

# Owner's Manual

## 1. The principle of Ultrasonic Cleaner

Ultrasonic cleaner is based on Cavitation effect caused by high frequency ultrasonic wave vibration signal in fluid. Microscopic bubbles are formed and they imploded violently that cause Cavitation, which gives out great impact to 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.

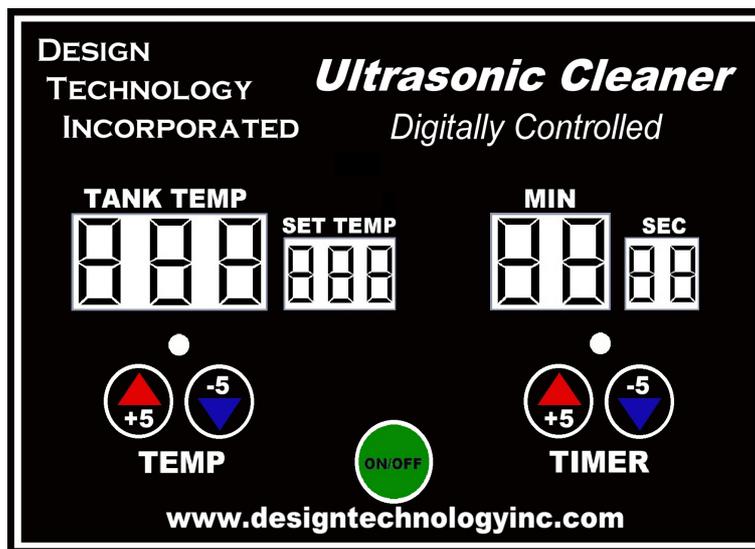
As one of the principal applications of ultrasonic wave, the ultrasonic cleaner has a strong dirt-removing capacity and offers wonderful cleaning effect. Ultrasonic cleaner has been widely used to clean optical instrument parts, timepiece parts, mini-bearing, electrical vacuum units, semi-conductor devices, missile guidance system, part form filament drawing membranes, spinning nozzle for chemical fiber production, medical syringe needle, oilier, throttle nozzle, etc. Besides the usage for high quality cleaning, ultrasonic cleaner is also used to perform ultrasonic pulverization, debarring, emulsification, mixing, removing of oxidized iron covering, acceleration to chemical reaction, etc.

## 2. Technology parameter

1. Voltage :AC110V/220V 50Hz/60Hz
2. Ultrasonic frequency:40KHz
3. Working hours:8
4. Unit, plug cable and basket: 6 lbs.

Model No.	Outer Dimension L×W×H(mm)	Tank Dimension L×W×H(mm)	Cubage (L)	Voltage (W)	Heating Range (°F/°C)	Timer Range ( MIN )
DSA50-SK2	175×165×250	150×137×150	2.5	50	35-175/5-80	05/01/60

## 3. Operation Instructions



1. Put the unit on a stable and flat working platform.
2. Place the cleaning subject in the basket
3. Fill the tank with water to completely immerse the cleaning subject. For the best cleaning result, water shall be up to  $\frac{1}{2}$  to  $\frac{2}{3}$  of nominated tank volume.
4. Add small amount of detergent.
5. Connect the power. **Do Not Turn Machine on without fluid in the tank!**
6. Press (ON/OFF) to turn on the machine:  
When the display window on the right side shows "00", ultrasonic cleaner is standby and the indicator light is off; press time setting key "+5", the ultrasonic cleaning indicate light turns on, the Timer begins to count down and ultrasonic cleaner starts to clean. When the Timer counts down to "00", the ultrasonic stops automatically and the indicator light turns off.
7. Set the temperature:
  - On the left of the panel, there are two keys ("+5" and "-5") for temperature setting. Press "+5" once, the temperature will go five degrees higher; press "-5" once, the temperature will lower five degrees.
  - Temperature range: 35°-175° F
  - When the tank temperature is lower than the setting temperature, the unit will keep heating and the heating indicator light will be on.
  - When the tank temperature is higher than the setting temperature, the unit will stop heating and the heating indicator light will be off.
8. Set Time:
  - On the right of the panel, there are two keys ("+5" "-5") for time setting. Press "+5" once, the ultrasonic cleaning time will add five minutes, and press "-5" once, the time will reduce five minutes.
  - Time setting range: 05-60 minutes

#### 4. Warning

1. Do not operate if the tank is empty. **Do Not Turn Machine on without fluid in the tank!**
2. After use, turn off the power and unplug the power plug.
3. When add or change water or detergent, the power must be turned off and disconnected.
4. Prohibited using corrosive or inflammable solution as washing fluid to prevent from danger.
5. Water level should be  $\frac{1}{2}$  to  $\frac{2}{3}$  of the tank.
6. Please do not touch the machine during its operation.