

THE NEUROGYM TRAINER

Sophisticated Sensors Help To Improve Motor Control And Coordination While Encouraging Frequent Use And Intensive Training



The NeuroGym® Trainer is a mobile, multi-faceted biofeedback device designed to help clients regain motor control and coordination. The NeuroGym Trainer uses input from various sensors to control the action of computer games, for instance to move a paddle to intercept a ball or to steer a car along a track. Targeted muscle activity and movements can be encouraged or discouraged by simple adjustments to software parameters. Successfully playing the game, then, depends upon meeting the minimum therapist-determined muscle activation or movement parameters. This mechanism provides real-time, speed sensitive feedback, allowing highly intensive goal-oriented and motivational rehabilitation.

Unlike traditional biofeedback devices, the NeuroGym Trainer provides exceptional versatility through the use of various input sensors that monitor muscle activity (EMG), weight shift or pressure changes, tilt, and proximity to a target. A therapist may choose to use a sensor individually or in combination with others. In addition, therapists can choose from a number of programs to design treatment plans ranging from simple one-channel programs to multichannel training set-ups. This versatility allows therapists to target individual muscles for relaxation or activation or to train more complex multi-joint movements.

FEATURES

- Goal-oriented, motivational training software emphasizes both movement accuracy and speed sensitivity
- Monitor displays the game and oscilloscope simultaneously
- Multiple sensors are available, including EMG, pressure, tilt, stretch, proximity, joint angle alarm goniometer, and incontinence vaginal probe
- EMG sensors can detect even minimal muscle activity
- Game and oscilloscope settings can be stored for use in multiple training sessions and to record patient progress

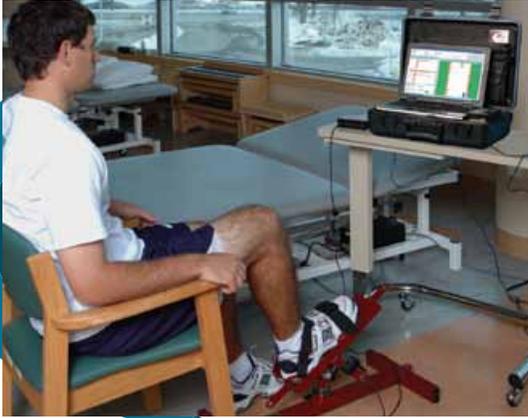
CLINICAL APPLICATIONS

- SPINAL CORD AND BRAIN INJURIES
 - STROKE • CEREBRAL PALSY
- MULTIPLE SCLEROSIS, PARKINSON'S DISEASE, DYSTONIA
 - MUSCLE IMBALANCE, PERIPHERAL NEUROPATHIES, POST-SURGICAL JOINT RETRAINING, INCONTINENCE
 - POST INJURY STRENGTH AND BALANCE TRAINING

TESTIMONIAL

"The NeuroGym Trainer gave me, for the first time, a sense of truly targeting the paretic muscles of my foot. I had never seen a machine like this before and it motivated and gave me hope that I would be able to effectively train my weak and numb foot muscles. With such intensive training of movement I could not sense before, I was able to improve my toe and foot control and get rid of my crutches."

Aaron, a 43 year-old man with paresis of the lower extremities secondary to spinal stenosis



IN ACTION

- Using the Bungee Mobility Trainer, an elderly nursing home resident with OA, a knee replacement and COPD improves his standing posture, balance and walking endurance. In the .
- An elderly longterm care resident hadn't been able to golf for four years – an activity that he used to love. Within the safety of the Bungee Mobility Trainer, he can walk out to the facility's
- A 50 year-old man who had suffered a stroke several years earlier has used the Bungee Mobility Trainer to overcome deficits associated with right hemiplegia. His goal is to run again.

SPECIFICATIONS

MODEL# NGA-4-A

The NeuroGym Trainer system is contained in a durable, hardshell carrying case (17.8" x 12.8" x 5.1") and includes:

- Laptop computer
- Operating System: Windows 7
- Power adapter, USB mouse
- Pre-loaded NeuroGym Trainer software games
- Four channel interface unit
- Standard sensor comes with 2 EMG sensors and 2 pressure sensors
- Additional sensors available for purchase:
Tilt Sensor, Proximity Sensor, Alarm Goniometer, Instrumented Ankle Trainer, Stretch Sensor, Fine Pressure Sensor

BENEFITS

- Improves motor control & coordination
- Encourages increased frequency & intensity of training sessions
- Increases active range of joint motion
- Increases weight bearing ability & balance (static & dynamic)
- Decreases muscle tension
- Improves coordination between agonist & antagonist muscle pairs
- Improves coordination of functional synergies
- Inhibits unwanted muscular activity within a particular movement
- Improves coordination of a movement spanning multiple joints

Research in neural plasticity has shown that patients' capacity to relearn lost motor abilities is much greater than previously believed. Until now, however, therapists have had few, if any, tools to help make this possible. The NeuroGym Technologies equipment, developed by physiotherapists, can help you enable your patients to recover and progress beyond expectations.

The NeuroGym Trainer is one of several mobility enabling tools designed by NeuroGym Technologies to promote the motor-relearning process and significantly improve patient mobility.

NEUROGYMTECH

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