

Performance of Avazzia BEST™ And Traditional TENS Therapy

Avazzia BEST	Traditional TENS (Transcutaneous Electrical Neural Stimulation)
Avazzia BEST devices are FDA-cleared for the symptomatic relief and management of chronic, intractable pain and adjunctive treatment in the management of post-surgical and post-traumatic pain. BEST devices are available by prescription only.	Check clearances and federal approvals.
Effectiveness lasts for several hours after treatment and has been shown in some cases to permanently resolve pain.	Effectiveness often ends when treatment stops.
Engineered and manufactured in the U.S., at a federally inspected facility in North Texas.	Often difficult to determine where product is manufactured; engineering origins often unknown.
Unique biofeedback feature of BEST units is designed to prevent habituation and accommodation for more effective pain management.	User's body often "gets used" to TENS stimuli. The result is the TENS unit works well for awhile and then effectiveness is either severely limited or eliminated.
Product has patented software and design. Superior technical support and service available at company headquarters in Dallas.	Purchaser should check product support and service. Some products offer no technical support and cannot be returned for any reason.
Accessories may be purchased, as needed, to improve treatment.	Many TENS units sold as kits, with no option to add needed items or delete unnecessary items.

***Biofeedback** is the body's response to the stimulus and the technology's ability to detect, measure, analyze and respond to the body. As the BEST product is applied, a high voltage microcurrent signal is passed through the skin. With each signal, the electrical properties of tissue changes. The BEST device detects the change and responds with modification of the next signal.*

Technical Comparison

Avazzia BEST	Traditional TENS (Transcutaneous Electrical Neural Stimulation)
Patented microchip technology designed by the Texas Instrument engineer who created the “logic” chips used in Apollo moon missions and F-14 and F-15 fighter jets.	Technology is basically the same as when units came into common use in 1970s. Technology can be easily replicated.
Output signals vary with changes in tissue impedance to reduce accommodation.	Output signals typically in the same, continuous pattern, often resulting in accommodation.
Avazzia BEST devices form a somatic feedback loop between the device and tissue being treated for more effective therapy.	No biofeedback.
Avazzia devices have high intensity, burst pulses and very low microcurrent for increased stimulation of neuropeptides.	Low intensity, long duration pulses, higher current.
Voltage range: 20-650 volts.	Voltage range: 0-40 volts.
Amperage range: Microamps (10^{-6} amps)	Amperage range: Milliamps (10^{-3} amps)
Signals, frequency range: 1Hz to 1500Hz	Signals, frequency range: 1Hz to 100Hz
Damped asymmetrical biphasic sinusoidal waveform.	Square waveform, monophasic or biphasic; symmetrical or asymmetrical.
Uses two AA batteries.	Typically uses 9V battery.
In addition to owner’s manual, online videos (accessible with membership fee) explain advanced techniques for pain management. Professional users may attend in-person training (registration required).	Owner’s manual included with purchase.
Service and technical support staffs are located in Dallas, Texas.	Check vendor to determine service and technical support.