



Typical Applications

Scientific Labs

Thoroughly removes blood, proteins, and contaminants

- Lab Glassware, Test Tubes, Pipettes
- Optical and Contact Lense, Eyeglass Frames
- Scientific Instruments, Components
- Cell Separation
- Sample Preparation

Industry

Deep cleans to remove dirt, grease, waxes, and oils

- Switches
- Relays and Motors
- Gears
- Precision Bearings
- Metal and Plastic Parts
- Assemblies
- Degas Liquids

Electronics

Removes flux and contaminants instantly, thoroughly

- PC Boards, SMDs
- Ceramic Substrates
- Capacitors
- Lapping Heads
- Packaging Components
- Quartz Crystals
- High-resolution Glass Plates

Medical and Dental Labs

Used with sterilization, it's a safer, surer way to clean dental and medical instruments

- Cannulae, Syringe Parts, Surgical Instruments, Blood Oxygenators
- Dental Instruments, Burs, Dentures, Caps, Plates

Jewelry

Cleans thoroughly, restores brilliance

- Watches
- Clock Movements
- Precious Metals and Gemstones
- Intricate Settings
- Chains, Charms
- Coins



Sweep Frequency - Industrial Transducers Improve Performance

The Bransonic® cleaners include the same high power, rugged transducers found on industrial system sold to the automotive, electronics, and metalworking industries. These Langevin-type metal/ceramic devices use engineered ceramics to assure both durability and superior power. Coupled with sweep frequency capability, you get the best possible cleaning every time, all the time. With these features, the Bransonic ultrasonic cleaners will operate all day, every day, for years - at peak performance.

Designed With You In Mind

Bransonic cleaners have been designed to be functional, reliable, and most important, easy to use. All controls are mouted in an easily accessible control panel above and behind the cleaning tank. They're easily seen and are above any liquid for safety and reliability. Smaller models features convenient built-in pour drains while the larger models incorporate tank drains with valves. Because we designed the Bransonic units to respond to your needs and requests, there's a great mix of features. You can choose from models including:

- **Ultrasonics with digital heat control, digital timer, and temperature monitor**

- **Ultrasonics with heat and mechanical timer**

- **Ultrasonics with mechanical timer**

Digital models offer you maximum control of cycle time up to 99 minutes and bath temperatures to 69° Celsius. Clear readouts and one-touch setting make this a great choice. You can count on batch-to-batch consistency because the unit automatically resets to the last setting. Just reload the tank and restart! Our rugged mechanical timers are adjustable up to 60 minutes and incorporate a hold feature for continuous cleaning. There are five Bransonic cleaners sized from 1/2 gallon to 5 1/2 gallons (1.9 to 20.8 liters) capacity. Check the product/ feature matrix for the Bransonic unit that best meets all of your needs!



Specifications:	Model 8510	Model 5510	Model 3510	Model 2510	Model 1510
Tank Size (LxWxD)	19.5"x11.5"x6"	11.5"x9.5"x6"	11.5"x6"x6"	9.5"x5.5"x4"	6"x5.5"x4"
Overall Size (LxWxD)	24"x18"x14.5"	16"x15.5"x14.5"	16"x12"x14.5"	13.5"x12"x11.5"	10"x12"x11.5"
Tank Capacity	5.5gal (20.8L)	2.5gal (9.5L)	1.5gal (5.7L)	0.75gal (2.8L)	0.5gal (1.9L)
Weight	26 lbs	14 lbs	12 lbs	9 lbs	7 lbs
Frequency	40 kHz	40 kHz	40 kHz	40 kHz	40 kHz
Drain	Yes	Yes	Yes	No	No
Digital Control Plus Heat and Timer (DTH)	B8510-DTH	B5510-DTH	B3510-DTH	B2510-DTH	B1510-DTH
Mechanical Timer Plus Heat (MTH)	B8510-MTH	B5510-MTH	B3510-MTH	B2510-MTH	B1510-MTH
Mechanical Timer (MT)	B8510-MT	B5510-MT	B3510-MT	B2510-MT	B1510-MT



Specifications:	B-200	B-300	B-3/B-5	PC-620	DHA-1000	IC 1216	IC 1620
	Jewelry & Optical Cleaner	Ultrasonic Cleaner	Pint Size Ultrasonic Cleaner	Ultrasonic Cleaner	Industrial Ultrasonic Cleaner	Industrial Ultrasonic Cleaner	Industrial Ultrasonic Cleaner
Tank Size (LxWxD)	6.5"x3.5"x2.25"	11.8"x3.9"x2.9"	3.5"D x3" dia	19.5"x5.75"x6"	14"x16"x10.5"	12"x16"x13"	16"x20"x16"
Overall Size (LxWxD)	8.75"x4.5"x5"	13.2"x5.3"x5.9"	5.25"x5.25"x6.25"	20.25"x6.25"x10.5"	17"x19"x19"	20.75"x19"x16.75"	24.75"x23"x20.75"
Tank Capacity	15oz (0.4L)	0.5gal (1.9L)	1 pint (0.47L)	2.75gal (10.4L)	10gal (37.8L)	10gal (37.8L)	21gal (79.5L)
Weight	3 lbs	4.6 lbs	3 lbs	23 lbs	70 lbs	80 lbs	120 lbs
Frequency	40 kHz	40 kHz	56 kHz	40 kHz	40 kHz	25 kHz / 40 kHz	25 kHz / 40 kHz
Remarks	Comes with 5-min timer, cover & basket	Comes with 15-min timer, cover & basket	Comes with cover & basket	With or without heater model cover & basket sold separately	Cover & basket sold separately	Comes with cover & basket	Comes with cover & basket



Accessories

- Cover
- Solid Insert Tray
- Perforated Tray
- Beaker Positioning Cover
- Mesh Basket
- Beakers



Aqueous Solutions

- OC
- JC
- EC
- IS
- OR
- BC
- RSL
- GP
- MC-1
- MC-2
- MC-3

SONIFIER® Superiority

Cell Disruption and More

The Sonifier product line, originally established as the benchmark in cell disruption, has become a liquid processing workhorse in the laboratory. Applications include:

- Emulsification of immiscible liquids
- Disaggregation and dispersion
- Homogenization
- Chip assay
- Acceleration of reactions
- Cell lysing
- Processing DNA and proteins
- Leaching and extraction

Each Sonifier system consists of a power supply, converter, and mechanically tuned processing horn. Standard units are available from 100 to 1000 watts for matching the equipment to your application.

A wide variety of specialized tools, chambers, and accessories are available to accomplish specific effects. In addition to many standard disruption horn sizes, Branson offers flow-through horns, high intensity cup horns, biohazard processing cells, sound reduction enclosures, and much more.



SONIFIER® Accessories



High Intensity Cup Horn



Cup Horn



Continuous Flow Chamber



Sealed Atmosphere Chamber



Flow Through Horn



Microtip with Coupler (double-step), 1/8" Microtip



Tapered Microtip



Standard Disruptor Horn

Rosette Cell

Branson's Rosette Cell provides a unique flow pattern of substances for exposure to ultrasonic energy during circulation through the cell. When it is immersed in a cooling bath, the enlarged glass surface area and circulation through the side arms provide an efficient means of heat exchange. Three sizes are available.



Acoustic Sound Enclosure

The Branson Acoustic Sound Enclosure creates a sound barrier that reduces the ambient noise level a minimum of 24 dBs from the working environment. Its small footprint allows for placement in virtually all laboratory or medical locations.



Higher Volume Liquid Processing

Static processing of high liquid volumes or processing liquids in a continuous stream generally requires greater ultrasonic power output to maintain appropriate power density per unit volume per unit time. Branson offer systems to meet these higher volume applications.

The Sonifier 2000dbc at 1000 Watts can process up to 10 GPM per processing cell. This 20 kHz system passes process fluid through a confined chamber in close proximity to a high energy ultrasonic horn.



Description	Part Number
2000dbc Continuous Duty Ultrasonic Power Supply	101-132-661
CR-20 Converter	101-135-060
J931 Cable, 8'	101-240-017
Liquid processing cell to be determined by application	



Analog SONIFIER® Cell Disruptor

Laboratory Standard

Branson Sonifier analog products use traditional analog technology to produce the same reliable results you have received from Branson for over 60 years. Automatic amplitude compensation provides constant horn amplitude at different energy levels encountered during sample processing, the broad-band tuning feature precisely adjusts the 20 kHz output frequency to optimum levels even when process tooling is changed.

The analog control package includes:

- Autotune plus Memory (AT/M) – provides fully-automatic tuning and stores frequency at the end of each cycle
- Adjustable output power to meet the needs of each application
- Energy pulsing to minimize heating of sensitive samples
- Mechanical timer to limit process time while freeing the operator
- An output meter to monitor process power and provide for repeatability

All of these features are housed in a rugged, compact package with slanted front control panel for clear visibility and easy access. All units are supplied as an operational package including power supply, converter, and standard disrupter horn.

Model	Output Power	Dimensions (WxDxH)	Weight	Part Number	Input Power	Included Horn
S-250A	200 watts	7 3/8" x 17 3/8" x 9 5/8"	19 lbs.	101-063-196	115 V, 60 Hz, 1Ø	1/2" tapped
				101-063-197	230 V, 50/60 Hz, 1Ø	
S-450A	400 watts	7 3/8" x 17 3/8" x 9 5/8"	25 lbs.	101-063-198	115 V, 60 Hz, 1Ø	1/2" tapped
				101-063-199	230 V, 50/60 Hz, 1Ø	
S-450A	400 watts	7 3/8" x 17 3/8" x 9 5/8"	25 lbs.	101-063-200	115 V, 60 Hz, 1Ø	3/4" solid
				101-063-201	230 V, 50/60 Hz, 1Ø	

Note: Below accessories for use with 250 and 450 units only



Digital SONIFIER® Cell Disruptor

Precision Control

Branson Sonifier digital products take advantage of the benefits enabled by newer digital technology. This is particularly useful where precise process control and parameter measurement is required. These 20 kHz units include automatic amplitude control, broad-band tuning, and include enhanced features like:

- Autotune plus Memory (AT/M) – provides fully-automatic tuning and stores frequency at the end of each cycle
- Multiple mode operation; continuous, pulsed, timed, temperature end-point
- Setup menu in five languages
- Digital parameter setting with valid parameter range checking
- Digital timer (9 hours, 59 minutes, 59 seconds)
- Amplitude is adjustable from 10-100%
- User I/O offers remote starts/stop control and the ability to view temperature, amplitude, and power values during experiments
- Automatic end-of-cycle shutoff using limit parameters
- Self diagnostics on startup
- Twenty user-programmed presets for convenience

All units have digital controls including a membrane switch for easy data entry, 10 hour timer, digital wattmeter, 80 character LCD display to monitor parameters and much more. The parallel printer interface and RS-232C serial computer interface add even more utility. All units are supplied as an operational package including power supply, converter, and standard horn.

Model	Output Power	Dimensions (WxDxH)	Weight	Part Number	Input Power	Included Horn
S-250D	200 watts	7 3/8" x 17 3/8" x 9 5/8"	20 lbs.	101-063-588	115 V, 60 Hz, 1Ø	1/2" tapped
				101-063-589	230 V, 50/60 Hz, 1Ø	
S-450D	400 watts	7 3/8" x 17 3/8" x 9 5/8"	22 lbs.	101-063-593	115 V, 60 Hz, 1Ø	1/2" tapped
				101-063-591	230 V, 50/60 Hz, 1Ø	
S-450D	400 watts	7 3/8" x 17 3/8" x 9 5/8"	22 lbs.	101-063-590	115 V, 60 Hz, 1Ø	3/4" solid
				101-063-592	230 V, 50/60 Hz, 1Ø	



SONIFIER® SLP Series

Smaller Volume

The Branson Sonifier SLP Series – available in both time and energy (joules) models – are capable of processing today's laboratory requirements. Software prevents inappropriate data entry and sounds an alarm if the process moves outside set limits.

The SLP Series units include the generator/power supply, converter, 1/8" microtip, all interconnects, and an I/O port for external control. They operate at 40 kHz, 50/60 Hz.

- Autotune plus Memory (AT/M) – provides fully-automatic tuning and stores frequency at the end of each cycle.
- Digital parameter entry for precise, easy setup.
- Digital amplitude control allows for critical applications (range from 10% to 100% in 1% increments)
- Continuous or pulsed operation
- LED readout displays parameter settings during setup and operation for easy reference and monitoring.
- Provides storage of last-used cycle parameters even if the system is shut off or a power interruption occurs.
- Local or remote (p/c) control capability
- Total processing time : 1 second to 99 hours (SLPt unit)
- Adjustable total energy : 1 to 10,000 joules (SLPe unit)

Model	Output Power	Dimensions (WxDxH)	Weight	Part Number	Input Power	Included Horn
SLPt Time	150 watts	7 3/4" x 13 1/4" x 9"	17 lbs.	101-063-723	117 Volt, 1Ø 50/60 Hz, 2 amps	1/8" Microtip
SLPt Time	150 watts	7 3/4" x 13 1/4" x 9"	17 lbs.	101-063-724	240 Volt, 1Ø 50/60 Hz, 1 amps	1/8" Microtip
SLPe Energy	150 watts	7 3/4" x 13 1/4" x 9"	17 lbs.	101-063-726	117 Volt, 1Ø 50/60 Hz, 2 amps	1/8" Microtip
SLPe Energy	150 watts	7 3/4" x 13 1/4" x 9"	17 lbs.	101-063-727	240 Volt, 1Ø 50/60 Hz, 1 amps	1/8" Microtip

Note: Other microtips available

