



## Neuro-Impulse - For Pain Management

### DESCRIPTION –

- Neuro-Impulse is a device used to re-educate inactive nerves to recover their inactive properties. Safe and better treatment options for Patients with Diabetic Neuropathy to alter pain, proprioception, touch perception, and motor function.
  - Unlike traditional TENS UNITS instead of blocking pain signals, a few weeks of Neuro-Impulse will reduce causes of foot burning sensations (pain, proprioception, touch perception, and motor function) and help to avoid ulcerations.
  - Useful for clinical applications as well as patient home care for improved blood flow velocity and volume better for wound healing.
  - Neuro impulses, also known as nerve impulses or action potentials, are the result of electrothermal waves that propagate along neurons in response to a stimulus.
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- Neuro-impulse helps in healing and Stimulates leg muscles to contract and relax thereby increasing blood velocity and volume
  - Stimulates all the afferent and efferent nerves in the lower extremities with a signal larger than normal to re-establish the pathways for subsequent normal signals to follow
  - Draws axon and dendrite nerve endings closer together to facilitate proper nerve transmission
  - Builds residual pain relief each time the system is used
  - It causes the brain to release endorphins that reduce global pain and anxiety
  - Promotes healing of non-plantar surface diabetic skin ulcers and sprains
  - Increases muscle strength for safe, pain-free walking
  - Promotes better mobility and balance during treatment
  - Reduces edema as muscle contractions encourage lymphatic drainage
  - Increases collateral circulation, stimulating vasculogenesis



### FEATURES –

- These impulses play a vital role in facilitating the transmission of information throughout the nervous system, allowing for rapid communication and coordination of various physiological processes in the body.
- A neuro impulse, also known as an action potential, triggers a series of physiological changes within a neuron in response to a mechanical, chemical, or electrical stimulus.
- This cascade of events propagates along the axon, transmitting signals throughout the nervous system.
- Neuro impulses are vital signals transmitted along nerve fibers.
- These signals serve as messengers, relaying crucial information about both the body and the external environment to the spinal cord and brain.
- They facilitate communication among various centers in the central nervous system, orchestrating a complex network of interactions.
- Additionally, neuro impulses command and coordinate muscle movements, allowing us to perform various actions and respond to our surroundings effectively.
- This stimulus initiates a chain reaction that propagates along the length of the neuron.
- The cell membrane of a neuron separates the interior and exterior environments of the cell.
- On the exterior side of the cell membrane, there is a higher concentration of positively charged sodium ions.
- These sodium ions play a crucial role in generating the nerve impulse. Conversely, the interior side of the cell is negatively charged and contains a higher concentration of potassium ions.
- This difference in ion concentrations creates an electrochemical gradient across the cell membrane.



# DIABETIC FOOTCARE

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COMPREHENSIVE DIABETES SOLUTIONS

## SPECIFICATIONS –

- Voltage: Input voltage - 230v Ac 50Hz
- Power: Output power - 2 watts
- Current: Output Current - 166mA
- Frequency - Output Frequency - 8Hz
- Time - 1 minute to 60 minutes for patient cable operation
- Display - Liquid Crystal Display (16\*2) - 16 columns & Rows (LCD)
- Mode's - Run mode & Set mode
- Set mode for time setting & output voltage level setting



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