UCS-650 Ultrasonic cell disruptor

Other series

Introduction

Ultrasonic cell disruptor a multi-functional and multi-purpose instrument that uses ultrasonic waves to produce cavitation effects in liquids. The instrument is widely used in teaching, scientific research and production in the fields of biology, microbiology, physics, zoology, agronomy, and pharmacy.

Feature

- 1. Adopts 5.0-inch TFT color touch screen to display various parameter indexes, and parameter setting is convenient and quick.
- 2. Adopt unique design of fully automatic lifting of the Ultrasonic horn, which is compatible with more container heights and liquid level heights.
- 3. Soundproof box is designed with sound-absorbing cotton and magnetic rubber to ensure sealing, which minimizes noise leakage.
- 4. 9 groups of commonly used parameter settings are set in the program. One-key calling, convenient and quick.
- 5. Using ARM microcomputer technology, the ultrasonic power is finely adjustable, the step is 1%, the time parameters are precisely adjustable, and the time control accuracy is 0.1s.
- 6. Novel and unique appearance, the design conforms to the man-machine operation size, the operation is simple and convenient.
- 7. A UV lamp inside the soundproof box, which can sterilize and illuminate.
- 8. The door lock handle of the box body is integrated, safe and convenient.

Structural features



Reduce noise

The soundproof box is designed with sound-absorbing cotton, magnetic rubber, etc. to minimize noise leakage.



UV lamp

There are UV lamps in the soundproof box, which can sterilize and illuminate.



Integrated design

Cabinet door/door lock/handle integrated design, safe and convenient.

Safety design



Alarm prompt

Buzzer alarm prompt function, will stop and alarm at the end of operation or failure occur.



Emergency button

The emergency stop button can stop the ultrasound and the horn returns to the top position to ensure the safety of man and machine.



Real-time detection

The sample protection temp. can be set, and the sample temp. can be detected in real time to ensure the safety of the sample.

Structure display







Acessories



Optional horn

Parameter

Model	UCS-650		
Frequency	20-25KHz		
Display method	5 inch TFT Touch screen display		
Random horn	Ø6		
Optional horn	Ø2, Ø3, Ø6, Ø10, Ø12		
Crushing capacity	0.5~500ml		
Adjustable protection temp.	Sample temp. to 80℃		
Max. lifting distance of horn	120mm		
Alarm	Time, overload, over temp.		
Input power	220V/50Hz		
Power	650W (1%-99%)		
External temp. sensor	PT100		
Ultrasound time setting	0.1s~9.9s (Suggest 1s-4s)		
Whole time setting	0.1min ~999.9min		
Interval time setting	0.1s~99.9s (Suggest 2s-8s)		
Fuse	250V, 5A, Ф5х20		
Power supply chassis size	W.250×D.420×H.438.5mm		
Soundproof box size	W.501×D.380×H.577mm		
Net weight	14kgs		





Applicable scope and best power ratio of various specifications of horns

Horn(mm)	Ø2	Ø3	Ø6	Ø10	Ø12
Broken amount(ml)	0.5–5	3–10	10–100	100-400	200-500
Power ratio(1-99%)	1-25%	5-35%	35-70%	50-95%	55-99%