

MITSUBISHI ELECTRIC CORPORATION
PUBLIC RELATIONS DIVISION
 7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo, 100-8310 Japan

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Customer Inquiries

Media Inquiries

Industrial Design Center
 Mitsubishi Electric Corporation
<https://www.MitsubishiElectric.com/ssl/contact/company/rd/form.html>
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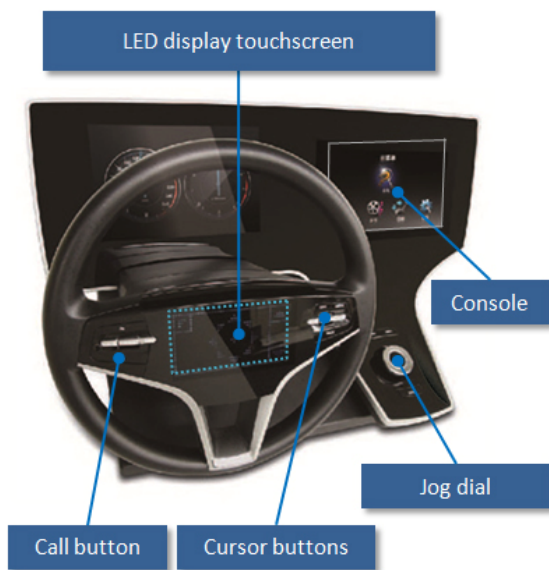
Public Relations Division
 Mitsubishi Electric Corporation
prd.news@nk.MitsubishiElectric.co.jp
<http://www.MitsubishiElectric.com/news/>

Mitsubishi Electric Develops Multi-modal Character-input Interface for Chinese-language Car Navigation Systems
Facilitates character input and usability

TOKYO, November 19, 2013 – [Mitsubishi Electric Corporation](http://www.mitsubishi-electric.com) (TOKYO: 6503) announced today it has developed a multi-modal character input human-machine interface (HMI) for next-generation Chinese-language car navigation systems. The HMI accepts both QuanPin and ShuangPin input using PinYin phonetic symbols, and also recognizes handwriting and audible commands for a total of four input modes.

The multi-modal character input system will be showcased in part on the company’s EMIRAI 2 concept vehicle exhibit (Booth E3203, East Hall 3) at the 43rd Tokyo Motor Show taking place at the Tokyo Big Sight exhibition complex in Tokyo, Japan from November 23 to December 1.

PinYin is the romanization of Chinese pronunciation, QuanPin predicts words based on the initial character and ShuangPin uses alphabetic input for each Chinese character.



System layout



PinYin input



Handwriting input

Development Features

1) Highly convenient system for Chinese-character input

- Four modes of input for extra flexibility
- Enhanced usability thanks to cursor buttons and jog dial

2) LED display touchscreen for handwritten input

- LED display touchscreen leaves trace marks to enable user to confirm what they have just written without having to check console

3) Steering wheel-mounted touchscreen for improved usability

- Touchscreen built into steering wheel allows input with either hand
- Curved shape of touchscreen fits steering wheel contours

China is the world's largest market for car navigation systems and demand is continue to grow. Various features of the Chinese language, however, have created a strong need for flexible character-input methods that ensure easy usage by all Chinese speakers. PinYin, developed in 1958 as the standardized Chinese writing system, is learned in schools and used by Chinese people in their 30s or younger. Older Chinese, however, can have difficulties using this system, as do people living in outer regions of the country. Furthermore, pronunciation in Cantonese and other numerous dialects can differ from standard Chinese.

Patents

The technology announced in this news release encompasses three Japanese patents and one international patent pending.

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About Mitsubishi Electric Corporation

With over 90 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. Embracing the spirit of its corporate statement, Changes for the Better, and its environmental statement, Eco Changes, Mitsubishi Electric endeavors to be a global, leading green company, enriching society with technology. The company recorded consolidated group sales of 3,567.1 billion yen (US\$ 37.9 billion*) in the fiscal year ended March 31, 2013. For more information visit <http://www.MitsubishiElectric.com>

*At an exchange rate of 94 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2013