## Development, Production, and Sales System

In the year under review, Clarion reorganized its sales system, creating separate units for each group of domestic and overseas automobile manufacturers in an effort to strengthen OEM sales. As a result, each sales unit can now access information about its respective manufacturer group in real time and help accelerate product development accordingly.

To reinforce our superior position in the face of worldwide price competition, we are working to shift production from Japan to overseas locations. We will mainly concentrate production in our plants in China and the Philippines. Meanwhile, our assembly plants in France, Hungary, and Mexico will increase local procurement of materials and components while maintaining their current assembly capacity. As a result of these measures, we aim to increase the ratio of finished products made overseas to 90% in the year ending March 2003, from 70% at the end of fiscal 2001. (The ratio for mechanical modules used in CD players and other items will rise from 80% to 90% in the same period.)

# Globalizing and Regionalizing Our Car Audio-Visual Equipment Business

In the car audio-visual equipment business, our fundamental approach is to develop and manufacture products that meet specific demands in each of the regions they are sold. At the same time, we work to increase local procurement of materials and components. In line with this approach, we have reinforced our system of four regional headquarters, located in Japan, The Americas, Europe, and Asia. In this way, we are better equipped to develop, manufacture, and sell products that closely meet specific local requirements.

#### Japan

In the year under review, continuing uncertainty in the domestic economy caused production and sales in the automobile industry to stagnate. Price competition worsened in the category of car audio-visual equipment for new cars, both in the OEM and aftermarket segments, causing sales prices to decline. In addition, falling sales prices and tightening supply of components led to lost opportunities for production and sales.

Consolidated sales in Japan in fiscal 2001 amounted to \$93,577 million (\$755.3 million), down 3.6% from fiscal 2000. This represented around 50% of Clarion's consolidated net sales. The operating loss in Japan was \$2,224 million (\$17.9 million).

#### The Americas

Clarion Group manufacturers of mechanical modules for cassette and CD players for the U.S. OEM market have acquired QS-9000 certification, the product quality standard adopted by the Big Three U.S. automobile makers. Clarion's OEM Business Division, as well as its production operations in the United States, Mexico, and China, have also obtained QS-9000 certification.

In April 2000, Clarion Brazil was established as a wholly owned subsidiary of Clarion Corporation of America—the regional head-quarters for the Americas—to facilitate sales to the Brazilian arm of Honda Motor Co., Ltd.

The aftermarket in North America has matured, characterized by severe competition. Clarion is working to expand its market share by offering low-priced, high-quality products with advanced functions.

OEM sales in North America languished due to the slowdown of the U.S. economy, and price competition in the aftermarket was severe. These factors severely affected Clarion's revenues and profits in that region. Consolidated sales fell 10.3%, to ¥51,867 million (\$418.6 million), and the Company posted an operating loss of ¥283 million (\$2.3 million).

## Europe

In fiscal 2001, Clarion endeavored to expand market share in Europe by developing, making, and selling products for local automobile manufacturers on an OEM basis. The aftermarket remained difficult, however, with tough competition from local and Japanese manufacturers.

Nonetheless, we expanded our sales base, taking advantage of our strengths in car navigation systems and car television systems. We have launched navigation systems covering Europe, with maps in six different languages. These have proved very popular. Germany is at the forefront in developing traffic information systems, and EU-wide systems are currently being planned. Clarion will strengthen its product development and sales efforts in preparation for such expansion.

Despite the strong yen, we posted a 30% jump in OEM sales, especially of CD players, due to high demand among European automobile makers for our products in their 2000 models. As a result, consolidated sales in Europe rose 12.9%, to ¥35,361 million (\$285.4 million), and operating income climbed to ¥292 million (\$2.4 million).

#### Asia

Clarion has spun off its mechanical module business and shifted production to China, the Philippines, and Malaysia. Among our production operations in Asia, those making products for the U.S. market have acquired QS-9000 certification, while those serving the European market have obtained ISO9000 series certification.

In the aftermarket, we continued to upgrade our lineup of car audio-visual equipment, car navigation devices, and car television devices in order to bolster sales. As a result, consolidated sales in Asia soared 40.1%, to \$7,880 million (\$63.6 million), and operating income jumped 216.7%, to \$640 million (\$5.2 million).

## In-Vehicle Computing Systems

Incorporating the latest information and communications technologies, intelligent transport systems (ITSs) connect people, roads, and vehicles to provide valuable information on traffic jams, road accidents, and other road conditions. These systems involve development efforts in nine different fields, including navigation systems, electronic toll collection (ETC) systems, and assistance for driving safety. It is believed that ITSs will spread rapidly throughout the world. For this reason, our business strategy for the 21st century entails shifting our focus from car audio-visual equipment to the development of in-vehicle computing system (IVCS) devices to meet growing demand from ITS and Telematics services.

In the OEM market, we are developing core technologies and products with ITSs in mind, and we have already started introducing IVCS devices on a commercial basis. Our leading position in this field is demonstrated by our introduction of the AutoPC, a world first, in the U.S. aftermarket. We will work hard to expand our market position in the future.

One specific ITS-related initiative is our joint development of ETC terminals with Hitachi Ltd. We are also developing next-generation car navigation system devices, which will be supplied to Nissan Motor Co., Ltd., in the spring of 2002. In addition, we are jointly developing an intelligent multimode transit system (IMTS) with Toyota Motor Corp. In this project, we have created a stable communications system, which is a prerequisite for high-speed, driverless vehicle operation, and have started practical trials.

In order to reinforce and accelerate IVCS development, Clarion will continue to actively pursue business and technology-transfer alliances with other companies.

#### SS Wireless Equipment

Clarion was one of the first companies to develop an SS wireless modem that provides stable transmission and is highly reliable in noisy environments. We are currently engaged in practical trials covering multiple applications. Our SS modems are already used in the Airport Surface Automatic Dependent Surveillance (ADS) system at Chitose Airport in Hokkaido. There, they are proving reliable in monitoring the positions of various moving vehicles and in facilitating vehicle dispatch and control.

Based on our accumulated technical expertise in SS wireless modems, we will accelerate development of products and applications, both in industrial areas and in IVCS-related devices and terminals.