

Upper Limb Functional Electrical Stimulation (FES) System (Hand Function)

YSA03-JL/R Wireless wearable hand function

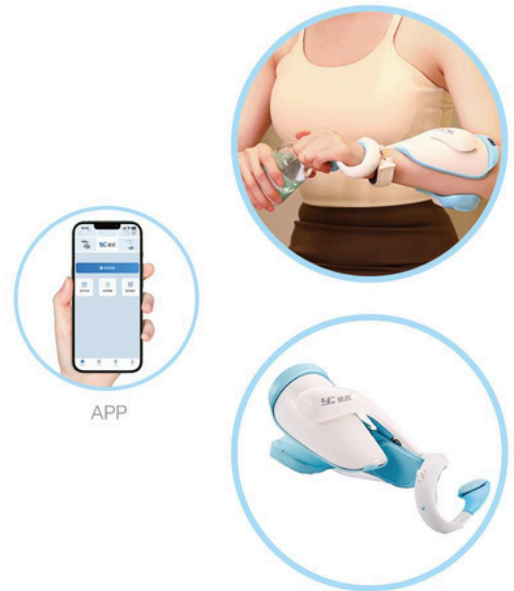
- ✓ Programmed functional electrical stimulation for upper limbs in patients with stroke, hemiplegia, and cerebral infarction
- ✓ Induce brain function reorganization, and promote neural function recovery
- ✓ Maintain the range of motion of hand and wrist joints
- ✓ Enhance muscle strength, and prevent muscle atrophy
- ✓ Increase active movement and reduce muscle tension
- ✓ Prevent and reduce upper limb edema and treat shoulder-hand syndrome
- ✓ Enhance upper limb functional activities and improve ADL abilities

Working Principle

Adopt programmable electrical stimulation to induce muscle contractions in the upper limbs and generate hand movements such as grasping, extending, lateral pinching, digital opposition and wrist joint flexion/extension to accomplish hand functional training, such as holding and releasing a cup or using a key, etc. Stimulate muscle spindle and muscle tendon proprioceptor through muscle contractions in functional movement and coordinate the central integration of motor output and sensory input, so as to induce functional reorganization of central nervous system in patients and promote neural function recovery.

Product Features

- Mobile App optional, convenient for operation
- Wireless hand controller (optional)
- Multiple safety detection and protection functions
- Three-channel output, programmed to stimulate extensor muscle, flexor muscle and thenar muscle
- Unique thenar muscle stimulation, featuring exclusive thumb function mode
- Ergonomically-designed neural prosthesis, automatically identifying electrical stimulation of muscles
- Wireless control, suitable for daily wear, enhance ADL abilities



APP

Lower Limb Functional Electrical Stimulation (FES) System (Walk Aid, Foot Drop)

YSL02-L/R Wireless wearable walking aid/foot drop orthosis

- ✓ Maintain the range of motion of lower limb joints
- ✓ Enhance muscle strength, and prevent muscle atrophy
- ✓ Increase active movement, and reduce muscle tension
- ✓ Prevent deep vein thrombosis in the lower limbs
- ✓ Induce brain function reorganization, and promote neural function recovery
- ✓ Enhance standing and walking functions, enhance ADL abilities
- ✓ Improve abnormal gait and increase walking safety

Principle Introduction

Utilizing adaptive technology to automatically detect the patient's step frequency and gait, the apparatus employs computer learning algorithms to track and provide precise programmed electrical stimulation as needed, ensuring that the muscles in the patient's lower limbs contract completely in sync with the gait requirements, thereby increasing the stability of ankle and knee joints, improving abnormal gait, and enhancing walking ability. Simultaneously, by promoting muscle contractions and stimulating muscle spindles and muscle tendon proprioceptors during the patient's practical walking, the apparatus coordinates the central integration of motor output and sensory input, aiming to induce functional reorganization of central nervous system in patients and promote neural function recovery.

Product Features

- Wireless hand controller operation
- Multiple safety detection and protection functions
- Dual-channel output, unique thigh-strap electrical stimulation, enhancing knee joint stability
- Stimulation for quadriceps femoris, hamstring muscles, and tibialis muscles
- Ergonomically-designed straps, automatically identifying electrical stimulation of muscles
- Wireless control, suitable for daily wear, enhance ADL abilities

