

FES vs. TENS FAQs

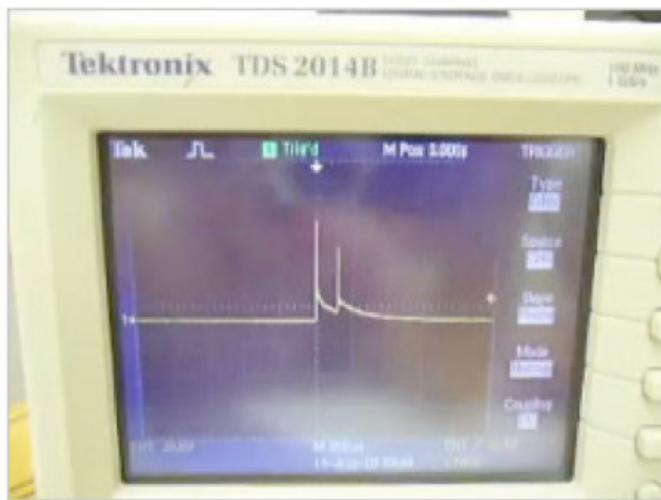
(Functional Electrical Stimulation vs. Transcutaneous Electrical Nerve Stimulation)

Why is FES a Beneficial Type of Electrostimulation?

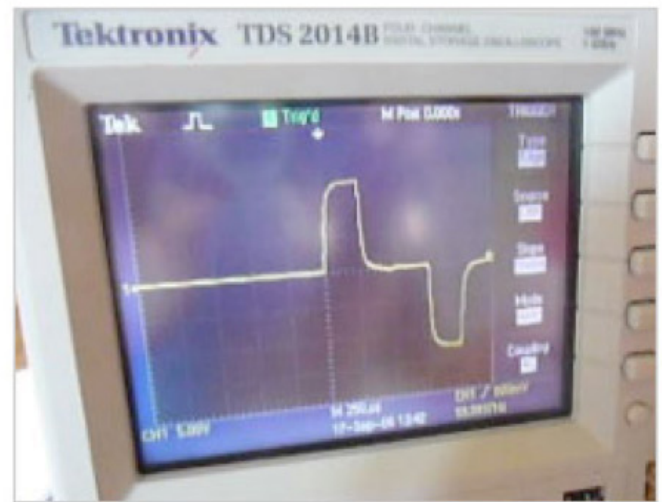
- FES is designed to stimulate motor and sensory nerves.
- FES replicates the body's own electrical impulse to generate a muscular response.
- FES uses low voltages to obtain deep muscle movement (9-11 Volts).
- FES provides computer-regulated signals, generated by software, for a clean & precise waveform.
- FES uses a balanced-biphasic waveform for stimulation that does not produce ion accumulation.

Why is TENS Different From FES?

- TENS is designed to stimulate sensory nerves, not motor nerves.
- TENS sends an impulse to confuse the sensory pathways to "gate" or block the pain sensation.
- TENS produces a strong, stinging sensation if muscle contractions are induced.
- High voltages are required to obtain deep muscle movement (120 Volts).
- TENS uses an unbalanced waveform. Waveform adjustments are necessary to avoid accommodations by the body so that the signal remains effective.



Conventional TENS Waveform



FES Waveform