OMNISTIM® 500 Pro
Multi-Modality Electrical Stimulation System

PRODUCT HIGHLIGHTS

The Omnistim® 500 Pro features a broad range of electrical stimulation options for unmatched treatment versatility and efficiency in today’s diverse clinical environment. The system is ideal for multidisciplinary rehabilitation use and the implementation of advanced electrical stimulation protocols.

MULTI-MODALITY FEATURES FOR TREATMENT FLEXIBILITY AND THERAPIST EFFICIENCY

• Easy-to-use clinical protocol driven treatment menu for increased therapist comfort and efficiency
• Updated exterior design with integrated carrying handle for improved portability
• Lead wire tester for easy evaluation of lead wire integrity to avoid costly device returns
• Color coded output controls, lead wire connectors and lead wires eliminate confusion when setting up electrode placements and adjusting intensity
• Transcutaneous Electrical Nerve Stimulation (TENS), Full-field Interferential Current (IFC) and Continuous MF Nerve Block for effective pain management
• Medium Frequency Alternating Current (MFAC) and Neuromuscular Electrical Stimulation (NMES) for neuromuscular re-education
• High Voltage Pulsed Current (HVPC) with monophasic system for increased circulation
• Comfortable outputs that are well tolerated by patients in all clinical settings
• Portable light-weight design including battery and line powered options

COMBINATION THERAPY

• The 500 Pro may be combined with ultrasound therapy using ACP’s recognized Omnisound® systems for efficient concurrent treatment
**CONTROLS AND FUNCTIONS**

The Omnistim® 500 Pro includes the following features to optimize clinical capabilities:
- Protocols are well researched and parameters are supported in refereed literature
- Parameters may be varied to accommodate patient response
- Multi-modality system includes Interferential with Full Field and Frequency Difference protocols (IFC), Medium Frequency Alternating Current (Russian stimulation or MFAC), Low Voltage Pulsed Current (Asymmetric Biphasic LVPC) and High Voltage Pulsed Current (Monophasic HVPC) waveforms
- Independent output controls and Start, Set, Stop buttons provide easy adjustment of stimulation output
- Manufactured to meet or exceed CE, AAMI TES and FDA standards for maximum clinical efficacy and patient - operator safety

**CLINICAL APPLICATIONS**

Use the Omnistim® 500 Pro for the treatment of:
- Pain
- Joint ROM Limitations
- Muscle Re-education
- Spasticity and Muscle Spasm
- Muscle Disuse Atrophy
- Circulation Deficits

**OMNISTIM® 500 Pro . . . Revolutionizing Rehabilitation**
TECHNOLOGY HIGHLIGHTS AND FEATURES

Interferential Current (IFC) and Transcutaneous Electrical Nerve Stimulation (TENS) for Pain Management
Select from Sensory, Motor, or Nerve Block techniques or from the innovative Frequency Sequential Programs for varied treatment options at the touch of a button. All parameters may be adjusted during operation for advanced treatment applications. The advanced Vector Scan modes allow slow and fast scan with a full 45° or 90° of coverage for maximum flexibility in treatment of acute and chronic pain and injury such as:

- Back Pain
- Arthritis
- Strains and Sprains
- Neuralgia
- Reflex Sympathetic Dystrophy (RSD) / Complex Regional Pain Syndrome (CRPS)
- Herpes Zoster - Shingles
- Degenerative Joint Disease

Full Field Interferential Therapy
Interferential Current (IFC) is intended for the symptomatic relief and management of chronic, intractable pain and for post-surgical and post-traumatic acute pain. IFC can be used for many pain related applications such as:

- Deep tissue and surface tissue areas for increased sensory input associated with effective pain management
- Nerve Block for deep tissue and surface tissue
- Providing pre-modulated medium frequency

Medium Frequency Alternating Current (MFAC) and Low Voltage Pulsed Current (LVPC) for Muscle Re-education
The MFAC (Russian Stimulation) protocols provide pre-programmed protocols for surface and deep muscle re-education, enhancement of ROM, reciprocal inhibition, treatment of muscle disuse atrophy and reduction of muscle spasm and spasticity. LVPC provides protocols for superficial muscle re-education. All parameters are fully adjustable during operation. The delay mode is provided for rehabilitation protocols requiring sequential re-education.

- Muscle Disuse Atrophy
- Muscle re-education for post-op surgery or trauma
- Relaxation of muscle spasms
- Increasing range-of-motion
- Increasing local blood flow
- Preventing deep venous thrombosis (blood clots) immediately after surgery

High Voltage Pulsed Current (HVPC)
Provides treatment applications for pain reduction and increased circulation. System features preset parameters for sensory stimulation and muscle pump programs, as well as custom programming options for each protocol. All parameters are adjustable during operation.

- Improve circulation
- Provide treatment options for edema

OMNISTIM® 500 Pro. . . Revolutionizing Rehabilitation
PRODUCT SPECIFICATIONS

OMNISTIM® 500 Pro TECHNICAL SPECIFICATIONS

Stimulation System:
Output: Constant voltage up to preset current; the system then operates in constant current mode.
Output Amplitude:
ICF Mode: FD 0-70 mA peak, FF 0-99 mA peak, 500 ohm load.
MFaC Mode: 0-99 mA peak to peak, 500 ohm load.
LVPC Mode: 0-99 mA peak into 500 ohm load.
HVPC Mode: 0-225 volts peak into 500 ohm load.
Channel Isolation: Independent channels transformer isolated.
Line Leakage: Less than 50 microamps.

IFC (Interferential Therapy) Mode:
Type: Frequency Difference or Full Field IFC.
Waveform: Bipolar Square Wave at a 2,000, 2,500, 4,000, 5,000 and 10,000 Hz carrier frequency.
Frequency Difference Modulation Rate: 0 to 250 Hz.
Beat - Sweep: Presetable from lowest to highest frequency difference modulation rate.
Vector: 45° or 90° fast or slow scan (7 or 74 sec).

MFaC (Medium Frequency Alternating Current) Mode:
Waveform: Bipolar Square Wave at a 2,000, 2,500, 4,000, 5,000 and 10,000 Hz carrier frequency.
Burst Frequency: Adjustable from 0 to 250 Hz.
Rate Scan Time: Adjustable 0-20 seconds.

LVPC (Low Voltage Pulsed Current) Mode:
Waveform: Asymmetric Biphasic Square Wave.
Pulse Rate: 0 to 250 Hz.
Phase Duration: 40 to 300 µsec.
Modulation: Phase ± 20% in 8 seconds.

HVPC (High Voltage Pulsed Current) Mode:
Waveform: Twin monophasic pulses each with 40 µsec phase duration.
Rise Time: < 500 nsec.
Pulse Rate: Adjustable from 0-125 Hz.
Interperiod Interval: Adjustable from 10-250 µsec.

Time Functions:
On/Time: Adjustable from 0-30 seconds.
Off/Time: Adjustable from 0-199 seconds.
On/Off Ramp: Adjustable from 0-9.9 seconds independently.
Channel Timing: Alternate, Simultaneous or Channel B delayed 0-9.9 seconds.

Patient Safety Systems:
Activation: Output levels are reset to zero at the start and completion of treatment. A patient safety hand control turns off the stimulation and sounds the buzzer if pushed.

General:
Dimensions: 6.5" (16.5cm) W x 12" (30cm) D x 3.5" (9cm) H.
Weight: (Includes batteries) 4.5 lbs (2.03 kgs).
Operating Power: 100-240 volts AC 47-63 Hz 50 watts or 4 x 1.5 volt “D” cell alkaline or NiCd rechargeable batteries. Charge LED indicator lights when the unit is running on line power or charging. The indicator light flashes on charge completion. Rechargeable batteries with full charge run the system from 5-10 hours dependent on the protocol used.

Push Buttons: Membrane switch label. Output controls feature LED’s above switches which light when stimulation is active on that channel.
Lead Wire Tester: Indicates a make or break in the lead wire by Green or Red LED, respectively.
Lead Wire Color Coding: Green and Blue coding for lead wires, output controls and channel identification.
Audio Indicator: Buzzes to signal treatment completion and start of On/Off timing cycles. May be turned on or off for timing cycle alert.

Subassembly manufactured under exclusive license for ACP in Taiwan, R.O.C. ACP reserves the right to change technical specifications and product availability without notice. Federal Law restricts this device to sale by or on the order of a physician or other health care practitioner.