

BENCHTOP ULTRASONIC CLEANER USER MANUAL

Thank you for purchasing the benchtop ultrasonic cleaner. Please take the time to read these operating instructions before use and retain them for future reference. Failure to follow these instructions may lead to serious personal injury and damage to property.

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SAFETY PRECAUTIONS



Keep it away from children!

This device is not intended to use by individuals with restricted physical sensory or metal capacities or those with lack of experience or knowledge, include children, unless they are supervised by a capable supervisors or trained professionals.



Please read the following terms very carefully as failure to comply those may invalidate your guarantee.

To avoid electrical shock:

- 1) DO NOT run the cleaner continuously for more than one hour at a time, as doing so can damage the internal components.
- 2) DO NOT operate the unit without fluid in the tank. Always ensure the fluid is no higher than the max mark, always ensure there is a minimum depth of 7cm.
- 3) DO NOT drop any item into the tank as this may cause damage to the transducer. Always place the items gently into the tank and use the basket whenever possible.
- 4) The more items that you place in your cleaning bath the less efficient it will clean. It is not advised to overlap items. Always allow plenty of clear space between the items.
- 5) Do keep the lid on during use. This will prevent splashes and reduce evaporation of the fluid.
- 6) Never immerse the machine or power cord in water or other liquid.
- 7) DO NOT touch the power plug with wet hands, especially when inserting or removing the plug.
- 8) DO NOT touch the unit if the machine has fallen into water during operation. Remove the power plug from the socket first.
- 9) DO NOT disassemble the machine, except by professionals.
- 10) UNPLUG the power source while filling or emptying the tank.
- 11) DO NOT spray water or liquid over the device and the control panel.
- 12) DO NOT operate the cleaner without proper grounding.
- 13) DO NOT place the device on a soft surface, where the vents could be blocked.
- 14) Upon completion of the cleaning cycle, turn the heater knob off and isolate the machine from the electrical supply.
- 15) Take care when adding or removing items from the cleaning tank as the fluid is likely to be hot and displaced fluid can damage the internal components. Any displaced fluid must be dried up immediately.

16) In the event of failure/emergency, disconnect the mains supply by removing the plug from the mains socket.

APPLICATION

Professional benchtop ultrasonic cleaners are widely used in different fields as: 3D printing, electronics, hardware, machinery, communications, biology, medical, glasses, optics, jewelry, watches and clocks, chemical, textile, automotive, shipping, aviation, industrial and mining, food testing, biopharmaceuticals, laboratories, universities.

A great variety of waterproof items can be cleaned with proper cleaning solutions. (Some specific items should be cleaned in Oily solvent) Here are some examples:	
Health and Beauty	Beauty and Chiropody Institutes: Scissors, scalpels, pincers, nippers, forceps and razors with the removal of organic tissue before sterilization.
Dental	Dental Practices and Dental Technician Laboratories: Dental instruments, removing organic and blood residues, cleaning hand pieces, drills, heads for ultrasonic ablaters, glass objects and mirrors; the removal of cement from spatulas and plaster from prostheses.
Hospital and Laboratories	Hospital Wards and Analysis Laboratories: Endoscopic probes, surgical instruments, glass containers in analysis laboratories with the removal of proteins, blood and organic tissue. Tattoo Studios: grips, tips and needles.
Jewelry	Necklaces, bracelets, rings, precious stones, watch casings and straps, precision mechanical movements.
Optical	During edging and polishing, debris and abrasives can scratch lenses. Ultrasonic cleaning can effectively protect the lenses.
Manufacturing	Aerospace, Pharmaceutical, Automotive, Marine, Filtration, Moulding, Food and Beverage, Plating & Surface Finishing, Semi-Conductors.
Maintenance	Bicycle gears, air purifiers. It cleans out debris in tiny holes and crevices effectively.

Items Not Suitable For Ultrasonic Cleaning

Soft Jewelry: Pearls, emerald, ivory, coral.

Agate, sea turtle shells, etc. Welded, Plated and Glued Items: Welded or plated metal items, glued items.

Watches: Except diver's watches with depth rating over 50m(150ft).

Others: Ceramic, camera filters with preexisting cracks.

PREPARATION:

1. Carefully unpack the cleaner and remove all traces of packing materials from it. Visually inspect the cleaner for any parts that may have become loose or damaged during transit.

Please confirm that the ultrasonic cleaner you have purchased is complete.

Contents:	
Ultrasonic bath	1 set
Soundproof lid	1 set
Cleaning basket	1 pc((optional accessories)
Power cord	1pc
User manual	1copy

2. Place the cleaner on a flat, clean surface where the cooling fans will receive adequate ventilation and ensure all controls are set to off. Also ensure the drain tap is in the closed position.

3. Ensure the power cord is securely plugged into the cleaner and that no part is likely to come into contact with moisture.

4. Carefully fill at least 1/2 of the tank with a solvent solution. For demanding cleaning we recommend a small amount of washing up liquid, this will help increase the cleaning performance. The cleaner is now ready for use.



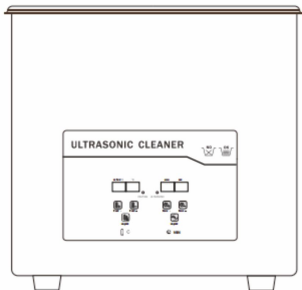
Attention

While the machine is working normally, ultrasonic and tank syntonny gives a well-proportioned sound, and no shudder on the surface of the water, yet there is spray made by the tiny bubbles. If there are discontinuous surges, please add or release a little of washing solution in the tank, stopping the surges is better for the objects cleaning.

KZ-D Series Ultrasonic Cleaner

Features :

- Ultrasonic frequency of 40 kHz
- Digital display of temperature and time.
- Adjustable temperature from 0-80°C.
- Cleaning time with individually adjustable from 1-30min.
- All devices have an useful basket for cleaning parts.
- 6 liter and above size with 1/2" drainage.
- Material tank and casing: Stainless steel.



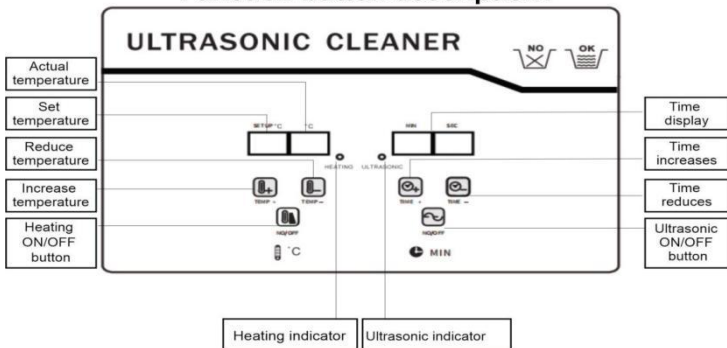
Operation Guidelines

Step	Action
1	Select your cleaning solution, fill at least ½ of solution into the tank. Do not exceed the filling line. Note: Do not ever use alcohol, gasoline or flammable solutions. Doing so could cause a fire or explosion. Use only water-based solutions.
2	Place the items into a basket, slowly lower the basket into tank, donot allow items to contact the tank bottom (solution should cover the items).
3	Plug the cleaner into grounded outlet. After the power on, the temperature display is environment temperature. Temperature default setting is 25°C, time default setting is 5 minutes
4	Time setting: Press "TIME+" or "TIME-"button to setting 1-30 min cleaning time. Each pressing increases / reduce the time by 1 minute.
5	Temperature setting: Press "TEMP+" button to setting the temperature, each pressing increase the temperature by 1°C. Press and hold this button, the temperature can be adjusted continuously. Press "TEMP-"button to reduce the temperature. Each pressing reduce the temperature by 1°C. Press and hold this button, the temperature can be reduce continuously. (When the temperature is lower than the actual temperature, the operation is invalid. When the temperature reaches the set temperature, the heating indicator light turns off. When the ultrasonic is working, the temperature displayed on the panel is the actual temperature of liquid.)
6	After time and temperature setting, press ON/OFF button to start both function.

KZ-D Series Ultrasonic Cleaner

Model	Tank size (L*W*H)mm	Unit size (L*W*H)mm	Volume (L)	Ultrasonic Frequency (kHz)	Ultrasonic power (W)	Heating power (W)
KZ-D013	150*140*70	180*165*205	1.3	40	60	100
KZ-D2	150*140*100	180*165*225	2		60	100
KZ-D3	240*140*100	265*160*225	3		120	150
KZ-D4	300*155*100	325*175*230	4		180	150
KZ-D6	300*155*150	325*175*275	6		180	300
KZ-D10	300*240*150	330*270*275	10		240	300
KZ-D15	330*300*150	355*325*275	15		360	450
KZ-D22	500*300*150	530*330*275	22		480	600
KZ-D30	500*300*200	530*330*330	30		600	600

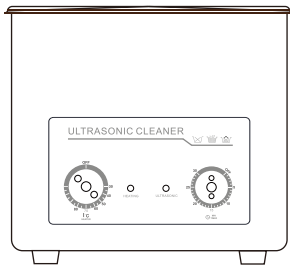
Function button description:



KZ-T Series Ultrasonic Cleaner

Features :

- Ultrasonic frequency of 40 kHz
- Digital display of temperature and time.
- Adjustable temperature from 20-80°C.
- Cleaning time with individually adjustable from 1-30min.
- All devices have an useful basket for cleaning parts.
- 6 liter and above size with 1/2" drainage.
- Material tank and casing: Stainless steel.



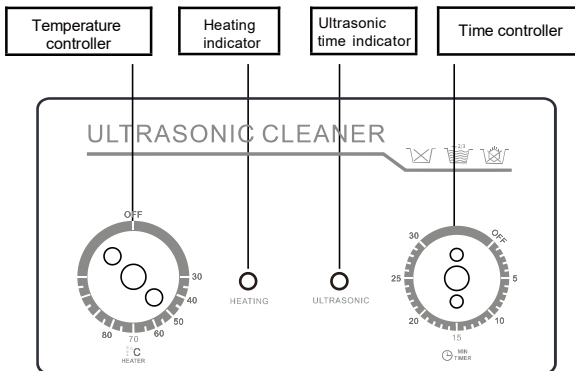
Operation Guidelines

Step	Action
1	Select your cleaning solution, fill at least ½ of solution into the tank.
2	Do not exceed the filling line. Note: Do not ever use alcohol, gasoline or flammable solutions. Doing so could cause a fire or explosion. Use only water-based solutions.
3	Place the items into a basket, slowly lower the basket into tank, do not allow items to contact the tank bottom (solution should cover the items).
4	Start the "TIME" control switch, rotate clockwise to setting the 1-30minutes cleaning time. The ultrasonic indicator is on and the ultrasonic cleaning function starts. Note: Forbidden to rotate counterclockwise! Start the "TIME" control switch, rotate clockwise to setting the 1-30minutes cleaning time. The ultrasonic indicator is on and the ultrasonic cleaning function starts. Note: Forbidden to rotate counterclockwise!
5	Start the "TEMP" control switch, rotate clockwise to setting the 30-80 C heating. After setting, the cleaning liquid is will be start heated to the set temperature. When reached the set temperature, the heating indicator light will turn off and stop heating.

KZ-T Series Ultrasonic Cleaner

Model	Tank size (L*W*H)mm	Unit size (L*W*H)mm	Volume (L)	Ultrasonic Frequency (kHz)	Ultrasonic power (W)	Heating power (W)
KZ-T013	150*140*70	180*165*205	1.3	40	60	100
KZ-T2	150*140*70	180*160*225	2		60	100
KZ-T3	240*135*100	265*165*225	3		120	150
KZ-T4	300*150*100	325*175*230	4		180	150
KZ-T6	300*150*150	325*175*275	6		180	300
KZ-T10	300*235*150	330*270*275	10		240	300
KZ-T15	325*300*155	355*325*275	15		360	450
KZ-T22	500*300*150	530*330*275	22		480	600
KZ-T30	500*300*200	530*330*330	30		600	600

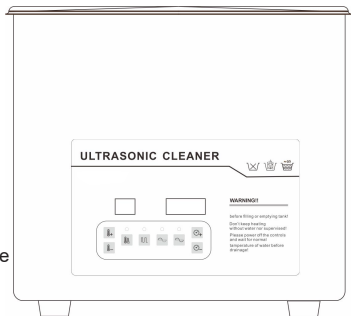
Function button description :



KZ-F Series Ultrasonic Cleaner

Features :

- Ultrasonic frequency of 40 kHz
- Degas function for degassing of cleaning liquids and for special applications in the laboratory.
- High/low power control provides safer cleaning of delicate components.
100% power for normal or 50% for delicate applications.
- Adjustable temperature from 0-80°C
- Cleaning time with individually adjustable from 1-30min.
- All devices have an useful basket for cleaning parts.
- 6 litre and above size with 1/2" drainage.
- Material tank and casing :Stainless steel.



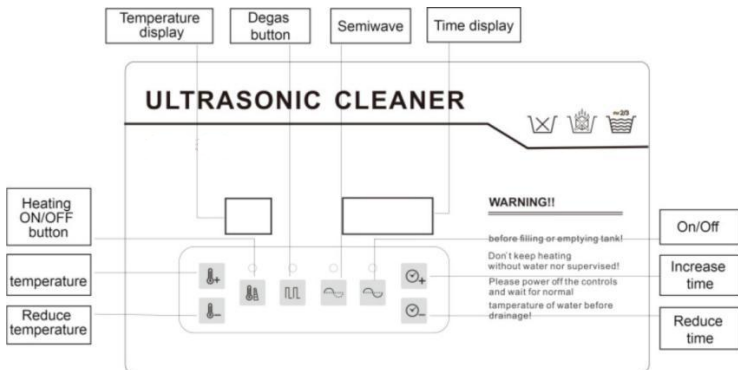
Operation Guidelines

Step	Action
1	Select your cleaning solution, fill at least ½ of solution into the tank. Do not exceed the filling line. Note: Do not ever use alcohol, gasoline or flammable solutions. Doing so could cause a fire or explosion. Use only water-based solutions.
2	Place the items into a basket, slowly lower the basket into tank, do not allow items to contact the tank bottom (solution should cover the items).
3	Time setting: Press to [ON], setting the cleaning time. Press [ON] to reduce working time. Each pressing to increase or reduce 1 minute. Press and hold the buttons, the temperature or time can be adjusted continuously. When the temperature is lower than the actual temperature, the operation is invalid. When the temperature reaches the set temperature, the heating indicator light turns off. When the ultrasonic is working, the temperature displayed on the panel is the actual temperature of liquid.
4	Degas Mode: To speeds up degassing process and improves cleaning efficiency. After timer and temperature setting, press "Degas" button [DEGAS] the device will work in degas mode: working 6 seconds, and stop 3 seconds, then working 6 seconds,...cycle like this with countdown display. If you want to transfer to other mode, just press "sweep" [SWEEP] or "turbo" [TURBO] button , then the "degas" indicator turn off and the indicator for "sweep" or "turbo" is turn on; If want to stop working, press again, then both heating and ultrasonic will stop and the corresponding indicator turn off .

KZ-F Series Ultrasonic Cleaner

Model	Tank size (L*W*H)mm	Unit size (L*W*H)mm	Volume (L)	Ultrasonic Frequency (kHz)	Ultrasonic power (W)	Heating power (W)
KZ-F013	150*140*70	180*165*205	1.3	40	30/60	100
KZ-F2	150*140*100	180*165*225	2		30/60	100
KZ-F3	240*140*100	265*160*225	3		60/120	150
KZ-F4	300*155*100	325*175*230	4		90/180	150
KZ-F6	300*155*150	325*175*275	6		90/180	300
KZ-F10	300*240*150	330*270*275	10		120/240	300
KZ-F15	330*300*150	355*325*275	15		180/360	450
KZ-F22	500*300*150	530*330*275	22		240/480	600
KZ-F30	500*300*200	530*330*330	30		300/600	600

Function button description :



008S-Large Power Ultrasonic Cleaner

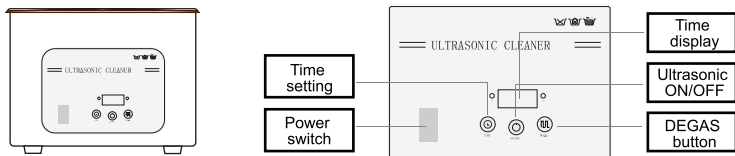
Operation Guidelines

Step	Action
1	<p>Plug in the power, check whether the machine display is normal, confirm that the machine is powered on, and the power The display light is on. , the working time is shown as default 300 seconds.</p> <p>Select your cleaning solution, fill at least ½ of solution into the tank. Do not exceed the 2/3 of the tank .</p> <p>Note: Do not ever use alcohol, gasoline or flammable solutions. Doing so could cause a fire or explosion. Use only water-based solutions.</p>
2	<p>According to the cleaning requirements to set the time, lightly press the "time (TIME)" key to set the time ; (60S → 120S→180S→240S→300S→360S→420S→480S→540S→600S, 10 time slots)</p>
3	<p>After setting the time, press the "ON/OFF" button , the blue indicator light is on, the cleaner start to working allow the setting time.</p> <p>When time countdown to 00:00, the ultrasonic stop working. Parameters work. The time countdown starts, and the work stops automatically when the remaining time is zero.</p>
4	<p>If need degas function, after setting the time, press"DEGAS"button to start the degas working mode. To speeds up degassing process and improves cleaning efficiency</p>

Specifications:

Model	Tank size (L*W*H)mm	Unit size (L*W*H)mm	Volume (L)	Ultrasonic Frequency (W)	Heating power (kHz)
008S	150*85*65	175*110*125	0.8	50	40

Function button description :



Attention:

1. When the ultrasonic is in normal operation, the uniform sound of the ultrasonic resonance with the tank should be heard, and there is no agitation on the surface of cleaning liquid, only splashes caused by cavitation. If there is agitation, please add or reduce liquid to eliminate the agitation for beneficial to cleaning objects.
2. Do not keep continuous working more than 60 minutes.
3. Do not ever use alcohol, gasoline or flammable solutions. Doing so could cause a fire or explosion. Use only water-based solutions.
4. Do not turn on the heating and ultrasonic when there is no liquid in the tank.
5. Prevent cleaning fluid or water from splashing into the machine and transducers; It will cause the machine to leakage, electrical short circuit and cause the piezoelectric ceramic of the transducers to burn out.