latest advances in audio technology in pursuit of the best in-vehicle sound reproduction. They are also compatible with the newest fifth-generation iPod® (with optional accessories), offering video replay as well as audio files. A combination slot, which accepts both SD memory cards and Memory Stick Pro, enables the retrieval of external digital data.

New Models Released for North American and European Markets

Clarion has expanded its 2006 new product lineup for the North American and European markets. With regard to HDD navigation systems, we launched the NAX970HD in North America and the NAX963HD in Europe. Both have a 30GB HDD capacity and their map data cover a wide region. Both also incorporate voice recognition software. This makes it possible to operate the unit using voice command and the driver can set destinations with two hands on the wheel, ensuring safety while driving. The European model NAX963HD is equipped with a touch panel control and 3D menu for simple operation, as well as map data for 27 countries, covering virtually all over Europe.

In the area of portable car navigation systems, we have commenced sales of the N.I.C.E. (Navigation and In-Car Entertainment) and the more compact N.I.C.E. P200 in North



NAX963HD

America. Both models incorporate a 20GB HDD, enabling this to be split into 10GB each for navigation and entertainment functions. The device can handle various audio and visual formats and the 7-inch high-resolution touch screen TFT-LCD monitor offers both crisp definition of map details and images from a DVD or an externally connected video



N.I.C.E. P200

camera. In Europe, we offer the MAP360 and MAP560. Light and compact, these models employ a 3.5-inch high-resolution LCD monitor. The MAP560 includes map data for 24 countries. The built-in lithium battery, which runs for 4 hours*, makes use possible outside the car, for example, on a motorbike or bicycle.

* When fully recharged

In-vehicle Information Device with Linux and Java™ J2ME CDC

Clarion commenced sales of an on-board information terminal for its Networking Auto Guide System, a vehicle information system, in March 2004. The terminal, developed for commercial vehicles, runs on versatile Linux as its operating system and uses J2ME CDC programming language, which possesses specifications suitable for telematics and navigation using Java™. This marks a world first for this programming language to be issued in a commercial fleet. Incorporating a packet telecommunications interface function on the conventional speech synthesizer PA device makes it possible to integrate several conventional community bus terminals into one, contributing to greater management efficiency in addition to lower installation cost. It also enables application to a next-generation community bus system by offering

such functions as GPS positioning and route management as well as a bus location system that transmits current locations of buses to users and the operations center on a real-time basis. Information such as news and advertisements can be sent via two-way transmission between the bus and the

operations center. As part of its efforts to further expand the system, Clarion is exploring adoption of the system to a wider range of commercial fleet management systems for positioning and route management of commercial transport and tour buses, among others.

