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**FOR IMMEDIATE RELEASE**

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## Mitsubishi Electric Co-develops Touch-based Interface for Remote Controls to Enable Both Blind and Non-blind to Easily Operate Devices

— Highly User-friendly Interface Induces Touch —

**TOKYO, February 14, 2018** – [Mitsubishi Electric Corporation](http://www.mitsubishielectric.com) (TOKYO: 6503) announced today that together with a school for the visually impaired it has designed an experimental remote-control interface that enables people to easily operate equipment by using their sense of touch to recognize the intuitive shapes and movements of various controls.



Power Mode Temp. Air force Air direction Timer

Examples of new interface used for air conditioner remote controller



Adjusting air force by sliding balls

The experimental remote-control interface for air conditioners was developed as a case study with the cooperation of teachers and students at a school for the visually impaired. The same principles of matching heights, shapes, etc. that the students learn at the school were adopted in developing the new interface. The unique interface uses distinctive shapes, positions and movements to signify the air conditioner's different modes and the status and operation of each function, enabling visually impaired people to easily confirm and adjust settings.



Training to match pegs and pipes of the same length

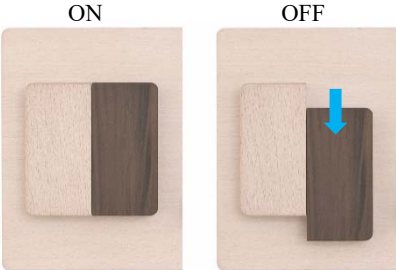


Training to match corresponding shapes and frames

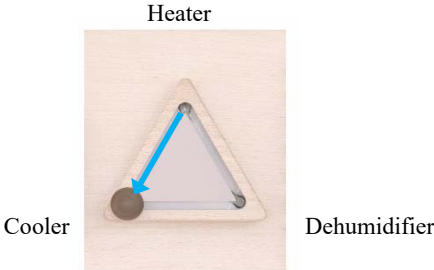
When visually impaired people use consumer products, they often encounter problems with not being able to understand the shapes or layouts of operational controls, such as remote-control buttons arranged on a smooth horizontal plane. Mitsubishi Electric is now proposing the concept of a remote-control interface that visually impaired people can understand intuitively and is so inviting that people want to touch it. The company believes that it can contribute to a more affluent society by expanding the range of people who can easily use consumer products.

Going forward, Mitsubishi Electric will continue researching innovative interfaces that can be operated by using human senses in creative ways, ultimately for application in products and systems such as consumer appliances and industrial equipment.

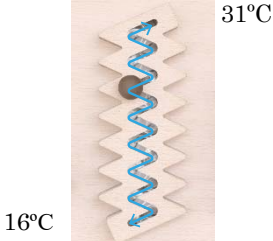
**Remote Control Settings Based on the New Interface (examples)**



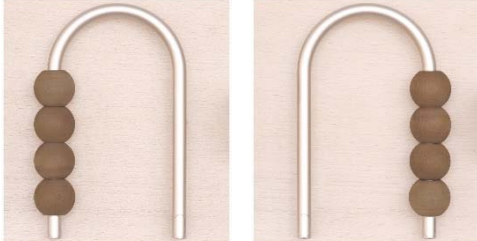
**Power** Alignment for ON, misalignment for OFF



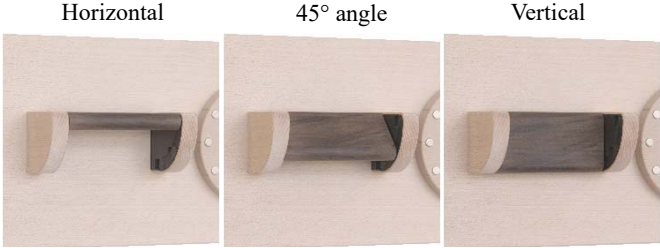
**Mode** Ball position determines mode



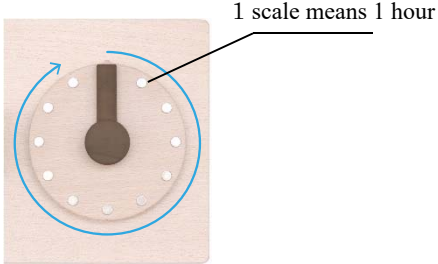
**Temperature** Each movement of the ball equals 1°C



**Air force** More balls on the left – weaker, more on the right – stronger



**Air direction** Position of louver indicates direction of air flow



**Timer** The timer control has a clock-like design

## **Background**

Under the Design X Project operated by Mitsubishi Electric's Industrial Design Center, designers are encouraged to independently pursue creative design themes. The theme being announced this time was developed by a young designer who recognized the unique challenges of designing products for visually impaired people and then realized that addressing this need could expand the range of product users. Thereafter, a team of three young Mitsubishi Electric designers, working in collaboration with a school for the blind, developed the experimental new interface for air-conditioner remote controls.

## **Patents**

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

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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 4,238.6 billion yen (US\$ 37.8 billion\*) in the fiscal year ended March 31, 2017. For more information visit:

[www.MitsubishiElectric.com](http://www.MitsubishiElectric.com)

\*At an exchange rate of 112 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2017