SynchroSonic® US/54 and US/50 Specifications

SynchroSonic US/50 provides therapeutic ultrasound and/or muscle stimulation with two pad application

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

Stimulator Features

- Dual channel, 4 pad stimulator - US/54
- Single channel, 2 pad stimulator - US/50
- Dual intensity controls - US/54
- Tetanize mode
- Adjustable pulsation and ramped surge modes
- Reciprocal mode ramped - US/54
- Intensity reset circuit
- Patient treatment stop switch
- Combination therapy capability

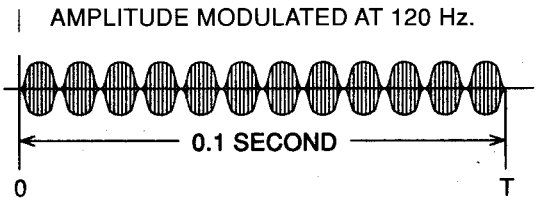
- Two Year Warranty - Generator - Parts and Labor
- One Year Warranty - Transducer - Parts and Labor
- CSA Approved

Input Power Requirements

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

Ultrasonic Generator

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



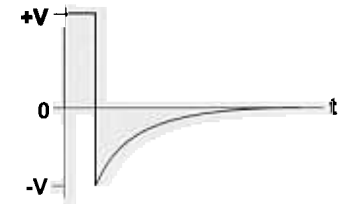
Pulse Duration ..... 8 ms ± 1%
Output Mode ..... adjustable interrupted & non-interrupted
Output Power ..... 0 to 20 W total ± 20%
0 to 5 W/cm^2 ± 20%
Temporal Peak/Temporal Average Intensity ..... 2.8:1 ± 20%
Treatment Timer ..... adjustable 0 to 30 minutes

Applicator (Transducer)

Crystal Material ..... barium-titanate
Applicator Beam Type ..... collimating
Frequency ..... 1.0 MHz ± 5%
ERA (Effective Radiating Area) ..... 4 cm^2 ± 20%
BNR (Beam Nonuniformity Ratio) ..... 5.5:1 maximum
Small Faceplate Size ..... 1.5" diameter
Standard Faceplate Size ..... 2.25" diameter

Electrical Stimulator

Waveform ..... asymmetrical alternating current (no load)



Output Voltage ..... 110 V peak into 1k Ω load
28 V peak into 100 Ω load
Output Intensity ..... 56 µC maximum charge per pulse into 100 Ω load
Pulse Width ..... 200 µs at 50% V maximum
Frequency Range ..... 1 to 80 pulses per s
Surge & Reciprocal Duration ..... adjustable
3.75 s on/off to 0.375 s on/off

Instrument US/50 and US/54

Overall Dimensions ..... 14½" W x 11" D x 7" H
Weight (including transducer) ..... 14 lbs.
Shipping Weight ..... 22 lbs.

Ordering Information US/50

Standard Soundhead 32-US/50
Standard QuickConnect Soundhead 32-US/50-D
Small QuickConnect Soundhead 32-US/50-SM
Standard/Small QuickConnect Soundhead 32-US/50-D2

Ordering Information US/54

Standard Soundhead 32-US/54
Standard QuickConnect Soundhead 32-US/54-D
Small QuickConnect Soundhead 32-US/54-SM
Standard/Small QuickConnect Soundhead 32-US/54-D2

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

AMREX®
electrotherapy equipment
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