Dentalzone

GT SONIC T-SERIES ULTRASONIC CLEANER

USER MANUAL

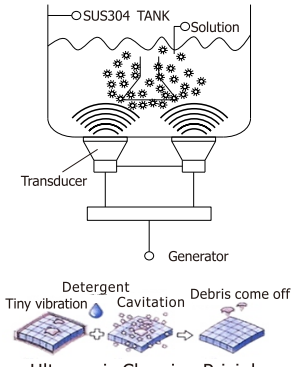


FEATURES

- Normal and soft power control to resolve the cleaning blind spot.
- Blinking LED light bar display for timer and temperature.
- Stainless steel housing, tank and lid, nice looking.
- Stamp tank without welding gap for better waterproof.
- Cooling fan.
- Moisture-proofed PCB.
- Industrial grade IC & ultrasonic transducer.

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

INTRODUCTION



Ultrasonic Cleaning Priciple

Ultrasonic cleaning is based on the cavitation effect caused by high frequency ultrasonic wave vibration signal in the fluid. Microscopic bubbles are formed, and they implode violently causing the cavitation which create an intense scrubbing action on the surface of the item being cleaned. The bubbles are small enough to penetrate microscopic crevices,cleaning them thoroughly and consistently.Ultrasonic cleaning is extremely effective at removing dirt and grime which would normally require tedious manual cleaning by hand. It has been used to clean a wide variety of instruments and mechanical parts such as carburetors,returning them to almost "like new" condition without damage to delicate parts.

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.

Contents:

a: Main machine	b: Lid	c: Power cord
d: Outlet filter	e: User manual	f: Mesh basket

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 lead is securely plugged into the cleaner and that no part part of the lead 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 syntony 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.

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 an individual who is responsible for their safety or have received training in operating the device.

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

1) DO NOT run the cleaner continuously for more than 30 minutes 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.

1 5)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.

17)Never plugged in the machine unattended .

APPLICATION

Provided product is non-porous and can normally be immersed in water almost anything can be thoroughly cleaned. Here are some examples:

Hospital	**Beauty and Chiropody Institutes:** scissors, scalpels, comedo removers, pincers, nippers, forceps and razors with the removal of organic tissue before sterilization treatments. **Tattoo Studios:** grips, tips and needles.
	Dental Practices and Dental Technician Laboratories: dental instruments, removing organic and blood residues, cleaning hand pieces, drills, heads for ultrasonic ablators, glass objects and mirrors; the removal o f cement from spatulas and plaster from prostheses.
	Hospital Wards :endoscopic probes, surgical instruments.
	Veterinary hospital:veterinary instruments.
Laboratories	**Analysis Laboratories:**glass containers in analysis laboratories with removal of proteins, blood and organic tissue.
Gold smithery and Silver smithery	Necklaces, bracelets, rings, precious stones, watch casings and straps, precision mechanical movements.
Manufacturing	Aerospace,Pharmaceutical,Defence,Automotive,Marine, Filtration,Moulding,Food and Beverage, Plating & Surface Finishing,Semi-Conductors.
Optical	During edging and polishing, debris and abrasives can scratch lenses. Ultrasonic cleaning can effectively protect the lenses.
Military	Reusable brass, gun parts, bullets etc.
Regeneration	For cleaning dot matrix printers and photocopier ink cartridges.
Maintenance	Mobile phones, 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.










MECHANICAL ULTRASONIC CLEANER STRUCTURE

Unit front view/side view



A: Stainless steel housing B: Lid C: SUS304 tank

D: Max line E: Plastic carrying handles F: Drain tap G:Rubber feet

Unit back view

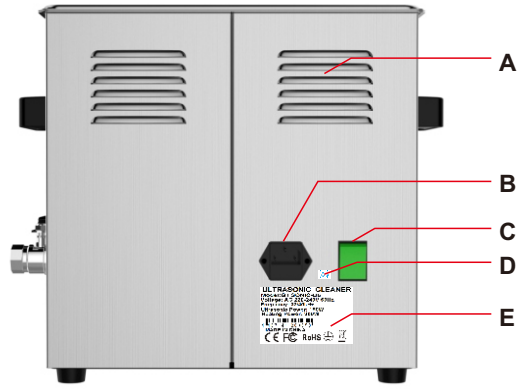
A:Louver

B:Socket

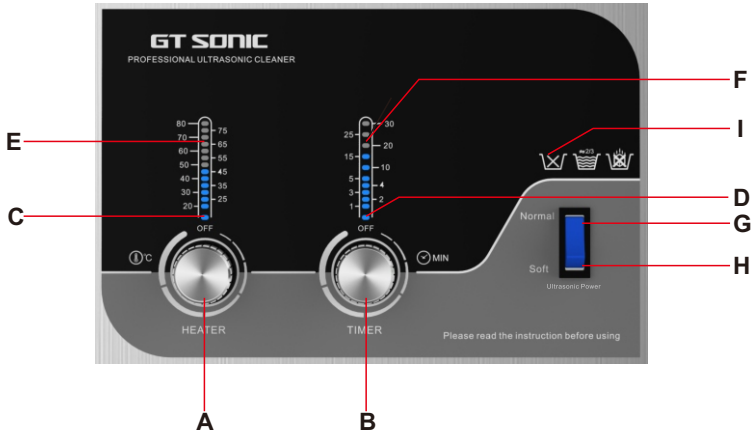
C:Power switch

D:QC PASSED sticker

E:Rating label



Front panel



A: Heating knob:Turn rightwards to set the temperature from 20-80℃,turn leftwards to reduce the temperature.

(Note:1:It's useless to turn rightwards when temperature reach to 80℃ and turn leftwards when temperature reach to 20℃)

B:Timer knob : Turn rightwards to set the timer from 0-30mins,turn leftwards to reduce the timer.

(Note:1:It's useless to turn rightwards when timer reach to 30mins and turn leftwards when timer reach to 0)

C:Heating indicator:When turn on power switch and setting temperature reached ,the heating indicator will light up.

D:Timer indicator:When turn on power switch and setting timer reached , the timer indicator will light up.

E:Heating LED light bar:Temperature display

F:Timer LED light bar:Timer display

G:Normal power :100% power to the tank for normal applications .

H:Soft power:Half power for delicate applications .

I: Warning marking

OPERATION

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)
Power switch 	a: Plug the machine into grounded outlet. b: Turn on the power switch on back side of the machine. The timer and heating indicator light up.
Ultrasonic power choose 	Choose normal soft ultrasonic power you need .
Temperature setting 	a:Turn the “Heater” knob rightwards to set heating temperature from 20℃ to 80℃.The light of preset temperature will blinking 3 seconds to start heating ,the LED light bar will display the ambient temperature and rise up until the temperature reached to preset temperature,heating will auto stop and the light of preset temperature will always blinking, the LED light bar below preset temperature all light off and heating indicator light up.

	b:Turn the knob leftwards to reduce the temperature . c:To stop heating immediately, turn knob leftwards to off until heating indicator light up again. **Note:** 1.Temperature with 13 gear ranges ,from 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80℃ 2.Heating will auto start again when actual temperature lower around 3℃ than the preset temperature. 3.To get the best cleaning result, the solution's temperature we suggest is 40℃-60℃. Warm water and dish washing liquid can soften grease and improve cleaning result. 4.If the preset temperature below environment temperature, the heating couldn`t start.
Timer setting 	a:Turn the "Timer" knob rightwards to set timer from 0-30 minutes. The preset timer light blinking 3 seconds and all LED light bar below preset timer will light up ,ultrasonic start working .The LED light bar will be shortened as operation time is going on .When cleaning is completed,the timer indicator light up. b:Turn the knob leftwards to reduce the ultrasonic working time . c:To stop ultrasonic immediately,turn knob leftwards to off until timer indicator light up again. **Note:** Timer with 9 gear ranges,from 1, 2, 3, 4, 5, 15, 20, 25, 30mins
Start Ultrasonic	After the timer be set,the ultrasonic start working. **Note:** During ultrasonic working state, you will hear the "sizzling" voice ,that means the cleaner running properly.
Stop ultrasonic and heating	1.Turn the "timer" knob to "OFF", the machine will stop working, The timer indicator will light up. 2.Turn the "heater" knob to "OFF", the heating will stop and the heating indicator will light up.

When finished use	1.When the cleaning is completed, turn off timer and heating. Then turn off the power switch in back of the machine 2. Unplug the power cord, open the lid and retrieve the basket and the items. 3. Empty the tank and clean both the outside and inside of the machine with clean and dry cloth for next use. 4.Keep the drainage valve closed.(for machines above 6L).

DIFFERENT WAYS OF CLEANING

GENNRAL CLEANING—use only tap water. Use warm temperature about 50℃ .

ENHANCED CLEANING—add few drops of standard washing up liquid, liquid soap, or detergent into water, other non-acidic cleaning agents can also be used.

EXTENSIVE CLEANING—removing tarnish, carbon & rust from non-plated metals, it is recommended to use specialist cleaning solution in associated using ultrasonic cleaner.

WARNING : Strong acid or alkaline cleaning solution will cause corrosion, rust and even puncture of tank or machine body. To overcome this problem, dilute to mild PH solution or request for tank made of specific grade of stainless steel like SUS304.

SPECIFICATIONS

Model	Tank size	Unit size	Volume	Ultrasonic power	Ultrasonic frequency	Heating power
	L×W×H(mm)	L×W×H(mm)	(L)	(W)	(kHz)	(W)
GT SONIC-T2	150×140×100	190×170×220	2	50	40	100
GT SONIC-T3	240×140×100	270×170×240	3	100		100
GT SONIC-T4	300×150×100	380×175×240	4	100		100
GT SONIC-T5	240×135×150	320×165×280	5	100		200
GT SONIC-T6	300×155×150	330×180×310	6	150		300
GT SONIC-T9	300×240×150	330×270×310	9	200		300
GT SONIC-T13	330×300×150	360×330×310	13	300		400
GT SONIC-T20	500×300×150	550×330×310	20	400		500
GT SONIC-T27	500×300×200	550×330×360	27	500		500

Heating Setting: 20-80℃ can be adjustable.
Timer Setting:0-30minutes can be adjustable.