SPECIFICATIONS

Waveform Specifications

 IFC (Interferential 4 pole)

Interferential Current is a medium frequency waveform. Current comes out of two channels (four electrodes). The currents cross each other in the body area that requires treatment. The two currents interfere with each other at this crossing point, resulting in a modulation of the intensity (the current intensity increases and decreases at a regular frequency).

Output Mode: . . . . . Pads
Carrier Frequency . . . . . Fixed
Beat Frequency . . . . . 0-200 Hz
Sweep Time . . . . . 15 seconds
Sweep Low Beat Frequency. . . . . 1-200 Hz
Sweep High Beat Frequency . . . . . 1-200 Hz
Scan Percentage . . . . . Static, 10%, 40%, 100%
Vector Scan. . . Manual (0°-90°), Automatic (40% and 100%), Off
Amplitude . . . . . 0-100 mA RMS into 500 ohm
Maximum Treatment Time . . . . . 1-60 Minutes
Available on Channel . . . . . 1&2, 3&4

 IFC (Interferential 2 pole) Premodulated

Premodulated Current is a medium frequency waveform. Current comes out of one channel (two electrodes). The current intensity is modulated: it increases and decreases at a regular frequency (the Amplitude Modulation Frequency).

Output Mode: . . . . . Pads
Output Intensity . . . . . 0-100 mA
Carrier Frequency . . . . . Fixed
Beat Fixed (Sweep Off). . . . . 1-200 Hz
Sweep Low Beat Frequency. . . . . 1-149 Hz
Sweep High Beat Frequency . . . . . 81-200 Hz
Cycle Time . . . . . Continuous, 5/5, 4/12, 10/10, 10/20, 10/30, 10/50
Mode Selection. . . . . CC or CV*
Treatment Time . . . . . 1-60 Minutes
Available on Channel . . . . . 1&2, 3&4

*CC= Constant Current
CV= Constant Voltage

SPECIFICATIONS

TENS- Symmetrical Biphasic

The Symmetrical Biphasic waveform has a short pulse duration and is capable of strong stimulation of nerve fibers in the skin and muscle. This waveform is often used in portable muscle stimulation units and some TENS devices. Because of its short pulse duration, the patient typically tolerates the current well, even at relatively high intensities.

Output Mode: . . . . . Pads

Output Intensity. . . . . 0-80 mA

Phase Duration . . . . . Adjustable 20-1,000 µsec

Frequency . . . . . 1-250 Hz

Mode Selection . . . . . CC or CV*

Burst Frequency . . . . . 0-4 bps

Frequency Modulation . . . . . 0-250 Hz

Amplitude Modulation . . . . . Off, 40%, 60%, 80%and 100%

Treatment Time . . . . . 1-60 minutes

⚠DANGER

- Stimulus delivered by the TENS waveforms of this device, in certain configurations, will deliver a charge of 25 microcoulombs (µC) or greater per pulse and may be sufficient to cause electrocution. Electrical current of this magnitude must not flow through the thorax because it may cause cardiac arrhythmia.

High Voltage Pulsed Current (HVPC)

The High Volt waveform has a very brief pulse duration characterized by 2 distinct peaks delivered at high voltage. The waveform is monophasic (current flows in one direction only). The high voltage causes a decreased skin resistance making the current comfortable and easy to tolerate.

Output Intensity . . . . . 0-500 V

Output Mode . . . . . Pads or Probe

Polarity. . . . . Positive or Negative

Ramp . . . . . 0.5 sec, 1 sec, 2 sec, 5 sec

Display. . . . . Peak Current or Volts

Sweep . . . . . Continuous, 80/120 pps, 1/120 pps, 1/10 pps

Frequency . . . . . 10-120 pps

Cycle Time . . . 5/5, 4/12, 10/10, 10/20, 10/30, 10/50, Continuous

Treatment Time . . . . . 1-60 Minutes

Available on Channels 1, 2, 3, 4

*CC= Constant Current
CV= Constant Voltage

SPECIFICATIONS

Russian

Russian Current is a sinusoidal waveform, delivered in bursts or series of pulses. This method was claimed by its author (Kots) to produce maximal muscle strengthening effects without significant discomfort to the patient.

Output Intensity . . . . . 0-100 mA

Output Mode . . . . . Pads

Channel Mode . . . . . Single, Reciprocal, Co-Contract

Duty Cycle 10%, 20%, 30%, 40%, 50%

Mode Selection . . . . . CC or CV*

Anti-Fatigue . . . . . Off or On

Cycle Time 5/5, 4/12, 10/10, 10/20, 10/30, 10/50,Continuous

Burst Frequency (Anti-Fatigue Off) . . . . . 20-100 pps

Ramp . . . . . 0.5, 1, 2 and 5 seconds

Treatment Time . . . . . 1-60 minutes

Available on Channels 1, 2, 3, 4

Microcurrent

Microcurrent is a monophasic waveform of very low intensity that closely simulates the electrical current generated by the human body. Microcurrent can be applied via electrodes or probe.

Output Intensity . . . . . 0-1000.0 µA

Output Mode . . . . . Pads or Probe

Polarity . . . . . Positive, Negative or Alternating

Treatment Time . . . . . 1-60 Minutes

Available on channels 1, 2, 3, 4

*CC= Constant Current
CV= Constant Voltage

SPECIFICATIONS

Ultrasound Specifications

Frequency . . . . . 1.0 MHz, +/- 5%; 3.3Mhz, +/- 5%
Duty Cycles . . . . . 10%, 20%, 50%, Continuous
Pulse Frequency 100Hz
Pulse Duration . . . . . 1mSec, +/-20%; 2mSec, +/-20%
5mSec, +/-20%

Output Power

5cm^2 Crystal . . . . . 0-10 Watts at 1 & 3.3 MHz
10cm^2 Crystal . . . . . 0-20 Watts at 1MHz
0-10 Watts at 3.3 MHz
2cm^2 Crystal . . . . . 0-4 Watts at 1 & 3.3 MHz
1cm^2 Crystal . . . . . 0-2 Watts 3.3 MHz
Amplitude . . . . . 0 to 2.5 W/cm^2 in continuous mode,
0-3 w/cm^2 in pulsed modes
Output accuracy . . . . . ± 20% above 10% of maximum
Temporal Peak to Average Ratios:
2:1, ± 20%, at 50% Duty Cycle
5:1, ± 20%, at 20% Duty Cycle
9:1, ± 20%, at 10% Duty Cycle
Beam Nonuniformity Ratio. . . . . 5.0 : 1 maximum
Beam Type. . . . . Collimating
Effective Radiating Areas. . . . . .10cm^2 Crystal - 8.5cm^2, +/- 1.5
5cm^2 Crystal - 4.0cm^2, +/- 1.0
2cm^2 Crystal - 1.8cm^2, +0.2/-0.4
1cm^2 Crystal - 0.8cm^2, +0.2/-0.4
Treatment Time . . . . . 1-30 Minutes