



QuadStar Elite

TENS/IF/EMS/High Volt Unit

FEATURES

- ▶ Four channel (8-lead) all digital combo Interferential, Muscle Stim, TENS, and High Volt Pulsed Galvanic, with sequential feature
- ▶ 2 Active and 1 Dispersive channels for High Volt
- ▶ 4 waveforms (asymmetrical and symmetrical biphasic squarewave, sinewave, and twin-peak monophasic)
- ▶ 4 Interferential modes, 8 TENS modes, 3 EMS modes, 3 High Volt modes
- ▶ Separate intensity controls for each channel
- ▶ Programmable sequencing of different modalities
- ▶ Preset treatment programs
- ▶ Fully adjustable parameter settings for all modes
- ▶ Great choice for professional or clinical use
- ▶ AC adapter / DC charger with internal Ni-Cad battery pack supply
- ▶ Last setting recall and parameter lock
- ▶ Compliance monitor
- ▶ Treatment timer
- ▶ 3-Year Warranty

TECHNICAL SPECIFICATIONS

Channel: (4) for INF, NMS, and TENS. (2) Active (red) and (1) Dispersive (black) for High Voltage

Electrodes/Leadwires: (4) Leadwires - Style L00013MC (2) GV0014R (red single wires) and (1) GV0014B (black single wire)

Power Supply: Internal battery P/N QSE 601 NiCad battery pack; External Specified Power Supply: P/N L60071 medical grade power supply

Size: 14.1 x 13.4 x 4.15 cm

Weight: 574 grams

Comes with 3 pkgs of 4 each 2 x 2 reusable self-adhesive electrodes, 1 pkg of 4 x 7 dispersive electrode, 4 each color-coded 48 pin lead wires for TENS/EMS/IF, 2 each 48 red single active pin lead wires, 1 each 48 black dispersive pin lead wire, AC adapter /DC charger, carrying case, and instruction manual



Distributed by:



Medi-Stim, Inc., 217 Industrial Court Wabasha, MN 55981 USA
1-800-363-7846 | Fax: 1-651-565-2410 | www.medi-stim.com

INTERFERENTIAL SPECIFICATIONS

Amplitude 0 - 78 mA peak to peak

Output Voltage 0 - 39 V peak to peak

Waveform Continuous sinusoidal

CH1/CH3 (Carrier) Frequency 4000 Hz

CH2/CH4 Frequency 4001 - 4150 Hz adjustable

Beat Frequency 1 - 150 Hz

- CH1/CH2 are an Interferential Pair
- CH1: Fixed Frequency (4000 Hz)
- CH2: Adjustable 4001 - 4150 Hz
- CH3/CH4 are an Interferential Pair
- CH3: Fixed Frequency (4000 Hz)
- CH4: Adjustable 4001 - 4150 Hz

Premodulated INF (using one channel) A mixed interferential beat frequency will be produced only out of CH 1 and/or CH 3.

MODES:

Constant Beat Frequency is adjustable from 1 - 150 Hz

Sweep 1 Beat Frequency modulates from 1 - 10 Hz and back over 12 seconds (6 second increase, 6 second decrease)

Sweep 2 Beat Frequency modulates from 80 - 150 Hz and back over 16 seconds (8 second increase, 8 second decrease)

Sweep 3 Beat Frequency modulates from 1 - 150 Hz and back over 20 seconds (10 second increase, 10 second decrease)

TENS SPECIFICATIONS

Amplitude 0 - 100 mA peak to peak

Output Voltage 0 - 50 V peak to peak

Waveform Asymmetrical biphasic square

Pulse Rate Adjustable 1 - 120 Hz

Pulse Width Adjustable 10 - 250 μ S

Modes Constant, Pulse Width Modulation, Pulse Rate Modulation, Rate & Width Modulation, SD1, SD2, Cycled Burst, Cycled Burst 2
Constant - Pulse Rate (Hz) is adjustable from 1 - 120 Hz and Pulse Width (μ S) is adjustable from 10 - 250 μ S.

Pulse Width Modulation - Decrease/Increase of set width 50% over 5 second cycle.

Pulse Rate Modulation - Decrease/Increase of set width 50% over 5 second cycle.

Pulse Width & Pulse Rate Modulation - Pulse Rate and Pulse Width alternately decrease and increase 50% of their set values over 5 seconds cycle.

Strength Duration 1 - Increase of set Pulse Width 40%, decrease of set Pulse Rate 45% and decrease of Amplitude 10% over a 3 second period. Values return to original settings over the next 3 second period.

Strength Duration 2 - Increase of a set Pulse Width 60% decrease of set Pulse Rate 90% and decrease of set Amplitude 13% over a 6 second period. Values return to original setting over the next 6 seconds.

Cycled Burst (B1) - 2.5 seconds on, 2.5 seconds off. Adjustable Pulse Rate 1-200 Hz. Adjustable Pulse Width from 10 - 250 μ S.

Cycled Burst II (B2) - 8 pulses per 0.25 seconds, off for 0.25 seconds. Adjustable Pulse Width from 10 - 250 μ S.

HIGH VOLT SPECIFICATIONS

Channel 2 active outputs; 1 dispersive return

Amplitude 0 - 700 mA peak, adjustable

Output Voltage 0 - 350 V adjustable

Waveform Pulsed galvanic twin peak monophasic delivered in pairs

Pulse Rate 1 - 120 Hz, adjustable

Pulse Width Inter pulse intervals of 100 (μ S), fixed

Modes Constant Stimulation, Alternating Stimulation, Cycled Stimulation

Polarity Switch Positive/Negative polarity of active electrodes (A1 & A2)

Contraction Time 0 - 99 seconds

Relaxation Time 0 - 99 seconds

Ramp Up/Down 0 - 10 seconds

NEUROMUSCULAR SPECIFICATIONS

Amplitude 0 - 120 mA from peak to peak (adjustable)

Output Voltage 0 - 60 V from peak to peak (adjustable)

Waveform Symmetrical, biphasic, square Asymmetrical, biphasic, square

Pulse Rate Adjustable 1 - 120 Hz peak to peak

Pulse Width Adjustable 50 - 400 μ S

Modes Constant, Cycled, Reciprocating

Constant - Use the Constant Mode or a Pulse Rate greater than 60 Hz. for the relaxation of muscle spasms only. Use of continuous stimulation and/or rates above the normal physiological range (e.g., greater than 60 Hz) could lead to rapid onset of muscle fatigue, making the device less effective in producing repeated forceful muscle contractions.

Cycled

Reciprocating

Ramp Up/Down 0 - 10 seconds

Contraction Time 0 - 99 seconds

Relaxation Time 0 - 99 seconds

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