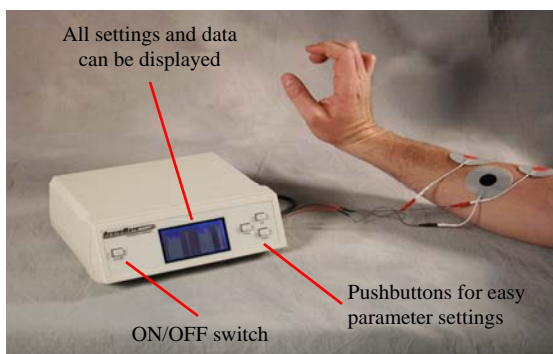


NeuroMove NM900

NeuroMove™ 900



The NeuroMove 900 is a combination of the latest in high-technology electronics and new developments in clinical rehabilitation treatments for stroke and spinal cord rehabilitation. New information on how the human brain heals itself now offers stroke and spinal cord patients new opportunities to rehabilitate injuries many years after the occurrence. The system is designed to be easily used in either the clinic or the home. Verbal, visual, and tactile reinforcement facilitate the development of new neural pathways that result in an increased ability to move extremities debilitated by neural injury. The USA Food and Drug Administration (FDA) recognizes the NeuroMove™ as the only system that is effective in post stroke and spinal cord rehabilitation through its combination of two clinical methodologies, Electromyography (EMG), and Neuromuscular Stimulation (NMS) with a unique, proprietary and patented process of accessing the brain's capability to still communicate along damaged pathways.



New Hope!

Now there is new hope for patients who had thought there was none. Patients with injuries decades old benefit equally well as patients with recent injuries. The NM900 has been designed to be simple to use, even by those severely impaired by their stroke.

STROKE & SPINAL CORD INJURY REHAB

NM900 Product Features

Self-adjusting

The threshold automatically adjusts to a level just above the base muscle activity, so it takes an extra effort to reach the threshold.

Instructions

Visual display and audio instructions to the patient indicating when testing is ready to begin and when to relax after testing is complete.

Safety

Sensor alarm, electronic timer, level lock. All functions are checked for errors before any treatment begins.

Display

A 60 second graphic history of EMG attempts as well as base EMG and threshold along with instructions to the patient. Instructions and feedback create motivation and a achievable goal for the patient.

Memory

Internal memory records relevant statistics which allow the physician to review the session history.



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What makes the NeuroMove NM900 a unique tool for Stroke and SCI Rehab

Q: Is this like regular muscle stimulation?

A: No. The stimulation is only applied when the patient comes up with a real attempt to move the muscle and only then is the stimulation applied (typically for five seconds). There is no muscle training involved with such little stimulation applied (typically for 30 minutes), as it is merely a replacement for any other reward such as giving the patient a piece of candy or a sound, etc. It is found to be the most effective feedback, since the patient can see that he can actually make a difference and move the muscle just by thinking about it. Some patients also benefit from the sensory feedback in addition to the visual.

Q: Is this like regular biofeedback?

A: No. Regular EMG (electromyography) may in some cases also have a very sensitive input, but for most other applications the input signals are filtered and averaged so that the small changes do not affect a steady and clear reading for monitoring. For stroke survivors - some have nearly no EMG activity or a considerable amount of muscle tone with high background “noise” - regular EMG / biofeedback will not stand a chance of detecting the changes that indicate a real attempt from the brain. The NeuroMove measures peak values in the EMG and has very fast input circuitry. Instead of averaging the input it does the opposite - it looks for a pattern in the small changes that indicate a real attempt. A very effective demonstration of this is when a non-patient actually triggers the NeuroMove just by thinking about it and imagining a movement.

Q: Is it complicated to set up?

A: No. The procedure for each 30 minute session is:

- Put the three large, self-adhesive electrodes over the muscle. Position is not significant, as the input is automatically adjusted continuously.
- Turn on the device and turn the stimulation level up slowly for a comfortable contraction of the muscle.
- Think very hard about moving the fingers, wrist, shoulder, foot or whatever muscle is being treated. Only when there is a real attempt will the muscle move for five seconds and will the display tell the patient to relax for fifteen seconds (programmable). After relaxing, the unit returns to “Ready” and is set for the next attempt (relaxing is just as important as concentrating). This is how the entire 30 minutes are spent!

Q: What does the FDA say?

A: The NeuroMove was approved in 2001 and has the FDA’s clearance for “Stroke Rehab” as an Indication for use.