

MedWave™

Neuro-100s

PANEL GUIDE



Introduction to Neuro-100S Panel

The Neuro-100S panel is a full-body therapeutic device combining 635 nm red light and 810 nm near-infrared light, designed to target both superficial and deep tissue layers.

This manual provides guidance on treatment protocols, expected benefits, pricing, and best practices for using the panel effectively in clinical and wellness settings.



MedWave™

A photograph showing a person lying on a treatment table, covered with a patterned blanket. Above them is a large, rectangular red light panel mounted on a stand. The brand name 'MedWave' is visible on the side of the stand. The entire scene is bathed in a red light.

Treatment Protocol

POSITIONING & TIMING:

DISTANCE FROM PATIENT:

Position the panel 4-6 inches from the body to ensure optimal light absorption.

SESSION DURATION:

- **Front of Body:** 10 minutes
- **Back of Body:** 10 minutes
- This dual-sided approach provides a comprehensive systemic treatment, addressing both localized and general wellness needs.

SESSION FREQUENCY:

STANDARD RECOMMENDATION:

For general wellness and maintenance, use the panel 2-3 times per week.

THERAPEUTIC USE:

For pain relief, injury recovery, or chronic conditions, 2-3 sessions per week are recommended, depending on patient response and practitioner guidance.

DETOXIFICATION NOTE:

Allow at least a day between sessions to support the body's detoxification processes.



Understanding the Light Wavelengths & Therapeutic Benefits

635nm Red Light (Visible Spectrum)

TARGETED EFFECTS:

Absorbed by superficial tissues, enhancing cellular activity in skin layers and soft tissues.

PHYSIOLOGICAL BENEFITS:

- **Skin Repair:** Stimulates collagen and elastin production, improving skin healing and repair.
- **Localized Pain Relief:** Eases discomfort in tendons, ligaments, and superficial tissue.
- **Anti-Inflammatory Effects:** Reduces inflammation in surface tissues, aiding recovery in minor wounds and irritations.
- **Fat Conversion:** Assists in the breakdown of fat cells, converting fat into usable energy.



Understanding the Light Wavelengths & Therapeutic Benefits

810 nm Near-Infrared Light (Invisible Spectrum)

TARGETED EFFECTS:

Penetrates deeply into muscles, joints, nerves, and other internal structures.

PHYSIOLOGICAL BENEFITS:

- **Deep Pain Relief and Anti-Inflammation:** Addresses systemic pain and reduces inflammation in deeper musculoskeletal tissues.
- **Enhanced Mitochondrial Function:** Increases ATP production, boosting cellular energy and resilience.
- **Systemic Circulation Improvement:** Stimulates nitric oxide release, enhancing blood flow and oxygenation.
- **Nerve Health and Neurological Benefits:** Promotes nerve repair and reduces discomfort in neuropathic conditions.



Suggested Conditions for Treatment with the Neuro-100S Panel

The Neuro-100S panel's large design is ideal for treating chronic or complex conditions requiring broad, whole-body therapy.

Conditions Addressed with 810nm Light

CHRONIC PAIN AND INFLAMMATION:

Effective for managing pain in joints, muscles, and connective tissues.

SYSTEMIC PAIN AND NEUROPATHY:

Provides relief for chronic pain and nerve-related discomfort.

TISSUE RECOVERY:

Supports recovery from muscle strains, sprains, and surgical healing.

ENHANCED CIRCULATION:

Beneficial for poor circulation, improving blood flow and tissue oxygenation.

REPRODUCTIVE HEALTH:

Helps relieve pain from conditions like endometriosis by improving circulation and reducing inflammation.

A close-up photograph of the MedWave Neuro-100S panel. The panel is dark grey or black with the brand name 'MedWave' printed in large, bold, white letters. A small circular logo is visible above the 'e' in 'Wave'. The background is slightly blurred, showing what appears to be a person's leg or arm being treated.

Suggested Conditions for Treatment with the Neuro-100S Panel

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Conditions Addressed with 635nm Light

SURFACE-LEVEL HEALING:

Ideal for wounds, cuts, scarring, and skin rejuvenation.

LOCALIZED PAIN RELIEF:

Effective for smaller joint pain and tendon issues.

ANTI-INFLAMMATORY SKIN BENEFITS:

Reduces inflammation for conditions such as eczema and psoriasis.



Treatment Pricing Guidelines

For full-body, systemic treatments with the Neuro-100S panel, a recommended charge is **\$100 to \$150 per session**. Factors influencing session pricing include:

BUNDLING WITH OTHER SERVICES:

Consider combining red light therapy with services like chiropractic adjustments, massage, or acupuncture for added value.

CONDITION COMPLEXITY:

Chronic or systemic conditions may require multiple sessions per week, supporting a premium price.

DURATION & FREQUENCY:

Extended or more frequent sessions may justify higher rates.



Lipedema

Lipedema is a chronic condition characterized by the abnormal accumulation of fat, primarily in the legs and arms. It often causes swelling, pain, and limited mobility.

Understanding Lipedema:

CHALLENGES FACED BY THOSE WITH LIPEDEMA:

- Persistent pain and tenderness in affected areas.
- Difficulty managing weight and swelling despite diet or exercise.
- Emotional distress due to physical changes and reduced mobility.

How the Neuro Panel Helps:

IMPROVED CIRCULATION:

The **810 nm near-infrared light** enhances blood flow, reducing inflammation and promoting lymphatic drainage.

PAIN RELIEF:

By reducing inflammation and targeting deeper tissues, the panel alleviates chronic pain associated with Lipedema.

FAT CONVERSION:

The **635 nm red light** supports the breakdown of fat cells, aiding in managing the condition's impact.

A person is lying on a treatment bed, which is covered with a red, textured surface. Above the person, a large array of small, circular red lights is visible, likely part of a red light therapy device. The word 'Wave' is faintly visible in the background.

Endometriosis

Endometriosis is a condition where tissue similar to the uterine lining grows outside the uterus, causing severe pain, inflammation, and fertility challenges.

Understanding Endometriosis:

CHALLENGES FACED WITH ENDOMETRIOSIS:

- Chronic pelvic pain and discomfort.
- Pain during menstruation, intercourse, and bowel movements.
- Limited treatment options often involving medication or surgery.

How the Neuro Panel Helps:

PAIN AND INFLAMMATION RELIEF:

The **810 nm near-infrared light** deeply penetrates to reduce inflammation and modulate pain pathways.

ENHANCED CIRCULATION:

Improved blood flow reduces tissue tension and promotes faster healing.

SUPPORT FOR HORMONAL HEALTH:

Studies suggest red light therapy can aid in balancing hormonal and cellular health, indirectly benefiting symptoms of endometriosis.

Lipedema, Endometriosis & Neuro-100S Panel

**THE NEURO PANEL PROVIDES A NON-INVASIVE,
DRUG-FREE SOLUTION TO MANAGE PAIN,
IMPROVE QUALITY OF LIFE, AND COMPLEMENT
EXISTING TREATMENTS.**

Consider integrating it into your practice to offer relief to patients with these
challenging conditions.

Panel Therapy vs. Shockwave Therapy: When to Use Which

NEURO-100S PANEL (SYSTEMIC APPROACH)

BEST FOR:

- Treating whole-body or systemic conditions needing deep, consistent light exposure.
- Enhancing wellness, energy levels, and circulation.
- Managing chronic, widespread pain.

BENEFITS:

- Offers wide-reaching therapeutic effects for both local and systemic issues, ideal for non-invasive, full-body relief.

SHOCKWAVE THERAPY (TARGETED APPROACH)

BEST FOR:

- Localized conditions needing focused, high-energy treatment.
- Treating calcifications, tendon injuries, and specific joint or muscle pain.

BENEFITS:

- Provides immediate, concentrated effects in a targeted area, complementing systemic treatments for localized symptoms.

COMBINATION THERAPY

BEST FOR:

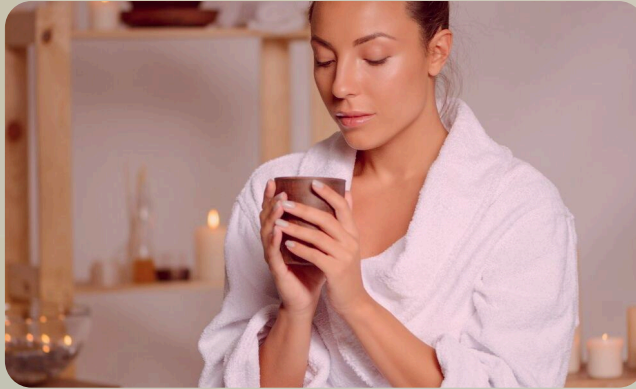
- Systemic and localized pain management, maximizing the impact of targeted and broad-spectrum treatment.
- When doing combination therapy, considering charging a higher rate for the treatment session.

Usage Guidelines for Practitioners



EYE PROTECTION

Patients should wear protective eyewear during sessions.



PRE-SESSION PREPARATION

Encourage hydration before treatment to enhance cellular response.



POST-SESSION CARE

Advise patients to continue hydrating and rest, as light therapy can support detoxification and metabolic changes.

Deep Dive into the Science of 810nm Light Therapy

The 810nm wavelength in the near-infrared (NIR) spectrum penetrates deeply into body tissues, making it effective for addressing muscles, joints, nerves, and other internal structures.

Mechanisms of Action

01 MITOCHONDRIAL ACTIVATION

810nm light activates mitochondria, specifically targeting cytochrome c oxidase (CCO) within cells:

- **Increased ATP Production:** Enhances cellular energy for repair and regeneration.
- **Release of Nitric Oxide (NO):** Improves oxygen use and cellular energy output by displacing nitric oxide from CCO.

Reference: Hamblin, M. R. (2017). Mechanisms of low-level light therapy. Photobiomodulation, Photomedicine, and Laser Surgery, 25(5), 391-401.

02 ANTI-INFLAMMATORY EFFECTS

The 810nm wavelength modulates inflammation by reducing pro-inflammatory cytokines and enhancing anti-inflammatory responses:

- **Reduced Inflammatory Markers:** Lowers TNF- α and IL-6, helping restore cellular balance.

Reference: Borsa, P. A., et al. (2013). The effects of photobiomodulation therapy on inflammation and tissue repair. Lasers in Surgery and Medicine, 45(5), 367-375.



Deep Dive into the Science of 810nm Light Therapy

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Mechanisms of Action

03 ENHANCED BLOOD FLOW & CIRCULATION

810nm light improves circulation by stimulating nitric oxide release, causing blood vessel dilation:

- **Vasodilation:** Increases blood flow, reducing muscle tension and promoting healing.

Reference: Chung, H., et al. (2012). The nuts and bolts of low-level laser (light) therapy. Annals of Biomedical Engineering, 40(2), 516-533.

04 NEUROLOGICAL BENEFITS & NERVE REPAIR

810nm light therapy supports nerve health and repair:

- **Nerve Regeneration:** Aids in nerve healing, benefiting neuropathy and nerve-related pain.

Reference: Anders, J. J., et al. (2014). The potential of light therapy for central nervous system injury and disease. Photomedicine and Laser Surgery, 32(7), 398-409.

Clinical Applications of 810nm Light

01

PAIN MANAGEMENT

810nm light effectively reduces chronic pain by targeting inflammation & improving tissue healing.

Reference: Youssef, E. F., et al. (2016). Efficacy of laser therapy in the management of musculoskeletal pain. Pain Research and Management, Article ID 4591420.

02

TISSUE HEALING & RECOVERY

It accelerates healing, benefiting athletes and post-surgical recovery.

Reference: Leal-Junior, E. C., et al. (2009). Phototherapy in skeletal muscle performance and recovery. Journal of Clinical Laser Medicine & Surgery, 27(4), 225-229.

03

REPRODUCTIVE HEALTH

810nm light may improve reproductive health by reducing inflammation and enhancing blood flow.

Reference: Faraji, S., et al. (2018). Light-based therapies and their potential in improving reproductive health outcomes. Photomedicine and Laser Surgery, 36(10), 527-534.

04

ORGAN HEALTH

Supports cellular repair in the liver, kidneys, and cardiovascular system by reducing chronic inflammation.

Reference: Morales, J. F., et al. (2020). Impact of photobiomodulation on organ health and cellular repair. Biomedical Photonics, 32(7), 412-426.

05

GUT HEALTH

810nm light may alleviate inflammatory gut conditions by supporting mucosal healing and reducing inflammation.

Reference: Biesiekierski, J. R., et al. (2015). Photobiomodulation and gastrointestinal health: Modulation of inflammation and tissue repair. Gut Health Journal, 58(3), 231-243.

NLT™ CONTRA-INDICATIONS/ADVISORY:

EYE WEAR

The light can be harmful to the eyes, especially if directly exposed. It is recommended to use protective eyewear when undergoing NLT™ Therapy, especially when the device is used near the eyes.

CANCER

Some sources suggest avoiding the use of NLT™ Therapy over known or suspected malignancies (cancerous lesions) unless under the guidance of a healthcare professional. We do not suggest using this technology on anyone with cancer or have a history of cancer.

PREGNANCY

The safety of NLT™ Therapy during pregnancy hasn't been thoroughly studied. Pregnant women should consult their healthcare provider before using NLT™ Therapy.

PHOTOSENSITIVITY

Some medications and substances can make the skin more sensitive to light. If you're taking any medications or have any conditions that increase light sensitivity, it's important to speak with a healthcare professional before undergoing NLT™ Therapy.

TOPICAL PRODUCTS

Some products applied to the skin may cause sensitivity or reactions when exposed to light. It's essential to check the ingredients in any skincare products and consult with a healthcare provider if unsure.

THYROID ISSUES

There's some debate about the use of NLT™ Therapy in individuals with thyroid issues, particularly if applied to the neck area. If you have thyroid problems, consult with your healthcare provider before using NLT™ Therapy.

SKIN CONDITIONS

If you have an active rash, sunburn, or other skin conditions, it might be best to avoid NLT™ Therapy until healed or discuss with a dermatologist.

RADIATION THERAPY

If you've recently undergone radiation therapy, consult with your healthcare provider before starting NLT™ Therapy.

TATTOOS

NLT™ Therapy might cause a reaction with some tattoo inks. If you have tattoos in the treatment area, monitor the response and consult with a healthcare provider if concerned.

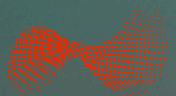
HEMORRHAGE (BLEEDING)

If there's an active bleed or a tendency to bleed (like in hemophiliacs), NLT™ therapy might not be recommended.

Conclusion

810nm near-infrared light is a powerful tool in photobiomodulation therapy, with applications spanning chronic pain, recovery, reproductive health, and beyond.

Combining 810nm with our narrow lens design and power output improves depth of penetration and impact on cellular health making it a powerful device to have in your clinic



MedWave™

