



MITSUBISHI ELECTRIC CORPORATION PUBLIC RELATIONS DIVISION

7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo, 100-8310 Japan

FOR IMMEDIATE RELEASE

Customer Inquiries

Industrial Design Center Mitsubishi Electric Corporation www.MitsubishiElectric.com/ssl/contact/company/rd/ form

www. Mitsubishi Electric.com/company/rd/

No. 2993

Media Inquiries

Public Relations Division Mitsubishi Electric Corporation prd.gnews@nk.MitsubishiElectric.co.jp

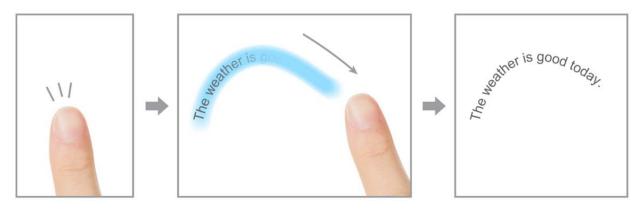
www.MitsubishiElectric.com/news/

Mitsubishi Electric Develops World's First Voice-activated Drawing Function that Displays Spoken Words Where Finger is Traced on Screen

For smooth communication that transcend disabilities or foreign languages

TOKYO, February 9, 2016 – <u>Mitsubishi Electric Corporation</u> (TOKYO: 6503) announced today that it has developed the world's first* technology combining voice-recognition and drawing functions to enable users to display their spoken words on a tablet or smartphone by simply dragging their finger across the screen. The technology is expected to be combined with other functions, such as, picture drawing and multilingual translation, to help people transcend disabilities and foreign languages for smoother global communication.

* As of the date of release: February 9, 2016



Press down and hold

Drag finger while speaking

Words appear behind finger

Key Features

World's first user interface for voice-activated drawing

- By pressing down on the screen and then speaking, spoken words can be displayed wherever the finger is dragged across the screen.
- Words stream behind the user's fingertip for an intuitive and enjoyable experience.
- No need to write out words, so easier than conversing by writing.
- Other functions can be added for innovative and diverse applications.

Works with other functions for wider applicability

- The technology can be combined with a picture-drawing function to create illustrations, maps and other graphics augmented with text, enabling richer expressiveness and enhanced understanding.
- The addition of multilingual translation would enable displayed words to be translated for face-to-face communication with speakers of other languages.

Possible Applications

With picture drawing

People with hearing disabilities cannot watch the speakers' mouth and hand movements simultaneously, making it difficult to understand a conversation involving spoken words and hand movements. Mitsubishi Electric's new technology allows a listener with a hearing disability to continue looking at the screen while the speaker talks and gestures with their hands.





A child with hearing disability communicating by drawing

With multilingual translation

Words displayed on the screen can be translated into other languages and then read out automatically.





Travelers drawing a picture of a souvenir and then asking where to buy it

With background images

Stored images displayed on a screen can be overlaid with text of the speaker's words to explain the content of the images more clearly.





Doctor explaining an X-ray to a person with hearing disabilities





Traveler asking a taxi driver how long it takes to get to the destination shown in a picture

Handwriting recognition

When the screen is tapped twice, the system analyzes the handwritten input and read out the written words, or translates them into a different language, allowing foreigners to easily communicate with people who are hard of hearing or people in noisy environments to communicate with others.





Staffer with hearing disability guiding a foreign visitor to his seat at an event hall

Split-screen display

The screen can be split into two sections so that people facing each other can converse without having to rotate the device back and forth, for example, at a reception counter.





Staffer in a public office telling a foreigner how to fill in a form and answering his question

Operating System

Android

Patents

Pending patents for the technology announced in this news release number two in Japan and two abroad.

Design Registration

Mitsubishi Electric owns four design rights related to the project in Japan and four abroad.

###

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 4,323.0 billion yen (US\$ 36.0 billion*) in the fiscal year ended March 31, 2015. For more information visit:

http://www.MitsubishiElectric.com

*At an exchange rate of 120 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2015