



## David Hale

OG Wellness Technologies Co., Ltd, Japan

### EMG-based Functional Electric Stimulation with IVES

Effective rehabilitation with IVES IVES is an Integrated Volitional control Electrical Stimulator that can be used for upper- or lower-limb rehabilitation of patients with paralysis caused by cerebrovascular diseases or locomotive disabilities. (Treatment) (Setup All functions from setup to treatment are integrated into one compact body A variety of treatment modes, to fit a wide "Power Assist mode" as well as five other treatment modes are available. A single unit can be used for various cases of patients' Up to 45 treatment patterns can be stored Up to 45 treatment patterns can be assigned... Electrodes and optional accessories to accommodate a wide range of patient symptoms and conditions Our original electrode design enables precise treatment IVES' unique "separation of myoelectric detection and electric stimulation output" technology\* integrates the myoelectric detection electrode and the electric stimulation electrode into one. Also, the fixed distance between IVES' bipolar gel electrodes makes it easy to precisely duplicate the desired electrode positioning over multiple treatments. ^Development of an EMG recording device from stimulation electrodes for functional electrical stimulation. Using real-time feedback, electrical stimulation is output in proportion to EMG signal in the body part being treated. The amount of strength exerted can be visually monitored with the muscle action potential indicator lights. Flexing the wrist with limited voluntary motion only Flexing the wrist with limited voluntary motion in Power Assist Mode Weak electric stimulation is given Flexing the wrist with greater voluntary motion in Power Assist Strong electric stimulation. IVES+GD-611 Rated power supply Power input External dimensions Treatment modes Treatment time Output waveform Output frequency Maximum output voltage Maximum output current Safety function Rated power supply 6V DC (4 AA alkaline batteries or AA Ni-MH rechargeable batteries) Normal Mode / Trigger Mode / Power Assist Mode Sensor Trigger Mode (when Gait Sensor is being used) External Trigger Mode (when using 2-pole Electrode Cord) External Power Assist Mode (when using 2-pole Electrode Cord) 5, 10, 15, 20, 25, 30 min.

### Biography

David Hale is a Senior Associate, International Sales Department at OG Wellness Technologies. He worked as English Teacher at Sophia Zemi English Conversation School. Before that he worked as Recruiting Manager at Alexander Technology Group.

[david-hale@og-giken.co.jp](mailto:david-hale@og-giken.co.jp)