NerveSpa **NerveWave** SELL SHEET

CLINICAL OVERVIEW

The Nerve Wave incorporates advanced Neuro Modulating electrotherapy programming, along with a wide range of traditional clinical grade modalities, all in one device.

The proprietary programming creates a combination of bioelectrical impulses and biochemical effects that therapeutically resolve the underlying condition, as well as quell the symptomatic condition.

The Nerve Wave enjoins middle frequency programming with traditional high frequency programming in some programs, while harnessing low frequency programming in other programs to maximize therapeutic capture.

Mechanism of Action:
- **High frequencies** stimulate metabolic effects, enzyme activation, and inflammation modulation.
- **Middle frequencies (kHz carrier currents)** support comfortable deep-tissue stimulation and therapeutic energy delivery to impact tissue and nerve signaling.
- **Low frequencies** stimulate circulation, lymphatic flow, and edema reduction.
- **Autonomic Balance:** Stimulates parasympathetic activation to regulate the nervous system.




Accessories Included

ACCESSORIES SOLD SEPARATELY


Clinical Applications

- **Regenerative Pain Control:** Therapeutic pain management outcomes for the back and joint.
- **Nerve & Neuropathy:** Nerve regeneration and symptomatic relief.
- **Restorative Recovery:** Post-surgical/injury rehabilitation and muscle activation.
- **Vagus Nerve Stimulation:** Systemic regulation for sleep, anxiety, and migraines.

Neuropathy | Chronic pain | Joint degeneration | Recovery | Parasympathetic Activation

MULTI-DOMAIN PROGRAMMING & USAGE GUIDANCE

Regenerative Pain Control

- Using clinically studied electrotherapy specifications derived from the Jstim – Joint Stimulator; low level frequencies are coupled with high volt stimulation set to a monophasic waveform. Such specifications have been studied to promote cartilage regeneration in the joint.
- Interferential therapy (IFT) targets chronic intractable back pain by using intersecting medium-frequency electrical currents to penetrate deep tissue, block pain signals, reduce inflammation, and improve muscle relaxation. This technique is especially effective for pain that has not responded to other treatments due to its ability to stimulate targeted nerves and muscles beneath the skin with minimal discomfort
- **Target Indications:** Treat degenerative joint conditions such as Osteoarthritis (OA) and Rheumatoid Arthritis (RA) of the knee, hand, and shoulder.

Protocol Frequency: 4–5x per week
Protocol Duration: Over the course of 26 weeks
Treatment Time: Joint (60 min); Back (25 min)

Nerve & Neuropathy

Clinical research maintains there are two approaches to treating Neuropathy – one being high frequencies with Sinusoidal alternating current with constant middle frequencies and the second being Low therapeutically ranged frequencies

- High Frequency with Middle Frequency attributes has been found in clinical and animal studies to enhance myelinated axon growth, accelerate nerve fiber maturation, and in some protocols, provide nerve conduction block for pain relief
- Low Frequencies tends to promote endogenous opioid release and support regenerative cellular processes that aid in nerve regeneration.

Using proprietary settings – delivering a mix between high frequency and low frequency coupled with waveforms specific to treating one's extremities, the Nerve Wave delivers therapeutic outcomes. These frequencies and waveforms have been found to stimulate both bioelectrical (low frequency) and biochemical (high frequency) processes in the body at the same time.

Protocol Frequency: 5x per week (60–90 uses)

- **Phase 1:** 1x/day
- **Phase 2:** 1x/day

Protocol Duration: Maintenance Phase: 2–3x/week for 6 weeks
Treatment Time: Primary Phase (20 min); Secondary Phase (20 min); Maintenance Phase (30 min)

Restorative Recovery

- Delivers gentle, non-fatiguing muscle contractions—primarily targeting small, slow-twitch muscle fibers and lymphatic movement within the muscle—accelerating the recovery process without causing additional strain or muscle fatigue.
- Increases vasodilation while boosting microcirculation and promoting angiogenesis in injured tissue, thus increasing healing.
  - Low Frequency promotes lymphatic drainage, reduction of swelling and inflammation, and increasing healing within the muscle and tissue.
  - High Frequency addresses post-surgical or post-injury pain syndromes by reducing reliance on pain medication, while increasing range of motion, and strength during the rehab phase.

Protocol Frequency: 4–5x per week
Protocol Duration: Over the course of 13–20 weeks
Treatment Time: Rehabilitative Relief (30 min); Muscle Activation (30 min)

Vagus Nerve Stimulation

- mild electrical impulses are delivered to the outer ear innervated by the auricular branch of the vagus nerve (ABVN), such as the tragus or cymba concha. This stimulation activates afferent nerve fibers that project to the brainstem, especially the nucleus tractus solitarius (NTS), and in turn modulate central autonomic activity, neurotransmitter release, and the balance of the sympathetic-parasympathetic nervous system
- Parasympathetic Activation: taVNS increases parasympathetic outflow and reduces sympathetic activity, with clinical studies showing benefits ranging from reduced heart rate and inflammation to enhanced relaxation responses and improved autonomic balance.

Protocol Frequency: 1–2x daily as needed
Protocol Duration: Typically 10 mins per session
Treatment Time: Sleep, Anxiety, Migraine (10 min)

Clinical Review & Ordering

Schedule a clinical review to walk through protocols, workflows, and clinic fit.

Phone: 1-800-239-7880
Fax: 1-888-304-5454
Email: support@nervespa.com
Web: nervespa.com

CLINICAL TECHNOLOGY NOTE

Modulated Medium Frequency

Both “Interferential high frequency” and “Medium frequency” setups similarly use kHz frequency carrier currents to get through skin comfortably, however, interferential relies on interference (a beat/envelope) in the low-frequency range for the actual neurophysiologic effect that is succeeded in the tissue. Look at this as High-Frequency stimulation with a successful low-frequency result deep in the tissue.

Whereas Modulated Middle Frequencies do not have a beat frequency and thus these two carrier currents are left to stimulate in a broader capacity to deliver therapeutic energy deep into the tissue to impact cell membranes and to promote healing, nerve repair, and nerve regeneration

Medium-frequency stimulation using pure high-kHz alternating current (typically 1–20 kHz without low-frequency beat modulation) offers therapeutic benefits by inducing reversible nerve conduction block and modulating neural excitability.

Neuropathy Symptom Relief

Kilohertz stimulation at 10–20 kHz significantly reduces neuropathic pain, mechanical/thermal allodynia, and hyperalgesia in models like chronic constriction injury and painful diabetic neuropathy (PDN) by suppressing TRPV1/NMDAR2B signaling, glial activation, and aberrant nerve firing. In PDN patients, 10 kHz peripheral stimulation yields 66–80% durable pain reduction over 24 months, plus secondary gains in sleep, mood, daily function, and glycemic control (HbA1c drops of 0.5–1.1%).

Nerve Regeneration Potential

While low frequencies (e.g., 2–20 Hz) enhance axon outgrowth, myelination, and regeneration post-injury, pure kHz AC shows direct promotion of regeneration; instead, it safely blocks conduction without damage, potentially creating a healing window by silencing hyperexcitable nerves. Studies are balanced between High kHz and Low frequencies delivering structural nerve improvements (e.g., higher axon density).