

SynchroSonic U/HVG50

Combination Ultrasound/Low Voltage Galvanic/High Volt Stimulator



Combination Therapy At It's Best

Combination therapy is designed for the combined simultaneous application of therapeutic ultrasonic energy and electrical stimulation through the transducer.

SynchroSonic U/HVG50

Three widely used therapeutic modalities are provided by the U/HVG50: low voltage galvanic (de) stimulation, high volt stimulation and ultrasound.

Low voltage galvanic (de) allows the practitioner to conduct denervation testing or to perform iontophoresis applications. High volt stimulation produces no heat under the electrodes and therefore causes less tissue irritation. Ultrasound allows for increased cell permeability with greater metabolic

exchange across the cell wall. While providing micro-massage to the patient, the ultrasound produces an analgesic and thermal effect when applied to the nerve root and primary treatment site.

Each of the three modalities may be applied separately or the ultrasound may be combined with either low voltage galvanic (de) or high volt stimulation simultaneously through the ultrasound transducer.

Optional Accessories

For greater convenience, this top-of-the-line, full range combination therapy unit can be easily wall mounted or placed on our three shelf, high impact plastic utility cart.

SynchroSonic® U/HVG50 Specifications



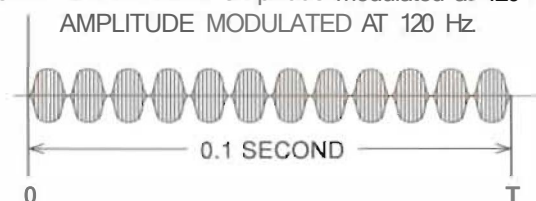
SynchroSonic U/HVG50 Combination Ultrasound with optional three shelf utility cart

Input Power Requirements

Line Voltage 120 Vac, 60 Hz
(Special voltage available on request)
Current 1.0 A
Line Leakage < 50 μ A

Ultrasonic Generator

(Complies with FDA Regulation 21 CFR 1050.10 and FCC Regulations)
Frequency 1.0 MHz $\pm$ 5%
Waveform amplitude modulated at 120 Hz $\pm$ 1%



Pulse Duration 8 ms $\pm$ 1%
Output Mode adjustable interrupted & non-interrupted
Output Power 0 to 20 W total $\pm$ 20%
0 to 5 W/cm² $\pm$ 20%
Temporal Peak/Temporal Average Intensity 2.8:1 $\pm$ 20%
Treatment Timer adjustable 0 to 30 minutes

Applicator (Transducer)

Crystal Material barium-titanate
Applicator Beam Type collimating
Frequency 1.0 MHz $\pm$ 5%
ERA (Effective Radiating Area) 4 cm² $\pm$ 20%
BNR (Beam Nonuniformity Ratio) 5.5:1 maximum
Small Faceplate Size 1.5" diameter
Standard Faceplate Size 2.25" diameter

AMREX[®]
electrotherapy equipment
a division of Amrex-zetron, Inc.

Ultrasound Features

- lightweight standard transducer
- Optional QuickConnect... transducer
- Optional small transducer with QuickConnect cable
- Cable fault alarm system
- Transducer protection switch
- Adjustable interrupted output mode
- 0 to 20 watt output • 30 minute timer

High Volt Stimulator Features

- Dual channel, 4 pad high volt pulsed de stimulator
- Selectable frequencies - pulsation to tetanize
- Selectable surge and reciprocal rates - ramped
- Intensity reset circuit • Combination therapy capability

Low Voltage Galvanic Features

- Single channel, 2 pad low voltage galvanic (de)
- 0 to 10 mA current for iontophoresis treatments
- Adjustable surge and alternating polarity surge rates
- Combination: iontophoresis/phonophoresis with FDA approved substances
- Two Year Warranty - Generator - Parts and Labor
- One Year Warranty - Transducer - Parts and Labor
- CSA Approved

Electrical Generator - High Volt

Waveform de "needle" pulses with no parasitic spike



Output Voltage 0 to 500 peak V
Output Intensity 20 μ C maximum charge
per pulse into 100 Ω load
Pulse Width 30 μ s
Frequency Range 1 to 160 pulses per s
Reciprocal/Surge Duration 2.5, 5 and 10 s

Electrical Generator - Low Voltage Galvanic

Description variable constant current source de output



Output Intensity 0 to 10 mA
Surge Duration variable 3.33 s on/off to 0.50 s on/off
Alternating Polarity Surge variable 3.33 s $\pm$ 0.50 s $\pm$

Instrument U/HVG50

Overall Dimensions 19½" W x 11" D x 7" H
Weight (including transducer) 18 lbs.
Shipping Weight 27 lbs.

Ordering Information U/HVG50

Standard Sound head 32-U/HVGS0
Standard QuickConnect Sound head 32-U/HVG50-D
Small QuickConnect Soundhead 32-U/HVGS0-SM
Standard/Small QuickConnect Soundhead 32-U/HVG50-D2

Caution: Federal law (USA) restricts this device to sale by or on the order of a licensed practitioner