

SINGLE TANK ULTRASONIC CLEANER
(KS -1042)

USER MANUAL

Thank you for buying our ultrasonic cleaner

Before using, please read and thoroughly understand the instructions

Keep this manual for reference

The **KS series** ultrasonic cleaning machine is one of our product. It make use of the ultrasonic cleaning medium by the water or cleaning fluid, it's fast, efficient and consistent, suitable for the laboratory, the factory workshop, widely apply to cleaning different kinds of vehicle spare parts ,hydraulic pressure groupware, mechanical bearing, fitting, valve, galvanization, hardware polishing and below various professional degreasing , remove dirt, dust, fingerprint:

Electron: Computer spare part, printing, semiconductor, optical lens, electronic products etc. electricity vacuum components magnetic material;

Light industry: Clock and watch components, camera components, glass products, eyeglasses part etc.

Health: Every kind of healthcare instrument, drugs appliance, vessel etc.

Chemical industry: The chemical reagent vessel, the chemical fiber nozzle, spurt the screw stock, the sealed container etc.

Craft: Jewelers ornaments, metal accessories, handicraft etc.

Hardware: Cutting tool measuring instrument, hard alloy tool, emery strainer, stainless steel tableware, each ramming polishing and so on;

ULTRASONIC CLEANING PRINCIPLE AND POINT:

Ultrasonic cleaner is on based of cavitation effect caused by high frequency ultrasonic wave vibration signal in fluid. Microscopic bubbles are formed and they implode violently that cause cavitation, which gives out great impact of the cleaning subject and provides an intense scrubbing action on the surface of cleaning subject. Additionally, the bubbles are small enough to penetrate even microscopic crevices, cleaning them thoroughly and consistently.

The effect of the cavitations corrosion's function is the ultrasonic cleaning basic principle. With the cleaning solutions, ,make the cleaning effect quickly.

We know the ultrasonic cleaner has the below characteristics from the cavitations:

1. Ultrasonic cleaner is very effective for cleaning those anomalous surface, porous, slit, pore, blind hole, trench etc.
2. High efficiency cleaning, the cleaning time is 10 seconds to 5 minutes;
3. Only use water or cleaning fluid have good cleaning effect, the low cost, reduces the environmental pollution, improves the workshop production environment.

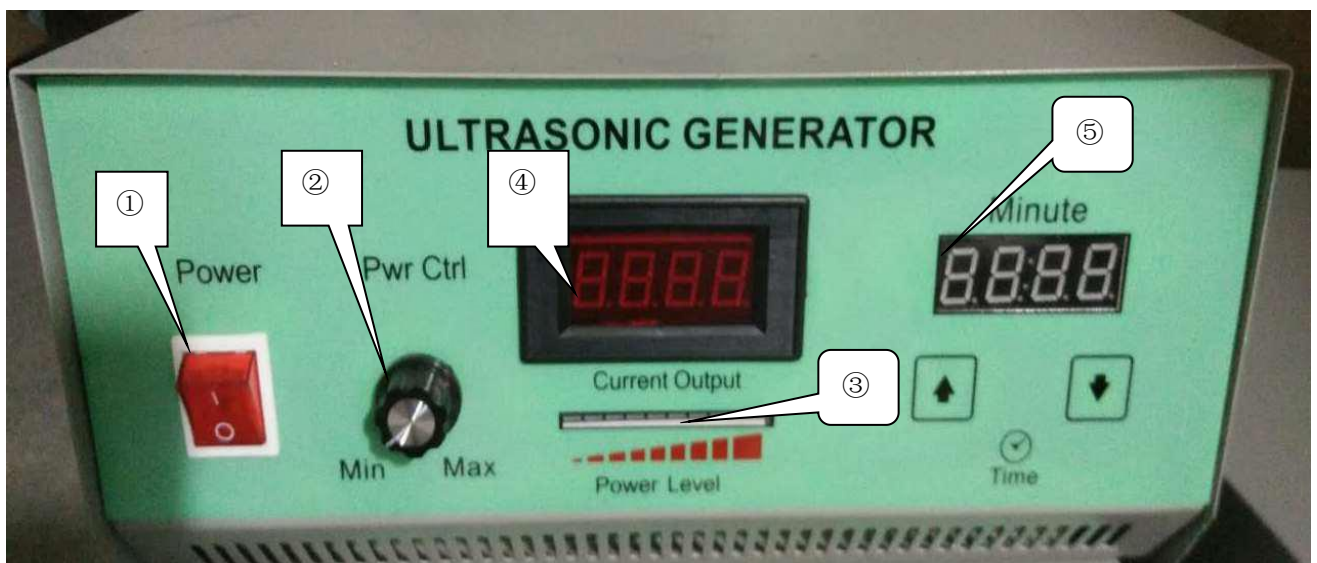
SPECIFICATIONS:

Model Specification	KS-1042
Tank size (L×W×H, mm)	Custom-made
Unit size (L×W×H, mm)	Custom-made
Housing material	Stainless Steel SUS304
Tank material	Stainless Steel SUS304
Capacity (L)	Custom-made
Transducer No. (pcs)	42
Frequency (KHz)	Custom-made
Ultrasonic power (W)	2100
Heating power (W)	4500
Generator power supply	AC220V, 20AMP
Heating power supply	AC380V, 20AMP

Note: Special requirements can be made according to client’s requirement, and OEM is welcome if the quantity is large.

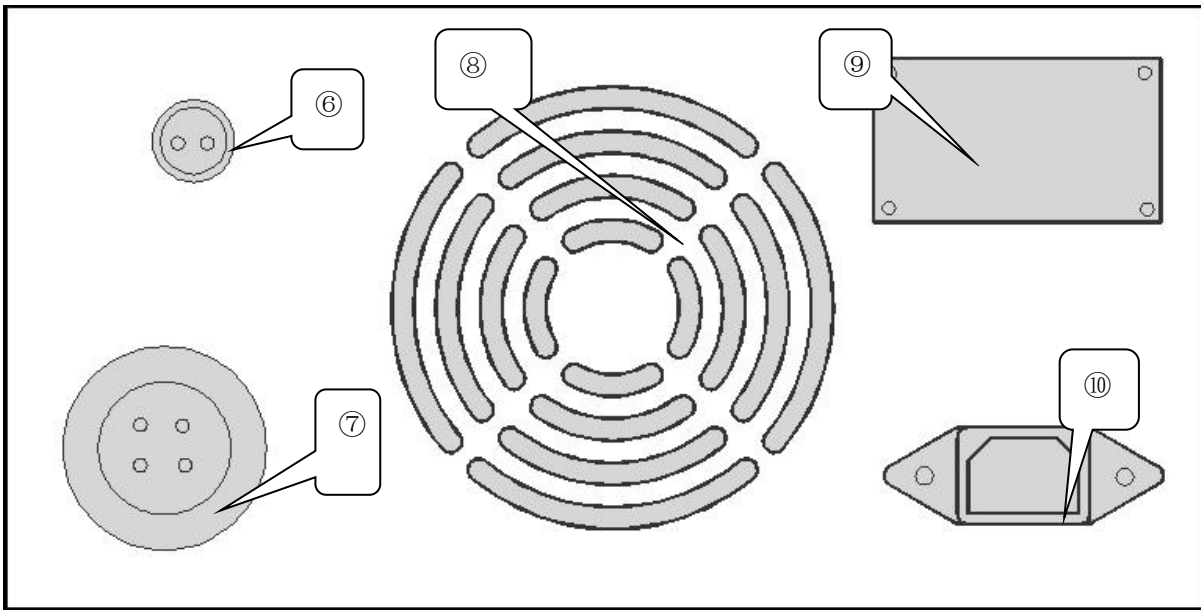
OPERATION MANUAL:

The generator function indicators



Generator Front Side

- ① **Power**(ON/OFF switch) : The main power switch of the generator
- ② **Pwr Ctrl** (power control switch): Turn the knob to adjust the ultrasonic power,
- ③ **Power level**: the LED strip will display the power level when adjust the power
- ④ **Current output** (LED display screen): To indicate the output current during operation.
- ⑤ **Minute**(Time display screen): Press the **↑** and **↓** buttons to increase or decrease the desired cleaning time.(1-99 minutes is available)



Generator Back Side

- ⑥ **Remote control switch:** to remotely control the operation of generator. (Remark : It must be shorted when not use.)
- ⑦ **Signal output Termination**
- ⑧ **Cooling fan**
- ⑨ **Nameplate**
- ⑩ **Plug socket**

The generator operating instruction

1. Pls do remember to add enough water or washing fluid to the tank before power on
 (reach to 2/3 of the tank capacity and must immerse the whole items which need to be cleaned)

 *Damage will be occurred if works without water.*

2.Pls ask a professional electrician to connect the power line for you

The electrician should help you to connect the loose wire with the air-break switch, please carefully notice the FIVE different colorful line (see pic 1)



Picture 1

3. Connect the ultrasonic signal plug (see Pic.2) with the “Signal output Termination” (see Pic.3) on the back side of the generator

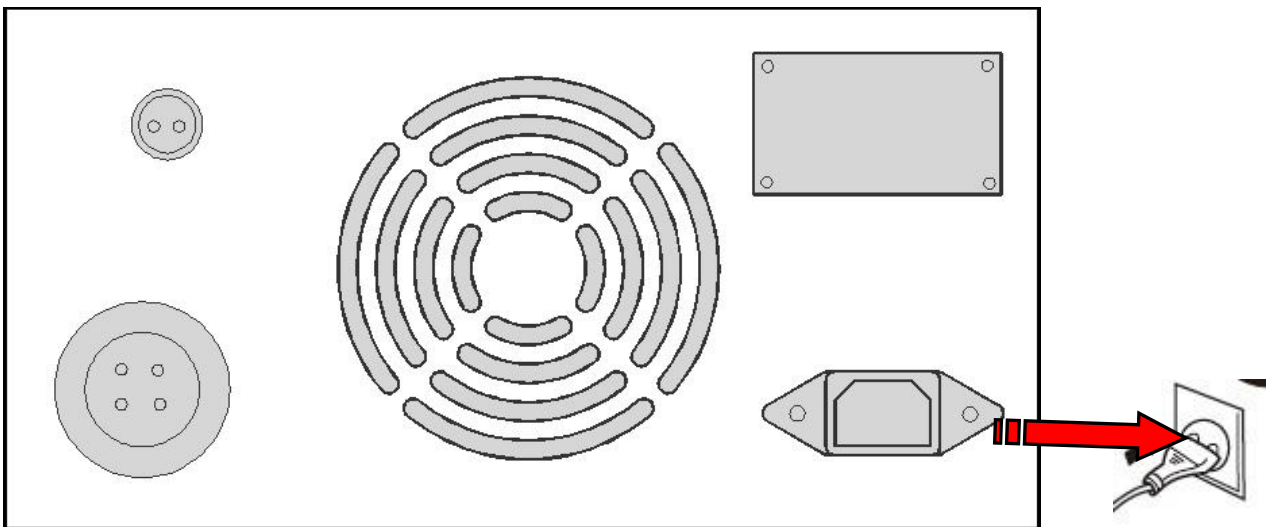


Picture 2



Picture3

4. Connect the power cord (see Pic.4) . Be sure the line voltage should be 120Vac \pm 10%, 50/60Hz.





Picture 4 (Generator Back Side)

5.The generator operation guide :



Picture 5 (Generator Front Side)

- Turn ON the “Power” switch, the power indication is lighted
- Turn the “Pwr Ctrl” knob in clockwise to rise up the output power. The power level is indicated on LED strip and the output current is indicated on the LED display screen simultaneously.
- Set the cleaning time by pressing  and  buttons which will be showed at “Minute” (1-99mins)

6. The heater operation guide:

There is an thermostat operation panel in the front of machine (see **Pic.6**).



Picture6

- **Temperature adjuster**(see the bottom knob): Turn the knob to start the heating function which can set the the temperature from ambient temperature to 110 degree centigrade
- **HEATER ON**(see the top left corner): The light will be on when the thermostat is running.
- **TEMP REACH**(See the top right corner): The light will be on when the temperature reached the setting degree.

Note: In the process of adjustment and operation, the current can't exceed ultrasonic generator maximum output current(work current),or it will damage the generator.

During adjustment ,the rating current calculated by 0.13A for each transducers, if there is many transducers, the current can adjust down properly by 0.12A calculated.

SAFETY PRECAUTION:

1. Read all the operating instructions before use the products.
2. Do not try to dismantle the generator during operation.
3. Ensure the power to generator should be dis-connected before connecting wires from generator.
4. To ensure the generator working at specified rated voltage.
5. Periodically cleaning up all the dust condenses on the ventilation fan and on the top of PCB by using vacuum or jet air method.
6. Prevent the generator working in a high humidity and high corrosive environment.
7. To avoid damage the generator. Never place it on an unstable stand or subject to a vibration environment.
8. The generator should be connect with ground line to prevent electrical shock.
9. To ensure the generator working with corresponding power rating of transducers. Any mismatching between generator's power and transducers' power will result to underload or overload.

LIMITED WARRANTY:

1. All unit provide one year limited warranty from the date of purchase.
2. During the limited warranty period, we will repair or replace any defective parts resulting from normal operation condition, but the buyer will bear the freight.
3. Any misuses and external reason to cause the failure of the parts will be charged as replace or repair.
4. All the generators and transducers had been tuned and tested over 100 hours before shipment to ensure the function. Any alternation or modification on the unit after shipment will void the warranty agreement.

CAUTION:

1. Don't operate the heater & ultrasonic when the tank is empty.
2. Washing fluid is better within 1/2 to 2/3 of nominated volume of tank.
3. Please keep the unit placed in a dry ventilated place, don't cove the cooling fan.
4. Machine fail to work, please contact with the repair person, don't open it to avoid the hurt.

Note : We reserve the right to change the specifications of products to improve or upgrade the performance without priority notification.

End