Stimpod NMS450

Features and Benefits

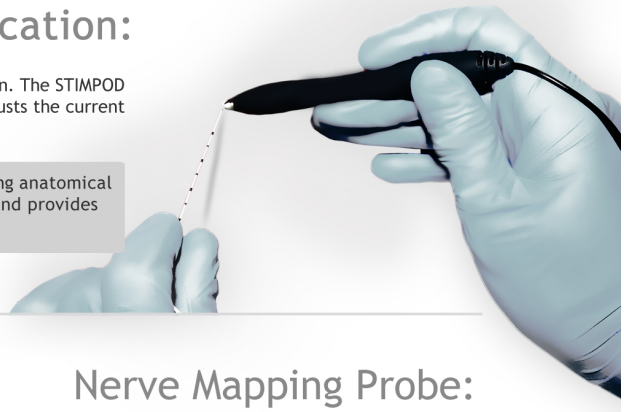
Tri-axial Accelerometer:

The STIMPOD NMS450 Nerve Stimulator includes a Tri-axial accelerometer which provides real time feedback of the strength of contraction of the affected limb (Train Of Four, Double Burst and Post Tetanic Count modes only). The strength of each measured contraction is displayed graphically and the relevant ratios are calculated and also displayed.

The fine movement diffences that can be detected by utilizing accelerometry offers major advantages over gauging contraction strength visually or tactilely.

Tri-axial accelerometry calculates the movement vector of the contraction in three dimensions. This negates the need for calibration as is the case with one-dimensional accelerometers, and reduces the setup time of the procedure.

Combined Nerve Mapping and Nerve Location:



Auto sensing technology provides a solution for simultaneous nerve mapping and nerve location. The STIMPOD Nerve Stimulator monitors whether the mapping probe or needle touches the patient and adjusts the current range accordingly, ensuring quick and precise nerve location.

This technology provides a cost effective alternative to ultrasound techniques for determining anatomical deviations prior to needle insertion. The technique reduces the time of the procedure and provides favourable patient comfort and safety.

Nerve Mapping Probe:

The STIMPOD Nerve Mapping Probe was designed to enable transcutaneous nerve mapping at higher currents (to a maximum of 20mA), whilst the tip offers a contact surface small enough to ensure effective discrimination.

Deeper peripheral nerves require higher current to be recruited by transcutaneous stimulation. The STIMPOD Nerve Stimulator sensing technology and Nerve Mapping Probe designs facilitate larger currents, thus increasing the percentage of peripheral nerves that can be targeted.*

* *See http://www.xavant.com/downloads/nerve-mapping-techniques.pdf*

Charge Transfer Waveform:

The STIMPOD Nerve Stimulator displays real time graphical representation of the actual waveform delivered.

The displayed waveform serves as a quick reference for excessive impedance (> 20kOhm) in the circuit. The waveform will indicate if the pulse is delivered according to the settings. If the waveform is not square, this will immediately indicate excessive impedance in the circuit and all elements in the circuit i.e. ecg electrodes and/or skin condition, needs to be re-assessed before nerve location can be successfully completed.*

* *See http://www.xavant.com/downloads/stimulation-waveform-interpretation.pdf*

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Proximity Indicator:

Visual and audible feedback is given when the target current- and pulse width ranges are reached indicating probable nerve proximity.

The Proximity Indicator provides a safety mechanism which prevents the user from getting confused with the current settings at different pulse widths. Prior to performing your peripheral nerve block, this unique indicator will provide indication of nerve proximity.

Non-Linear Current Adjustment:

In this current adjustment mode the user can pre-program 20 different current and pulse width settings.

When adjusting the adjustment wheel the STIMPOD Nerve Stimulator will only scroll through the pre-programmed Current and pulse width settings. (The default settings are calculated to facilitate the non-linear nature of the current intensity versus the distance from the nerve.)*

* *See http://www.xavant.com/downloads/non-linear-adjustment-mode.pdf*

Technical Specifications:

Current Range

Nerve Locating: 0.0 - 5.0mA
Nerve Mapping: 0 - 20mA
NMBA Monitoring: 0 - 80mA

Load Impedance

Nerve Locating: 0 - 20kΩ (100V)
Nerve Mapping: 0 - 20kΩ (400V)
NMBA Monitoring: 0 - 5kΩ (400V)

Stimulating Modes

Train-of-Four (TOF)
Double Burst (DB)
Post-Tetanic-Count (PTC)
Tetanus (TET)
Twitch (1Hz, 2Hz, 5Hz)

Dimensions

145mm x 90mm x 30mm

Operating Temperature

10 - 40° Celsius

Order Information:

Kits

NMS450 Kit

Product Code: XT-45011 (-NA)*
Contents:
1 x STIMPOD NMS450
1 x NMBA Monitoring Cable
1 x Nerve Locating Cable
1 x Nerve Mapping/Locating cable
1 x Instructions For Use
1 x Carry Case

Accessories

NMBA Monitoring Cable

Product Code: XT-45015 (-NA)*

Nerve Locating Cable

Product Code: XT-41003 (-NA)*

Nerve Mapping/Locating Cable

Product Code: XT-41004 (-NA)*

Instructions For Use

Product Code: XT-45006-EN**

Carry Case

Product Code: XT-41002

*North America only i.e. Product Code: XT-45015-NA
** English (Refer to http://www.xavant.com for additional languages)

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