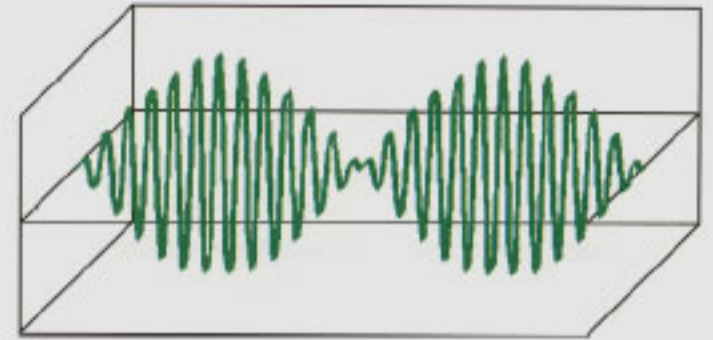




BIPOLAR INTERFERENTIAL

Bipolar Interferential works on the same premise as Quadpolar Interferential. That premise being that electrical stimulation at higher frequencies(5000Hz) penetrates the skin easily(due to the capacitive effects of the skin) but has little therapeutic effect. Lower frequencies(0-200Hz) are therapeutic, yet produce irritation or even pain if applied directly. Bipolar Interferential utilizes a high "carrier" frequency(5000Hz) to pass through the skin barrier easily but it is "premodulated" in the stimulator to give a "beat" frequency between 5-200Hz.

It does this by modulating the amplitude of the sine wave, not the frequency of the wave, to produce the "beat" frequency of 5-200Hz at the 5000Hz "carrier" frequency. By doing this it enables a single channel(two electrode) system to be used. In addition, Bipolar Interferential gives you "full-field" treatment directly under the electrodes because it's "pre-modulated". No criss-cross mixing of two different frequencies is required to produce the "beat" frequency.



Bipolar Protocols by Sam Davis, PT

FACILITATION OF INHIBITED MUSCLE-Electrode placement dependent upon injury location		
	<p>MODE: Bipolar IF-Continuous PULSE RATE: 1-10Hz Scan TIME: 10-15 Minutes VECTOR: Off</p>	<p>DOSAGE: At or near Motor threshold TREATMENTS: 10 REGIMEN: Daily</p>
STRENGTHENING OF WEAKENED MUSCLE-Electrode placement dependent upon injury location		
	<p>MODE: Bipolar IF-Surge PULSE RATE: 20Hz Fixed TIME: 10-15 Minutes ON TIME: 10 Seconds OFF TIME: 50 Seconds</p>	<p>DOSAGE: At Motor threshold TREATMENTS: 10 REGIMEN: Daily or E.O.D. dependent on muscular response</p>
LEVATOR SCAPULA SPASM		
	<p>MODE: Bipolar IF-Surge PULSE RATE: 90-100Hz Fixed TIME: 10-20 Minutes ON TIME: 6 Seconds OFF TIME: 6 Seconds</p>	<p>DOSAGE: Comfortable Motor threshold REGIMEN: Daily TREATMENTS: 4-5 Days or until spasm breaks</p>