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FOR IMMEDIATE RELEASE **No. 3172**

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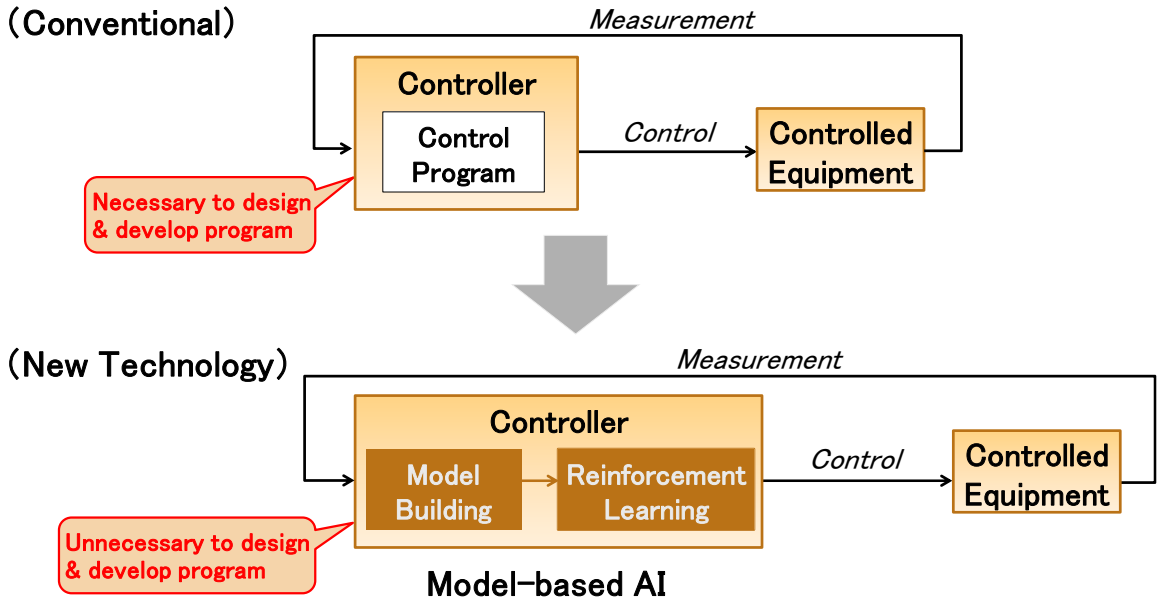
New Technology Uses Model-based AI Learning to Control Equipment

Learns autonomously how to control equipment

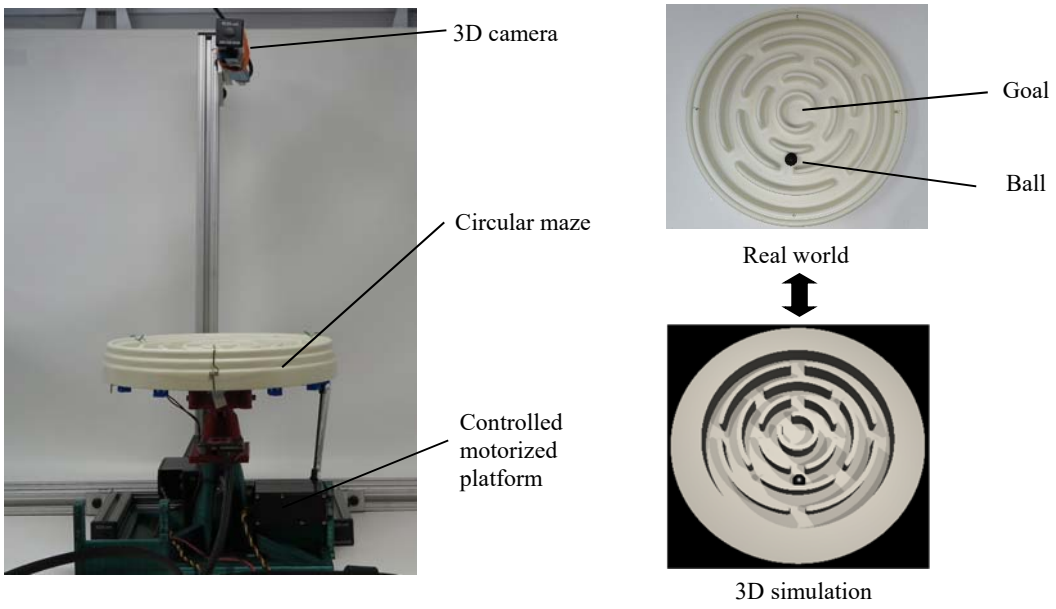
TOKYO, February 14, 2018 – Mitsubishi Electric Corporation (TOKYO: 6503) announced today that it has developed a technology that uses model-based artificial intelligence (AI) to control equipment autonomously. The technology of Maisart* proprietary AI constructs models of the equipment through repeated trial and error and then learns control rules based on these models. In a demonstration using a circular maze where the objective is to drive a ball to the center of the maze by tipping and tilting the maze, the technology successfully learned how to drive the ball to the goal without the need for human programming. Mitsubishi Electric's new technology, which is still under development, is expected to significantly reduce the cost and time needed to develop control programs in the future.

*Mitsubishi Electric's **AI** creates the **S**tate-of-the-**ART** in technology Maisart



Using model-based AI, the technology learns control rules automatically to reduce the cost and time of system development. A state space model of the particular system's dynamics is learned through repeated trial and error, based on which the technology automatically learns control rules needed to reach pre-defined goals. Manual program development by humans to teach proper control actions becomes unnecessary, which helps to reduce the time and cost of developing control programs.

Going forward, Mitsubishi Electric will continue to develop the technology by adding increased AI capability to improve the speed and accuracy of autonomous learning. It will also employ 3D simulations of the controlled equipment to significantly decrease the time required to learn control methods.



Circular maze used for demonstration

About Maisart

Maisart encompasses Mitsubishi Electric's proprietary artificial intelligence (AI) technology, including its compact AI, automated design deep-learning algorithm and extra-efficient smart-learning AI. Maisart is an abbreviation for "**M**itsubishi Electric's **AI** creates the **S**tate-of-the-**ART** in technology." Under the corporate axiom "Original AI technology makes everything smart," the company is leveraging original AI technology and edge computing to make devices smarter and life more secure, intuitive and convenient.

Patents

Pending patents for the technology announced in this news release number two in the U.S.A. and six outside the U.S.A.

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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

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