



News

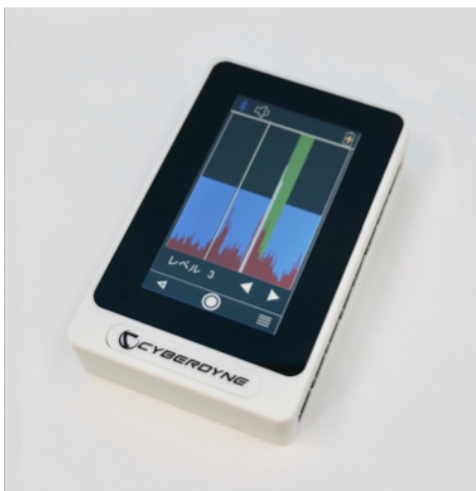
September 26, 2018
CYBERDYNE, INC.

Start of selling Cyin for Living Support to the public in Japan

~ The device enables patients who have difficulties in speaking or moving, to communicate and control various devices~

CYBERDYNE, INC. (“the Company”) announced to commence selling of Cyin for Living Support (a communication device for patients with severe disorders, often referred here as “the device”) in Japan to the public from September 25, 2018. The device is the first commercialized product of the Cyin series, which is a new product that utilizes Cybernic Technology.

Alike the Company’s signature product HAL, Cyin for Living Support reads faint bio-electric signals sent from the patient’s brain to the muscles through nerves when a patient intends to move the body. With the device, the patient can transmit his/her intention to various communication equipments, such as a nurse call button, and operate them, even if he/she has a difficulty to speak, move or use those equipments. Cyin for Living Support is the device that enables the patient to communicate and act more positively.



Left: controller of Cyin for Living Support, Right: image of using Cyin for Living Support

Background of developing Cyin for Living Support

Traditionally, a patient who was severely restricted with their vocal or physical capabilities due



to neuromuscular diseases etc., attempted to communicate through transparent character plate with an assistance of caregivers, various switches, devices controlled by eye tracking or devices controlled by sensing various biological phenomenon such as brain waves. However, each methodology had its challenges such as burden of the caregivers, difficulty for the patient to move physically upon controlling the devices, obscurity of the intention transmitted in the progression of diseases. As a solution to the aforementioned challenges, the Company utilized the technologies that it accumulated through Medical HAL for Cyin for Living Support, and newly developed sensors and algorithms suitable for assisting communication of patients in severe conditions. Due to these endeavors, the Company was able to complete the productization of Cyin for Living Support.

The Company delivered Cyin for Living Support to 11 patients' associations and support associations of patients (as a donation from Daido Life Insurance Company). This time, the Company starts selling the device with greater usability to the public.

Main characteristics of Cyin

- By utilizing the Company's Cybernic Technology, even a patient unable to move his/her body due to the progression of a disease, can still communicate (either with Cyin for Living Support itself or through other devices such as a computer by selecting yes or no and by typing texts) or operate control equipments such as a nurse call button with his/her own will, as long as the device could detect the faint bio-electric signals of him/hers, which will be converted into input signals. Bio-electric signals could be detected from various regions of the body, depending on the physical conditions of the patient*.
- Cyin for Living Support has eight input ports and eight output ports, with which it can utilize bio-electric signals from multiple parts regions of the body. This realizes complex control of each single equipment and simultaneous control of multiple equipments.
- Cyin for Living Support can be flexibly connected to input equipments such as sensors or output equipments already owned by the patient for the device such as computers according to the patient's needs. For example, if it is connected to the voice reading devices, the patient could transmit his/her intention with their eyes closed.
- As the device is palm-size and light, it can be carried and used outside. The battery could be charged wirelessly, simply by placing it on the charging board.



* Detection of bio-electric signals depends on the condition of individuals and the Company cannot guarantee that Cyin could be use for every patients.

Price of the device

Recommended retail price will be 600 thousand Japanese yen excluding tax. Installation fee and adjustment fee are not included in this price.

The Company hopes to help patients with restricted means of communication with Cyin for Living Support, which will enable them to have more initiative in their action. The Company will promote its business with the device, so that patients can feel hope or joy through communication and the device will “bridge” patients with their family members and their friends. In addition, the Company also intends to develop the device even more, so that it could be used to analyze vital information such as bio-electric signals. Through this endeavor, the Company hopes to make further contribution to the development of Cybernics fields, such as medicine and engineering.

<About Cyberdyne>

Since its establishment as a venture company from the University of Tsukuba in 2004, CYBERDYNE has promoted the comprehensive development of various Cybernic Systems (Cybernic devices, Cybernic interfaces, etc.) that utilize Cybernic Technology from research and development to social implementation, aiming to tackle the various issues the society is facing. The company has developed business in the fields of medicine, living support and daily living (including the work environment), and its main product, Robot Suit HAL is widely distributed not only in the medical and living support fields but also in care support and labor support fields. In addition, new products such as Transportation Robot and Cleaning Robot equipped with artificial intelligence and environment recognition functions, HAL Lumbar Type for reduction of the load and stress on the lower back, smaller-sized HAL (Single-Joint Type), Vital Sensor for arteriosclerosis and arrhythmia measurements are continuously developed. For more details, please refer to the following website: www.cyberdyne.jp/eng/.