

OPERATION

The ultrasonic generator transforms the electric current from 220V 50Hz into ultrasonic energy of 20KHz, to feed the ultrasonic transducers. The transducer produces an elastic distortion by following the alternate voltage, which traduces in a longitudinal mechanical vibration that produces a cavitation effect in the titanium alloy probe submerged in the solution. This generates a multitude of micro bubbles which releases a considerable energy in the probe end that allow a sample intense shaking and vibration.

APPLICATIONS

**Biology, chemistry, environment, general analysis laboratory.**  
It allows disintegration of cells and biological tissue, DNA protein extraction, ether hydrolysis RNA, reactions output acceleration and increase, earth and sediments treatment according to EPA SW methods which simplifies the Soxhlet method in time, quality control, R&D, sample gas remove, dissolution and homogenization, emulsion, dispersion, liposomes formation, proteins microencapsulation, etc.



FEATURES

The equipment consists of a control and power unit and an ultrasonic transducer (homogenizer).

**Control unit:** Epoxy coated external metallic case and ABS front panel. It consists of a LCD display, cycle time programming push buttons, impulse intervals, maximum power and temperature with 10 programs configurable by the user. Probe and connector for the sample temperature control.

**Ultrasonic transducer** consists of a piezoelectric converter with a 1/4 inches titanium alloy probe (5,6mmØ and 60mm height). It is hold by means of a retort stand and an adjustable clamp, max. 44 cm height.

CONTROL PANEL

- On/off switch.
- Parameters indicator LCD display.
- Ultrasonic power adjustable control (1-99%).
- Push button from 0 to 9 for parameters selection: Time (1" – 2hours).
- Maximum impulses and temperature.
- SET push button: select parameters.
- CLEAR push button: cancel parameters.
- ENTER push button: validate parameters.
- START/STOP push button: cycle beginning and end.
- PAUSE push button: pause function.
- RECALL-SAVE push button: memory to save 10 programs.

ACCESSORY

Anti-noise cabin

Made in double isolated layer that protects from high noises emitted by the ultrasound effects. It comes with a transparent door.

Part No. **5059601**

**Probe 1/8"** for volumes of 0.5-400 ml.

Part No. **5059602**

**Probe 3/8"** for volumes of 20-600 ml.

Part No. **5059603**



MODEL

Part No.	KHz Frequency	Height/Width/Depth (exterior) cm			Power W	Weight Kg
<b>5059600</b>	20	22	19	33	500	6,7

It is supplied with a support-rod adjustable in height.