

## ICON INSTRUMENTS COMPANY

(Manufacturer of Laboratory Equipment)

## **IIC-173**

## **ULTRA SONIC PROBE PROCESSOR**

- Ultra Sonic probe Sonicator can disintegrate most cells, bacteria, spores or tissue. They can
  prepare an emulsion down to 1/100 of a micron homogenization "immiscible" liquids, accelerate
  enzymes and chemical reactions, stimulate bacterial activity, disperse solids in liquids and
  degasliquids Principle of ultrasonic processor:
- High frequency vibrations are produced by S.S. velocity Horn which is immersed into the liquid
  to be processed the vibrations given rise to millions
  of intense microscope vacuum bubbles which form and implode at a very high rate (Twenty
  thousand times per second). This phenomenon is known
  ascavitation. cavitation gives raise to intense local pressure eaves & micro streaming of the liquid
  round the point of collapse.
- Ultrasonic Processors consist of Ultrasonic generator to produces high frequency Electrical Energy operating at a frequency of 22KHZ and ultrasonic power of 120W.
- S.S. velocity horn fitted with PZT crystals (Transducer Elements). The velocity horn assembly
  converts the electrical high frequency energy fed from the ultrasonic generator to mechanical
  vibrations at the rate of applied electrical frequency. The amplitude of these mechanical vibrations
  are magnified bythis velocity horn. This velocity horn is used for the processing application



## **Features**

- Low transducer losses permit maximum cleaning action
- Solid state transistor designing with auto tuning
- · Modular generator for easier modification / servicing
- · Probe Tips: Detacheabtype made of SS 304 grade
- Microprocessor based design

- · Rugged and easy to clean stainless steel housing
- · Extensive protected electronics circuits for longer and safe operation
- · Frequency 22±3 KHZ
- Input voltage range of 170 AC-270 AC,50Hz
- · One year warranty

General Specification	IIC-173	IIC-173 A
In Power Supply	230 V AC	230 V AC
Ultrasonic Power	125 W	250 W
Horn Dia	5mm or 10mm or 15mm	5mm or 10mm or 15mm
Capacity	5 ml to 500ml	5 ml to 500ml
Timer	0 - 30 min	0 - 30 min
Accessories	std. ultrasonics horn, vertical stand & platform for sample holde	
Approx. Size	Generator : L - 380 X W - 380 X H - 280mm	
	stand: W - 150 X D - 300 X H - 600mm	