

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



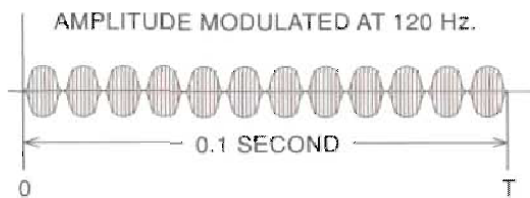
SynchroSonic US/50 provides therapeutic ultrasound and/or muscle stimulation with two pad application

Input Power Requirements

Line Voltage	120 Vac, 60 Hz
	(Special voltage available on request)
Current	1.0 A
Line Leakage	< 50 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/cm ² \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 cm ² \pm 20%
BNR (Beam Nonuniformity Ratio)	5.5:1 maximum
Small Faceplate Size	1.5" diameter
Standard Faceplate Size	2.25" diameter

Ultrasound Features

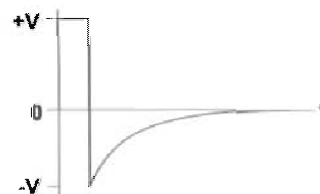
- Lightweight standard transducer
- Optional QuickConnect™ transducer
- Optional small transducer with QuickConnect cable
- Cable fault alarm system
- Transducer protection switch
- Adjustable interrupted output mode
- 0 to 20 watt output • 30 minute timer

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

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 μ C maximum charge
	per pulse into 100 Ω load
Pulse Width	200 μ s 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	14 1/2" 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