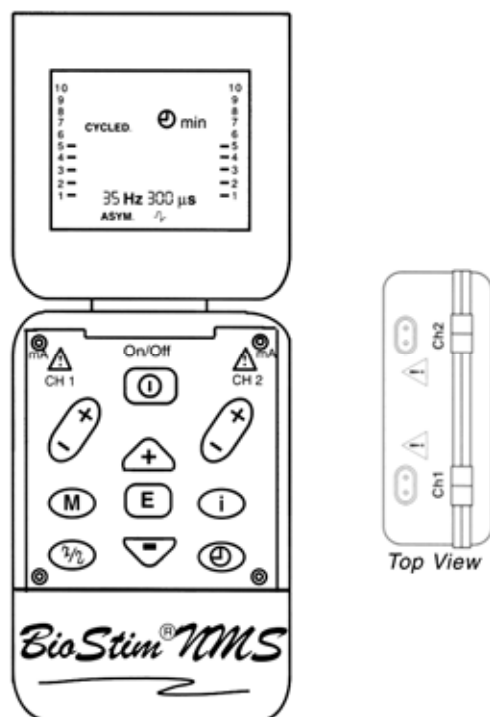


# BioStim<sup>®</sup> NMS



## 2 Wave Forms

- Symmetrical Square
- Asymmetrical Square

## Dual Device

- NMS
- TENS

## 5 Pre-Programmed Protocols

- Symmetrical
- Asymmetrical
- Incontinence

## 3 Stimulation Patterns

- Continuous
- Cycled
- Reciprocating

## Patient Lock

## Patient Compliance Meter

## SPECIFICATIONS

Channels	2
Waveform	Symmetrical, biphasic, square Asymmetrical, biphasic, square
Output	Constant
Intensity	Continuously adjustable from 0-98mA peak
Frequency	Adjustable 1-120 Hz. A Pulse Rate of less than 60 Hz should be used if repeated muscle contractions are desired. A Pulse Rate of at least 10 Hz should be used if forceful, tetanic muscle contractions are desired.
Impulse Width	Adjustable 50-300 μs
Mode Selection	1. <i>Constant</i> : Use the Constant Mode or a Pulse Rate greater than 60 Hz. for the relaxation of muscle spasms only. Use of continuous stimulation and/or rates above the normal physiological range (e.g., greater than 60 Hz) could lead to rapid onset of muscle fatigue, making the device less effective in producing repeated forceful muscle contractions. 2. <i>Cycled</i> 3. <i>Reciprocating</i> Therapy 1 - 35 Hz, 300μs, Symmetrical Biphasic Therapy 2 - 35 Hz, 300μs, Asymmetrical Biphasic Therapy 3 - 50 Hz, 180μs, Symmetrical Biphasic Therapy 4 - 20 Hz, 250μs, Symmetrical Biphasic Therapy 5 - 10 Hz, 50μs, Symmetrical Biphasic
On Ramp	0-10 seconds
On Time	0-99 seconds
Off Ramp	0-10 seconds
Off Time	0-99 seconds
Output Voltage	0-49 V
Intensity	0 - 98 mA
Power Supply	4 AA Batteries, E Block, type 6F22
Dimensions	3.75" x 2.5" x 1.25" (95 mm x 63 mm x 32 mm)
Weight	8 oz (226 grams)

(Data was recorded across a 500 OHM resistance load)

## SAFETY

**Indications:** External electrical neuromuscular stimulation using bi-phasic output is indicated as therapeutic adjunct for prevention or retardation of muscle disuse atrophy; relaxation of muscle spasm; muscle reeducation; maintaining and increasing the range of motion; increasing local blood circulation and as an immediate post-surgical stimulation of calf muscles to prevent venous thrombosis

### Contraindications:

Use of electrical stimulation may be hazardous for patients with certain demand-type cardiac pacemakers. NMS or EMS devices should not be applied to malignant tumors.

### Warnings:

Stimulation should not be applied over the carotid sinus. Severe spasm of the laryngeal and/or pharyngeal muscles may occur when electrodes are placed over the neck or mouth. (These contractions may be strong enough to close the airway or cause difficulty in breathing.) Stimulation should not be applied transcranially. Adequate precaution should be taken with patients with suspected heart problems or epilepsy. Caution should be exercised in the transthoracic application of EMS devices so that the introduction of electrical current into the heart does not cause arrhythmias. The safety of electrical stimulation for use during pregnancy has not been established. The long-term effects of chronic electrical stimulation are unknown. EMS devices should be kept out of the reach of children. Persistent use of stimulation in the presence of skin irritation may be injurious.

Simultaneous connection to RF surgery equipment can cause a burn. Operation near (e.g. 1m) short wave or micro wave therapy equipment can change the output values of the stimulator.

### PRECAUTIONS should be exercised when stimulation is used:

Some patients may experience skin irritation or hypersensitivity due to electrical stimulation. This irritation can usually be reduced by using an alternate electrode site or alternate conductive medium.

### Adverse Effects:

Improper use of stimulation may result in skin irritation and burns beneath the electrodes.

### Caution:

EMS devices should only be used under medical supervision for adjunctive therapy in the treatment of medical diseases and conditions.

Dependent upon government regulation, this device may or may not require a medical prescription.

Federal law (USA) restricts this device to sale by, or on the order of, a physician so licensed by the State. Keep out of reach of children.

DISTRIBUTED BY:

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