

# PROB SONICATOR

Brand- **BIOGENIX®**

## Product Description

### Description

A Sonicator system is comprised of 3 major components: Generator, Converter and Horn (also known as a probe). The ultrasonic electronic Generator transforms AC line power to high frequency electrical energy. The generator features a keypad or buttons which allow the user to control the sonication parameters. The generator provides high voltage pulses of energy at a frequency of 20 kHz that drives a piezoelectric Converter. The converter is a cylindrical device which is connected to the generator by a high voltage cable. The converter transforms electrical energy to mechanical vibration due to the characteristics of the internal. The vibration is amplified and transmitted down the length of the Probe/Horn. LCD display screen clearly displays all operating parameters and options: Pulse ON, Pulse OFF Time, and Total Time.



## Specifications

- FULL AMPLITUDE CONTROL**  
Full amplitude control Amplitude (intensity) is controlled from 1-100% giving a greater degree of resolution and the ability to pinpoint the amplitude needed to effectively process your sample
- PROGRAMMABILITY**  
Parameters including processing times, pulse on/off and amplitude can be saved to memory and run by the touch of a button.
- PULSE MODE**  
Adjustable pulse On and Off times to reduce the heat gain in temperature sensitive samples.
- TEMPERATURE MONITORING**  
An optional temperature probe is available for those customers who wish to monitor the temperature of their sample. If the temperature limit is reached, sonication shuts down to prevent overheating.
- TOTAL ENERGY OUTPUT DISPLAY**  
Energy delivered to the probe is displayed in both Watts and Joules.
- AUTO TUNING**  
The Sonicator digitally tracks frequency changes in the converter / tip assembly caused by load and temperature changes and maintains electrical efficiency at all times. Manual tuning is unnecessary.



❑ **OVERLOAD PROTECTION**

The unit is equipped with fault detection circuitry to shut down sonication in the event that a fault occurs

❑ **TOUCH SCREEN CONTROLAR**

large, color LCD screen clearly displays all operating parameters and options. Intuitively and quickly access any of the Sonicator's functions with a simple touch.

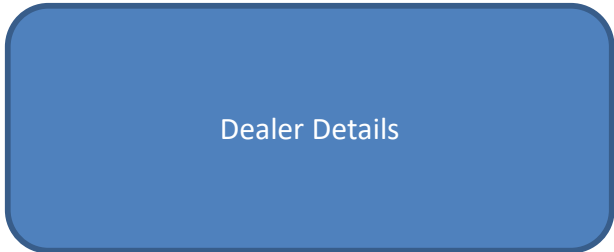
## Technical Specification

Brand	BIOGENIX
Probe Diameter	6mm
Frequency	20 KHz
Power	250 -500 W
Dimensions	490×370×280
Temperature range	upto 100°C
Overload protection	yes
Display	LCD
Output amplitude	100% adjustable
Sensor	Temperature sensor inside the box
Body	Completely covered and sound proof
Auto frequency chasing	yes

## Uses of Sonication

The following are the uses of sonication:

- ▶The sonication mechanism is used in ultrasonic cleaning which includes cleaning of particles that adhere to the surfaces.
- ▶It is used in laboratories for cleaning fragile objects such as spectacles and jewellery.
- ▶The artificial ageing of liquors and other alcoholic beverages is done by the process of sonication.
- ▶Other applications of sonication in food industries include dispersions of emulgators and speeding the filtration process.
- ▶Different parts of the soil are studied with the help of sonication.



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