

# FastStart® EMS



## Neuromuscular Electronic Stimulator

- Digital, programmable
- Microprocessor controlled
- Custom touch pad interface
- Ergonomic case design
- Custom LCD with timer
- Broad clinician parameters
- Custom or standard presets
- Unique pause feature
- Custom lead wires
- Optional AC adapter
- Custom belt clip / table stand
- Uses 4 AA batteries or powerpack

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## Neuromuscular Electronic Stimulator



## Product Profile

### Features and Benefits

- User Interface
  - Custom LCD Display - 2 rows of 8 characters
  - Indicators for low battery and pause
  - Flashing Indicator to show current flow
- Pulse Intensity
  - 0-100 mA peak in 1 mA increments
- Waveform
  - Symmetrical or Asymmetrical Waveform
- 75 Programmable Presets
  - Clinicians can decide which presets a patient will have access to and be allowed to change. All settings can be permanently locked so the patient cannot make changes. The most common presets are pre-programmed for your convenience.
- Frequency
  - 1-80 Hz in 1 Hz increments
- Pulse Duration
  - 50-300  $\mu$ s in 10  $\mu$ s increments
- Simultaneous or Alternating Modes
- Adjustable Ramp On and Off
  - 0-9 sec in .5 sec intervals
- Adjustable On Time
  - 1-99 sec in .5 sec intervals
- Adjustable Off Time
  - 0-99 sec in 1 sec intervals
- Adjustable Lag Time
  - 0-9 sec in .5 sec intervals
- External Trigger
  - Will connect to any external device (e.g. CPM or Heel Switch)
- Adjustable Treatment Time
  - 1-60 min, 1-150 repetitions, continuous
  - 1-30 min in 1 min intervals
  - 30-60 min in 5 min intervals
  - 1-30 repetitions in 1 rep intervals
  - 30-150 repetitions in 5 rep intervals
- Automatic Switching to Next Preset
- Compliance Timer
  - 0-999 hr, 59 min (41.66 days) in 1 min intervals

### Indications

- Relaxation of muscle spasms
  - Prevention or retardation of disuse atrophy
  - Increasing local blood circulation
  - Muscle re-education
  - Immediate post-surgical stimulation of calf muscles to prevent venous thrombosis
  - Maintaining or increasing range of motion
- Stimulators should only be used under medical supervision for adjunctive therapy for the treatment of medical diseases and conditions.

### Contraindication

Stimulators should not be used on patients with cardiac demand pacemakers

### Adverse Reactions

- Skin irritation and burns beneath the electrodes have occasionally been reported with the use of stimulators.
- If you experience any initial symptoms of skin irritation due to the electrode, discontinue use immediately and contact Patient Care at VQ OrthoCare<sup>SM</sup>, 800.452.7993 or consult a physician.

### Precautions

- Safety of stimulators for use during pregnancy has not been established.
- Caution should be used for patients with suspected or diagnosed heart problems.
- Caution should be used for patients with suspected or diagnosed epilepsy.
- Caution should be used in the presence of the following:
  - When there is a tendency to hemorrhage following acute trauma or fracture;
  - Following recent surgical procedures when muscle contraction may disrupt the healing process;
  - Over the menstruating or pregnant uterus; and
  - Over areas of the skin which lack normal sensation
- Some patients may experience skin irritation or hypersensitivity due to the electrical stimulation or electrical conductive medium. The irritation can usually be reduced by using an alternative conductive medium or alternate electrode placement.
- Electrode placement and stimulation setting should be based on the guidance of the prescribing practitioner.
- Keep out of reach of children.
- Use only with the leads and electrodes recommended for use by the manufacturer.
- Portable stimulators should not be used while driving, operating machinery, or during any activity in which involuntary muscle contractions may put the user at undue risk of injury.

### CAUTION

Federal law restricts this device to sale by or on the order of a practitioner licensed by the law of the State in which he/she practices to use or order the use of the device.

### Warnings

- The long-term effects of chronic electrical stimulation are unknown.
- Stimulation should not be applied over the carotid sinus nerves, particularly in patients with a known sensitivity to the carotid sinus reflex.
- Stimulation should not be applied over the neck or mouth. Severe spasm of the laryngeal and pharyngeal muscles may occur and the contractions may be strong enough to close the airway or cause difficulty in breathing.
- Stimulation should not be applied transthoracically in that the introduction of electrical current into the heart may cause cardiac arrhythmias.
- Stimulation should not be applied transcerebrally.
- Stimulation should not be applied over swollen, infected, or inflamed areas or skin eruptions, e.g. phlebitis, thrombophlebitis, varicose veins, etc.
- Stimulation should not be applied over, or in proximity to, cancerous lesions.



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