Ultrasonic cleaner

- Thanks for purchasing this machine.
- · Read all instructions before operating the device.
- · Please keep the manual for reference.

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Cautions

- Ensure the power supply is in rated range before power cable is connected. Refitting is strictly prohibited! Attention that the control panel will be croded by organic solution, strong acid and strong alkali.
- Ensure the earth wiring is well connected before starting.
- Activate key of system should be on position of "ON/OFF" button.
- Do not turn on machine if the tank is empty or the transducer will be damaged.
- Please close the lid to reduce noise and pay attention to water and steam in case of burning skin while open the lid.
- Do not relocate the machine when fluid in the tank in case of overflow.
- Water-soluble liquid is suggested for bench top ultrasonic cleaner. Strong acid or flammability cleaner is strictly forbidden. If solvent type cleaner is added in tank, please stop working for a while after 30mins cycle.
- Do not use the machine in below environment.
 - The place where temperature change fiercely
 - The place where vibration or impact is strong
 - The place where water,oil or chemicals splash
- The place where humidity is too high and is easy to produce dew.
- The place where exists corrosive gas or dust
- The place where is filled with explosive and flammable gas



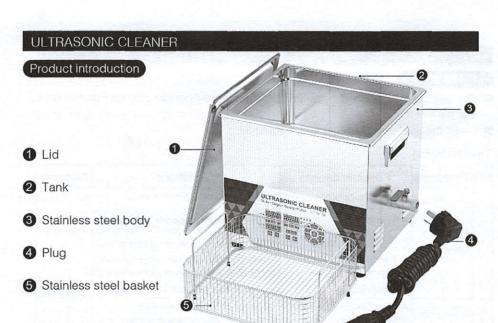
Do not work for long time when you use flammable liquid like alcohol! You will get better cleaning effect if cleaning solution is added in ultrasonic cleaner.

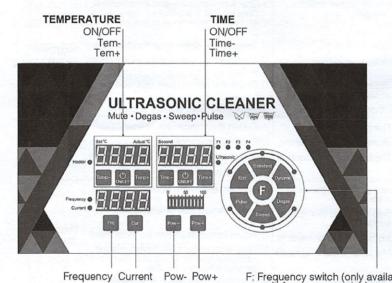
Maintenance

- 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

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





Operation steps



Check the machine

Plug the machine to be sure the machine will be in a state of electricity after start the power switch on the back.



Uncover the lip and fill the tank with tap water.

No water operation will damage the machine, please put the cleaning objects in the water. Fully immerse the part to be cleaned in the water, but do not over the MAX line.



When the ultrasound is not activated, pressing "TIME+" increases the time displayed on the screen by 1 second, and pressing "TIME-" decreases it by 1 second. Press and hold to adjust the time; when "0000" is displayed, it is in constant mode. After setting the working time, press the "ON/OFF" button lightly to turn on the ultrasound indicator light. The machine will work according to the specified parameters, and timing will begin. When the set time is reached, it will automatically stop working and the indicator light will turn off. Note that all digital series have parameter memory function, and the set parameters can be remembered even after power-off.



Temperature



The temperature is displayed on the screen as "50" along with the actual temperature. Pressing the "TEMP+" button increases the set temperature by 1 ° C, while pressing the "TEMP-" button increases the set temperature by 1 ° C, while pressing the "TEMP-" button decreases it by 1 °C. Pressing the "HEATER" button once turns on the heating function, illuminates the heating indicator light, and causes the actual temperature display to blink at a frequency of 1Hz. When the temperature reaches the set temperature, the screen stops blinking. Two temperature display screens show the set temperature and actual temperature respectively. During heating, the heating indicator light remains on.



Adjust power

After turning on the ultrasound, press "POW+" to increase the power, press "POW-" to reduce the power, and press and hold to continuously adjust, the adjustment range is 1%-100%



Frequency/current display window

The default display state is that the current operating frequency and current are displayed alternately every 5 seconds. When the frequency or current button is pressed, the display state is the corresponding frequency or current, and the cycle is no longer alternating.



Switching of working mode
Before turning on ultrasound, press the Eco/Standard/Dynamic/Pulse/Degas buttons to enter the corresponding cleaning mode.



Eco mode: For nearly silent, gentle cleaning.

Standard mode: Normal cleaning, with the cleaning machine operating at its best state. Dynamic mode: Combines sweep and pulse for optimized cleaning performance. Pulse mode: Brief spikes in power to remove stubborn contaminants or for mixing and sample prep.

Degas mode: Quickly remove trapped air from solvents and fresh cleaning solutions. Sweep function: For uniform cleaning via a slight \pm variation in ultrasonic frequency. When the frequency sweep function is turned on, the ultrasonic working frequency cycles back and forth between positive and negative 1 Khz to match the optimal working state of each transducer and achieve better cleaning effect.



Finish work

Please do unplug the machine first after working, and then clean the tank. Be sure no liquid is in the tank if need long-term storage.

Ultrasonic application description

- The standard ultrasonic cleaners adopt high quality stainless steel plate with strong corrosion resistance and long lifespan, transducers with advanced connection sticking technology, high electroacoustic conversion efficiency and strong ultrasonic output, also equipped with automatic constant temperature heating device. Temperature range: 20-80°C.
- Suit for varies industries and objects cleaning, such as precision electronic parts, eyeglasses & clock parts, optical glass parts, hardware, jewelry, semiconductor silicon wafer, printer inkjet, medical instruments and electroplate parts etc.

Industry	The cleaning products and materials	Clear dirt			
Semi-conductor	Integrated circuit, power tube ,silicon wafer, diode, lead frame, capillary, tray, etc.	Hards, etching oil, polishing wax, dust particles, etc,			
Tube parts, cathode ray tube, printed circuit board, quartzparts, electronic components telephone switching equipment, speake components, power meter, LCD glass, core iron parts, computer floppy disk, video parts head, photo die mask, etc.		Finger print, powder, cutting oil, stamping oil, iron filings, polish-ing materials, walnut			
Precision machine	Bearing, sewing machine parts, typewriter, textile ,machine, optical mechanical device, gas valve, watches cameras, metal filter.	Machine cutting oil, iron filings, olishing 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			
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, oi stamping oil, dirt etc.			
Chemical fiber	Chemical or artificial fiber nozzle filter protecto chemical fiber texture, etc.	r Chemical colloid, glue, and other solic material. dust. Etc.			

Specification

Model	Capacity (L)	Frequency (KHz)	Ultrasonic Power (W)	Heating Power (W)	Tank Size (LxWxH mm)	Unit Size (LxWxH mm)	Temp.	Timer (s)
GL0203	3.2	28/40/80/120	0-100	150	240x135x100	265x165x255	20-80	1-9999
GL0304	4.5	28/40/80/120	0-150	300	300x150x100	325x175x260	20-80	1-9999
GL0306	6.5	28/40/80/120	0-150	300	300x150x150	325x175x300	20-80	1-9999
GL0410	10	28/40/80/120	0-200	300	300x240x150	325x265x325	20-80	1-9999
GL0615	15	28/40/80/120	0-300	450	330x300x150	355x325x325	20-80	1-9999
GL0822	22	28/40/80/120	0-400	600	500x300x150	530x330x330	20-80	1-9999
GL1030	30	28/40/80/120	0-500	600	500x300x200	530x330x380	20-80	1-9999