

**SynchroSonic® US/54**

Combination Ultrasound/Low Volt AC Stimulator

**Combination Therapy Made Simple**

Combination therapy plays an important role in today's modern practice. It allows for the expansion of treatment capabilities by combining therapeutic ultrasound with low volt muscle stimulation. It enables the practitioner to take full advantage of the thermal effect of ultrasound in combination with the analgesic effect of stimulation.

**SynchroSonic US/54**

The SynchroSonic US/54 is a versatile combination unit that provides muscle stimulation with four pad application and therapeutic ultrasound. Each modality may be used independently or in combination through the lightweight ultrasound transducer. The custom designed transducer is available with standard

size faceplate and/or small size faceplate and features a protection switch and cable fault alarm system. The optional QuickConnect™ Transducer Cable System allows the practitioner to replace the transducer cable on site.

The US/54 also features the patient treatment stop switch. Designed to promote patient assurance, the treatment stop switch allows the patient to discontinue stimulator output at the press of a button.

**SynchroSonic US/50**

The SynchroSonic US/50 Combination Ultrasound/Low Volt AC Stimulator provides muscle stimulation with two pad application, therapeutic ultrasound and a patient treatment stop switch.

# SynchroSonic® US/54 and US/50 Specifications



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

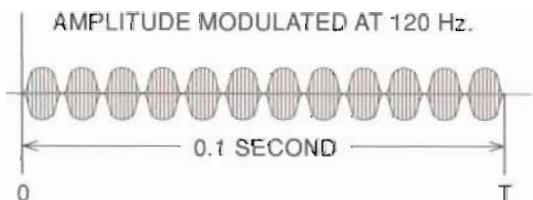
## Input Power Requirements

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/cm² ± 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 cm² ± 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.

7034 Jackson Street, Paramount, California 90723 (800) 221-9069 or (310) 527-6858 FAX (310) 366-7343  
Web Site <http://www.amrexusa.com>

## Ultrasound Features

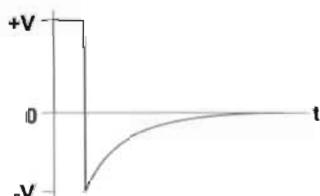
- Lightweight standard transducer
- Optional QuickConnect™ transducer
- Optional small transducer with QuickConnect cable
- Cable fault alarm system
- Transducer protection switch
- Adjustable interrupted output mode
- 0 to 20 watt output • 30 minute timer

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

## 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***

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