

ULTRASONIC CLEANER

MINIATURE SERIES



MANUAL

1. Please read this instruction manual before using
2. Keep this manual for reference
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ULTRASONIC CLEANER

Instruction Manual

- MECHANICAL MODEL
(without heater)
- MECHANICAL MODEL
(with knob timer and heater)
- DIGITAL MODEL
(with digital timer and heater)
- POWERADJUSTABLE MODEL
(with timer & heater & adjustable power)

APPLICATION:

Electronic factory, car work shops, Industrial and Mining area, watch shops, Laboratories, hospital, Dental clinics, Jewelry shops, Mobile Phone repair shops and household use.

CAUTIONS

Thanks for purchase ultrasonic cleaner. Please read the instruction manual carefully before operation to avoid damage to the machine or any danger to personal safety. And please keep it for reference.

- I. Ensure the power supply is in rated range before power cable is connect. Refitting is strictly prohibited! Attention that the control panel will be eroded by organic solution, strong acid and strong alkali.
- II. Ensure the earth wiring is well connected before starting.
- III. Ensure the power key or knob is on the 'OFF' place before starting.
- IV. Do not operate if the tank is empty, or ultrasonic generator will be damaged, if heating is needed, the water level shouldn't be less than 2/3.
- V. Please close the lid to reduce noise and pay attention to water and steam in case of burning skin while open the lid.
- VI. Do not locate the machine when fluid in the tank in case of overflow. Suggest using water-soluble liquid for benchtop ultrasonic cleaners. Strong acid or flammability cleaner is forbidden.
- VII. Do not use the machine in severe environment:
 - a. The place where temperature changes fiercely.
 - b. The place where humidity is too high and is easy to produce dew.
 - c. The place where vibration or impact is strong.
 - d. The place where there exists corrosive gas or dust.
 - e. The place where water, oil or chemicals splash.
 - f. The place where is filled with explosive and flammable gas.
- VIII. Shorten the daily working time. Suggestion is to stop for a few minutes for heat dissipation after working over 30 minutes.

Heater is forbidden when using flammable liquid (such as alcohol, solvent cleaner)

OPERATION PROCEDURE

- Before starting the equipment, check the machine to see if there is loosen parts.
- Keep the unit on a stable and flat working platform in dry and cool environment.
- According to the size and quantity of washing objects, add little bit detergent in the tank which can help improve the cleaning effect. (Empty tank working is forbidden!)
- Ensure correct power and switch connect before starting the equipment.

- Operation Instructions: (Mechanical models)

Start (ULTRASONIC), clockwise rotate to choose the time you required between 0-30min. When the indicator light is on and make "ZIZI" sound, it shows ultrasonic operation work OK.

If need heating, start(HEATING) to adjust required temperature, normally 40-60 °C is the best. (Heating is optional upon needs)

To stop cleaning.

- ① press OFF once, the ultrasonic stop run, the indicator light will also be off.
- ② rotate the heating control knob to "OFF", the indicator light will also be off.
- ③ then switch off the unit and disconnect the power
- ④ empty out the liquid and clean the tank and the unit with clean cloth for next use.

- Operation Instructions: (Digital models)

Timer setting: When power is connected, the default setting is "05:00". Press TEME+ once will increase time by 1 min; Press TEME+ once will decrease time by 1 min. (Free choice and digital countdown control).

Temperature setting: (heating is optional upon needs) When power is connected, the default setting is "50 °C" and Actual is room temp., press TEMP+ once, will increase temperature by 1 °C; Press TEMP- once, will decrease temperature by 1 °C. If the setting temperature is lower than the actual tank temperature, the operation will stop automatically. When the temperature rises to the setting temperature, the indicating light goes off. When ultrasonic work, two temperature screen shows set temperature and actual temperature has been reached.

After set the time and temperature, press ON/OFF once, the equipment will work automatically. Press ON/OFF again, the work process will stop. Then switch off the unit and disconnect the power supply, empty out the liquid and clean the tank and the unit with clean cloth for next use.

- Adjusting power:

The function is only available for power adjustable models! Rotate SLOWLY the power knob clockwise to increase the power from 40% to 100% and counter-clockwise SLOWLY is to decrease sonic power.

• **Cleaning Application:**

PCB, jewelry, electronic components, car parts, hardware, metal tools, computer parts, Laboratory instruments, clock&watches, eyeglasses, contact lens, dentures, dental tools, DVD&

VCD, golf, table-ware, printer inkjet, seal and comb, toothbrush, coins, etc.

Industry	The cleaning products and materials	Clear dirt
Semi-conductor	Integrated circuit, power tube, silicon wafer, diode, lead frame capillary tray, etc	Hands, etching oil, stamping oil, polishing wax, dust particles
Electrical& electronic machine	Tube parts, cathode ray tube, printed circuit board, quartz parts, electronic components, telephone switching equipment, speaker components, power meter, LCD glass, core iron parts, computer floppy disk, video parts, hoop parts, head, photo die mask, etc	Finger print, powder, cutting oil, stamping oil, iron filings, polishing materials, walnut powder, polishing wax, resin, dust, etc.
Precision machine	Bearing, sewing machine parts, typewriter, textile machine, optical mechanical device, gas valve, watches, cameras, metal filter element, etc	Machine cutting oil, iron filings, polishing powder, finger print, oil, grease, dirt, etc.
Optical device	Glasses, lens, prism, optical lens, filter lens, glass device, film optical fiber, etc	Plastic, resin, paraffin, finger printing, etc.
Hardware& machinery parts	Bearing, gear, ball, metal shaft parts, tools, adjustable valve and cylinder parts, burner, compressors, hydraulic press, gun and ultracentrifuge, city water faucet, etc.	Cutting oil, iron filings, grease, polishing powder, fingerprinting and so on
Medical instrument	Medical instrument, denture, etc.	Iron filings, polishing powder, oil, stamping oil, dirt, etc
Electroplate	Galvanized parts, mold, stamping parts, etc	Polishing scrap iron, oil, black iron shell, rust, oxidation shell scrap iron, polishing powder, stamping oil, dirt, etc
Car parts	Piston ring, carburetor, flow meter housing, compressor shell, electrical components, etc	Iron filings, polishing powder, oil, stamping oil, dirt, etc
Chemical fiber	Chemical or artificial fiber nozzle filter protector, chemical fiber texture, etc.	Chemical colloid, glue, and other solid material, dust, etc

• **Maintenance**

■ The unit must be opened by authorised specialised person only for maintenance and care of it.

- Clean the contaminant in the tank frequently
- Trouble clearing

NO.	Problems	Possible causes	Solutions	Remarks
1	No ultrasonic	A.Power supply not connect B. Fuse broken C.Cable short circuit D.Transducer short circuit E. PCB Board broken F. Other reasons	A. Check and plug power switch. B. Check the fitted power supply and change the same specification fuse C. Connect fitted cable or replace a new D. Inquiry our after service engineer. E. Check the broken part and change it F. Inquiry our after service engineer	
2	Time control failure	A. Timer knob out of control B. Timer failure C. Other reasons	A. Loosen or tighten the screw. B. Replace timer or digital panel. C. Inquiry our after service engineer	
3	No heating	A.Heater power switch bad linkage B.Fuse burn out C.Heating pad burn out D.Digital display board out of control E.Other reasons	A.Check heating plug and connect well. Check outlet line with multimeter. If OK and resistance value is low hundred OHMS B. Change the same specification fuse. C. Replace the bad heating pad if open circuit D. Check the broken part and change it E. Inquiry our after service engineer	Suggestion 50-60℃
4	Temperature control failure	A. Thermostat loosen B. Thermostat tube broken C. Digital display out of control D. Other reasons	A. Fasten the thermostat header B. Replace thermostat C. Check the broken part and change it D. Inquiry our after service engineer.	
5	Not well cleaning	A. Not strong ultrasonic cleaning B. Too high too low liquid surface C. Too high too low temperature D. Not suitable cleaning liquid E. Other reasons	A. Connect ultrasonic in/on and adjust B. Adjust liquid into the best surface C. Adjust temperature into the most fitted. D. Stop and switch off power supply, replace suitable liquid after the previous liquid cool down E. Inquiry our after service engineer.	Suggestion 50-60℃
6	Electric leakage	A. Customer side not grounded B. Machine not grounded	To ensure grounded. Check if machine earth wire loosen	
7	Other problems			

