



ULTRASONIC CLEANER SKYMEN MANUFACTURE

Professional manufacturer focus on ultrasonic technology R&D

Instruction Manual

The pictures in this manual are for reference only.
Please refer to the real products.

MECHANICAL
SERIES

DIGITAL TIMER
S SERIES

DIGITAL TIMER
PLUS SERIES

Application:

Electronic factory, utensil, hardware, machinery, communication, biological, medical instrument, glasses, Optical, Jewelry, clock, watch, chemical, Textile, auto part, Ships, aviation, mining area, commercial cleaning.

PREFACE OF USE

Thanks for purchase ultrasonic cleaner, Please read the instruction manual carefully before operation to avoid damage to the machine or any danger to personal safety. And please keep it for reference.

Please make sure power supply is in rated range, before plug the machine. Refitting is strictly prohibited! Attention that the control panel will be eroded by organic solution, strong acid and strong alkali.

THE BASIC PRINCIPLE OF ULTRASONIC CLEANING

The cleaner uses ultrasonic energy (40 kHz) in the form of sound waves to create millions of tiny microscopic bubbles in the solution that even works its way into holes and hidden cavities, loosening dirt on all surfaces that the solution touches. This action called cavitation, occurs thousands of times per second to gently yet thoroughly scrub contamination off the article being cleaned. When you lift the item out of the cleaner, it's microscopically clean.

NOTES BEFORE USE

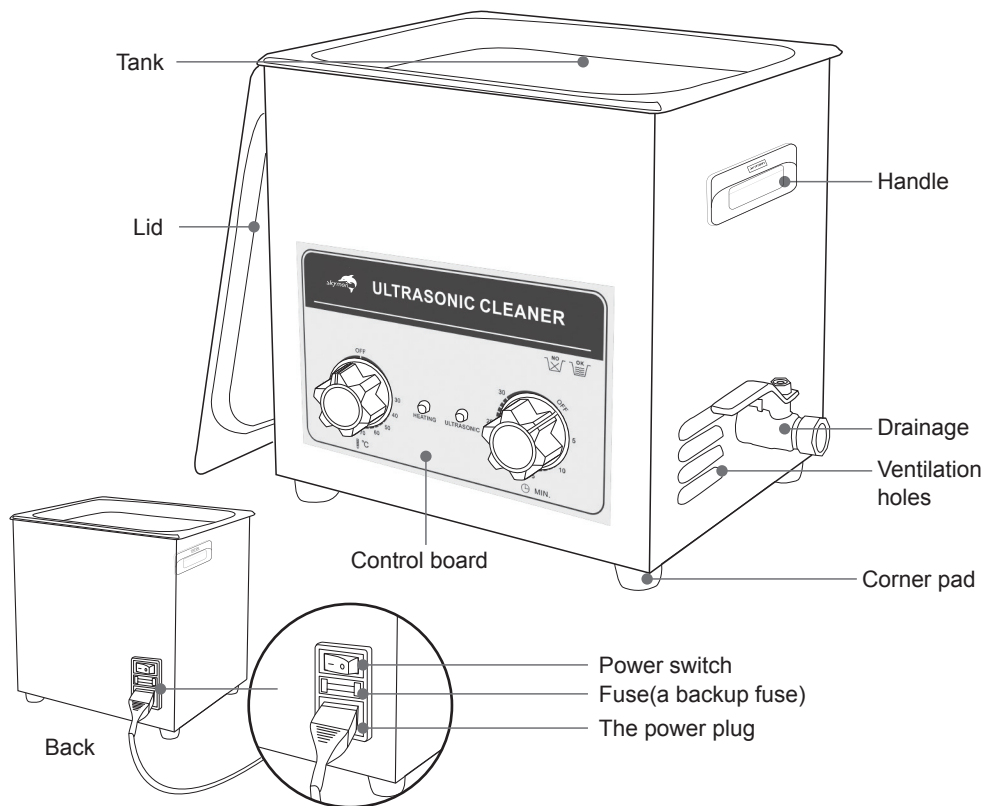
- 1 . Ensure the power supply is in rated range before power cable is connected. Refitting is strictly prohibited! Attention that the control panel will be eroded by organic solution, strong acid and strong alkali.
- 2 . Ensure the earth wiring is well connected before starting.
- 3 . Ensure the power switch should be placed in the "O" position before starting.
- 4 . Do not operate if the tank is empty, or ultrasonic generator will be damaged. If heating is needed, the water level shouldn't be less than 2/3.
- 6 . Please close the lid to reduce noise and pay attention to water and steam in case of burning skin while open the lid.
- 7 . Do not relocate the machine when fluid in the tank in case of overflow.
- 8 . Please choose the proper sizes or types of baskets according the object to be cleaned
- 9 . Suggest using water-soluble liquid for benchtop ultrasonic cleaners. Strong acid or flammability cleaner is forbidden. Do not heat when using flammable liquid such as alcohol, gasoline, etc., heating is strictly prohibited, ultrasonic vibration for a long time cause temperature of liquid increase, caution fire!
- 10 . Do not use the machine in severe environment :



The place where temperature changes fiercely; The place where humidity is too high and is easy to produce dew; The place where vibration or impact is strong; The place where exists corrosive gas or dust; The place where water, oil or chemicals splash; The place where is filled with explosive and flammable gas;

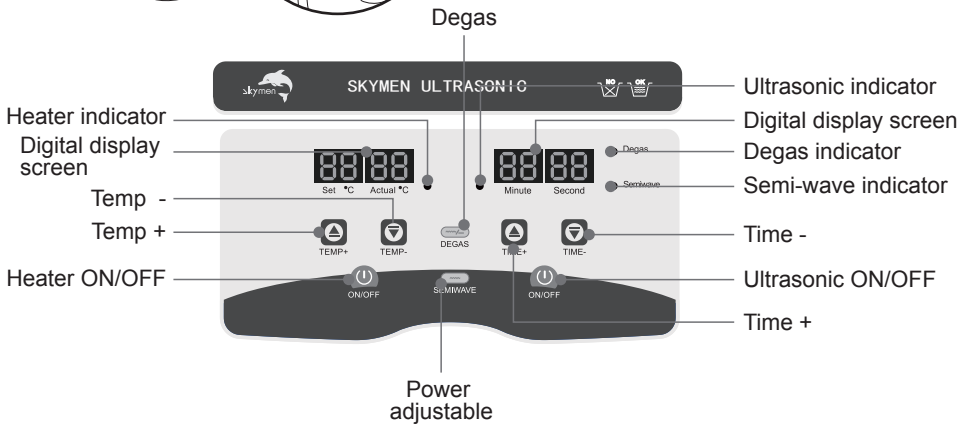
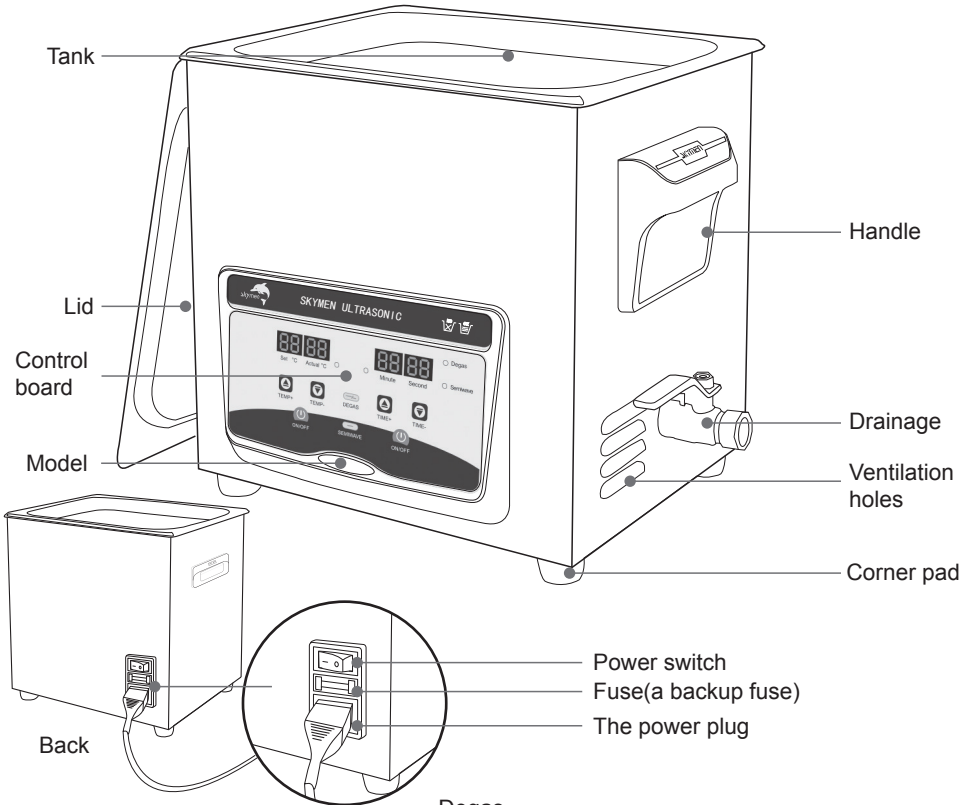
PRODUCT DRAWING&INDICATION

MECHANICAL MODEL

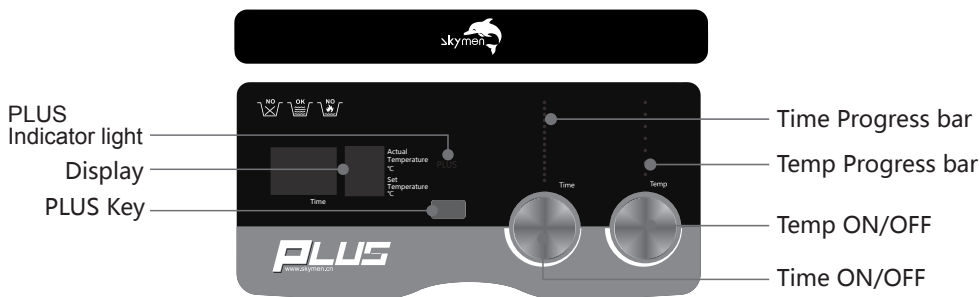
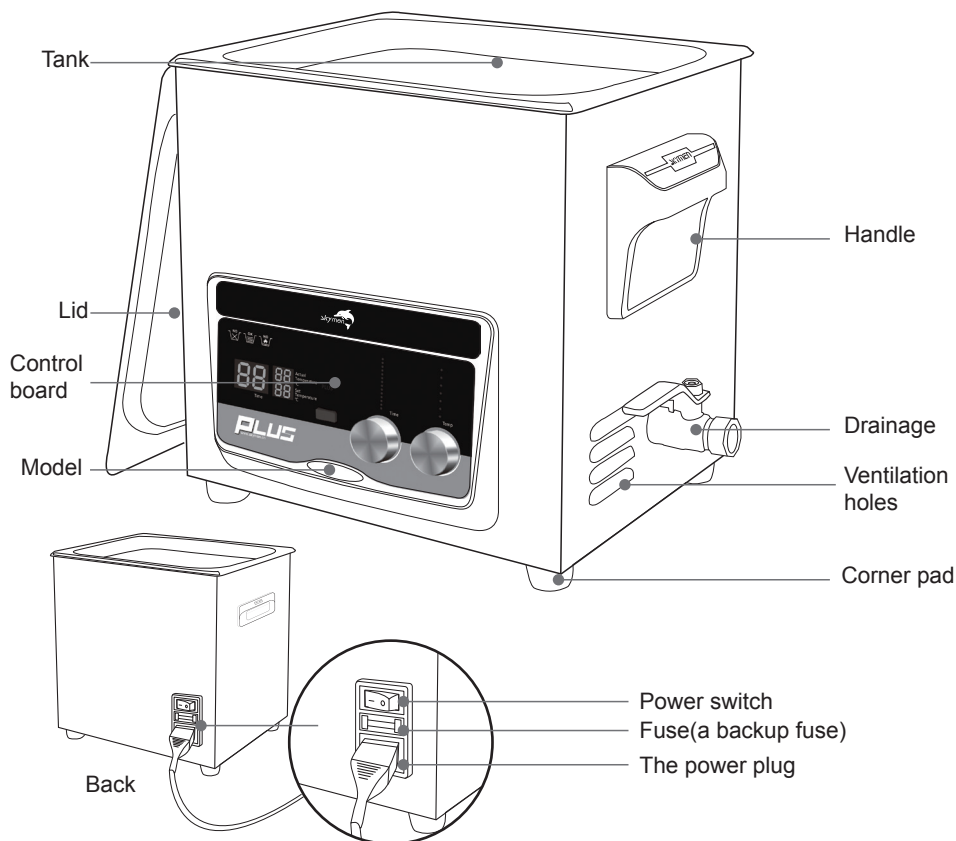


PRODUCT DRAWING&INDICATION

Digital timer heater adjustable with degas series

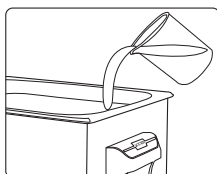


Digital timer heater adjustable plus series



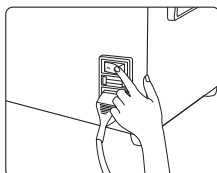
OPERATION STEPS

◆ Before Operating Your Cleaner



1. Add cleaning liquid

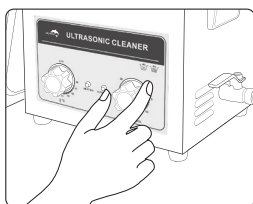
Add appropriate amount of cleaning solution to the cleaning tank according to the cleaning. Ensure that the liquid level is not lower than the inner tank height by 2/3 when the heating is turned on. **Use flammable liquids such as alcohol, gasoline, etc. It is forbidden to heat. Long-term vibration will cause liquid increase in temperature, beware of fire!**



2. Open power

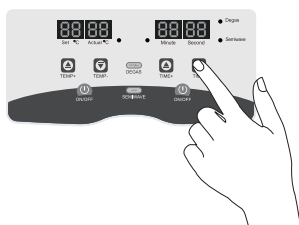
Plug the cleaner into a grounded outlet. Turn on the power switch at the tank back, then machine is power on. ("O" is closed, and "-" is open)
PLUS Series: Turn on the power , in the LOGO breathing light standby state, wake up by any operation

◆ Start ultrasonic cleaning

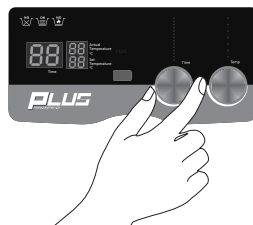


MECHANICAL SERIES

Start(ULTRASONIC), clockwise rotate to choose the time you required between 0~30 min. When the indicator light is on and make "ZIZI" sound,it shows ultrasonic operation work OK.



S series: At first setting, the time is random. Touch "Time+" or "Time-" to set time, press "On/off" the ultrasonic active and the machine start to countdown.



PLUS series: At first setting, the time is random, progress bar light on, Turn the rotary knob clockwise to increase time ; Turn counterclockwise to decrease time. Correspondingly the two digits on the left of the display change accordingly, and the time setting done well. Press the rotary knob, ultrasonic start working.

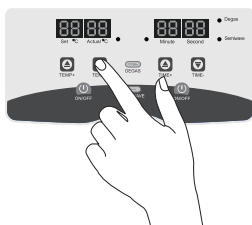
Plus Series Description: Time starts to countdown in minutes. The progress bar indicator flashes to show that the ultrasound starts to work. When the countdown is over, the ultrasound stops working, the progress bar indicator recover light, press the knob again during the work, When ultrasound stops working, the progress bar indicates Light stops flashing. The next boot,display of timer will default last setting.

◆ Heat

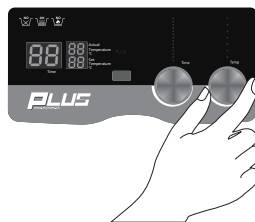


MECHANICAL SERIES

If need heating, start(HEATING) to adjust required temperature, normally 40~60°C is the best. (Heating is optional upon needs)



S series : At first setting, the temperature is random. Touch “Temp+” or “Temp-“ to increase or decrease temperature. Press” on/Off” button ,heat will active before reaching the setup temperature.



Plus series: At first setting, the temperature is random. Turn the rotary knob clockwise or counterclockwise to increase or decrease temperature. Press rotary knob ,heat will active before reaching the setup temperature.

Plus Series Description: Heating in degrees Celsius, the progress bar indicator light flashes, which say heater starts working, heat to the specified temperature, When Heating Stop Working, the progress bar indicator recover light . Press the knob again during the work, the heating stop working, the progress bar indicator light flashes. The next boot,display of heater will default last temperature setting.

◆ Additional functions

Degas:ultrasonic work for 9seconds,stop for 6seconds, work for 9seconds ets etc. till time is out. (some cleaner do not have this function)

Semiwave: touch “Semiwave”to start half-wave Mode, ultrasonic power will cut in half. (some cleaner do not have this function)

PLUS:The machine will work at 150-180% power (this will not affect the machine's performance life) , which is used to clean object with stubborn stains. (Some machines do not have this function)

◆ Power OFF

MECHANICAL SERIES

Turn the timer button to the location of “OFF”, the ultrasonic stops and the light is off. Turn the heating button to the location of “OFF”, the heating stops and the light is off. And then cut off the power, empty out the liquid, clean the tank and the unit with cloth for next use.

Digital timer heater adjustable S series

Presss the ultrasonic “ON/OFF” button, the ultrasonic stops and the light is off. Presss the heater “ON/OFF” button, the heating stops and the light is off. And then cut off the power, empty out the liquid, clean the tank and the unit with cloth for next use.

Digital timer heater adjustable PLUS series

After the countdown is over (during the working, press the button again, the ultrasonic operation stops). And then cut off the power, empty out the liquid, clean the tank and the unit with cloth for next use.(If the PLUS series does not any operate for 3 minutes, the panel light will go out in standby mode)

OPERATION PROCEDURE

>>>>>MECHANICAL SERIES<<<<<<

Model	Frequency (KHz)	Transducer (Pcs)	Capacity (L)	Tank size(mm)	Unit size(mm)	Heating power (W)	Ultrasonic power (W)	Time(M)	Temperature(°C)
JP-010	40	1	2	150x135x100	175x160x210	100	80	0~30	room temp~80
JP-020	40	2	3.2	240x135x100	265x165x220	100	120	0~30	room temp~80
JP-030	40	3	4.5	300x150x100	325x180x225	200	180	0~30	room temp~80
JP-031	40	3	6.5	300x150x150	325x180x280	200	180	0~30	room temp~80
JP-040	40	4	10	300x240x150	325x265x280	200	240	0~30	room temp~80
JP-060	40	6	15	330x300x150	360x325x285	300	360	0~30	room temp~80
JP-080	40	8	22	500x300x150	530x325x285	500	480	0~30	room temp~80
JP-100	40	10	33	500x300x200	530x325x325	500	600	0~30	room temp~80

>>>>>Digital timer heater adjustable with degas series<<<<<<

Model	Frequency (KHz)	Transducer (Pcs)	Capacity (L)	Tank size(mm)	Unit size(mm)	Heating power (W)	Ultrasonic power (W)	Time(M)	Temperature(°C)
JP-020S	40	2	3.2	240x135x100	270x185x230	100	120/60	0~30	room temp~80
JP-030S	40	3	4.5	300x150x100	330x200x235	200	180/90	0~30	room temp~80
JP-031S	40	3	6.5	300x150x150	375x200x275	200	180/90	0~30	room temp~80
JP-040S	40	4	10	300x240x150	380x290x280	200	240/120	0~30	room temp~80
JP-050S	40	5	14.5	300x240x200	370x270x325	200	300/150	0~30	room temp~80
JP-060S	40	6	15	330x300x150	400x350x280	300	360/180	0~30	room temp~80
JP070S	40	8	20	330x300x200	400x300x200	300	480/240	0~30	room temp~80
JP-080S	40	8	22	500x300x150	585x330x280	500	480/240	0~30	room temp~80
JP-100S	40	10	30	500x300x200	585x327x333	500	600/300	0~30	room temp~80
JP-120S	40	12	38	500x300x250	595x345x385	800	720/360	0~30	room temp~80

>>>>>Digital timer heater adjustable plus series<<<<<<

Model	Frequency (KHz)	Transducer (Pcs)	Capacity (L)	Tank size (mm)	Unit size (mm)	Heating power (W)	Ultrasonic power (W)	PLUS-Ultrasonic power (W)	Time (M)	Temperature (°C)
JP-020 _{PLUS}	40	3	3.2	240x135x100	290x185x270	100	120	180	0~99	room temp~80
JP-030 _{PLUS}	40	5	4.5	300x150x100	350x210x275	200	180	300	0~99	room temp~80
JP-031 _{PLUS}	40	5	6.5	300x150x150	350x210x325	200	180	300	0~99	room temp~80
JP-040 _{PLUS}	40	8	10	300x240x150	395x295x315	200	240	480	0~99	room temp~80
JP-060 _{PLUS}	40	10	15	330x300x150	420x360x320	300	360	600	0~99	room temp~80
JP-080 _{PLUS}	40	14	22	500x300x150	595x355x330	500	480	840	0~99	room temp~80
JP-100 _{PLUS}	40	18	30	500x300x200	595x355x385	500	600	1080	0~99	room temp~80

(The size is manual measurement, please refer to the actual product)

APPLICATION

Full series standard ultrasonic cleaners are made up of high quality stainless steel plate, which is corrosion resistance and long lifespan, adopt with high quality ultrasonic transducer and advanced adhesive technology, high electro-acoustic conversion efficiency and strong ultrasonic power output. Equipped with automatic constant temperature heating device, heating range: room temperature~80°C. Skymen ultrasonic cleaner widely applied to industry of precision electronics, painting, filter system, watch-clocks, glass, metal, jewelry, and medical instruments deaning etc.

Industry	The cleaning products materials	Cleardirt
Semi-conductor	Integrated circuit, power tube, silicon wafer, diode, lead frame, capillary, tray, etc	Hards, etching oil, stamping oil, polishing wax, dust particles, etc
Electrical & electronic machine	Tube parts, cathode ray tube, printed circuit board, quartz parts, electronic components, telephone switching equipment, speaker components, power meter, LCD glass, core iron parts, computer floppy disk, video parts, hoop parts, head, photo die mask, etc	Fingerprint, powder, cutting oil, stamping oil, iron filings, polishing materials, walnut powder, polishing wax, resin, dust etc
Precision machine	Bearing, sewing machine parts, typewriter, textile machine, optical mechanical device, gas valve, watches, cameras, metal filter element, etc.	Machine cutting oil, iron filings, polishing 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, copm pressors, hydraulic press, gun and ultracentrifuge, city water faucet, etc.	Cutting oil, iron filings, grease polishing powder, finger printing, and so on.
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	Poston ring, carburetor, flow meter housing, compressor shell, electrical components, etc	Iron filings, polishing powder, oil, stamping oil, dirt, etc
Chemical fiber	Chemical or artificial fiber nozzle filter protector, chemical fiber texture, etc	Chemical colloid, glue, and other solid material, dust, etc

MAINTENANCE

◆ Maintenance

Regularly use high-pressure wind blown away dust for electrical parts Clean the tank at least once a week

◆ Troubleshooting

No	Problems	Possible causes	Solutions	Remarks
1	No Ultrasonic	A.Power supply not connect B.Fuse broken C.Cable short circuit D.Transducer short circuit E.PCB Board broken F.Other reasons	A.Check and plug power switch B.Check the fitted power supply and change the same specification fuse C.Connect fitted cable or replace a new D.Inquiry our after service engineer E.Check the broken part and change it F.Inquiry our after service engineer	
2	Time control failure	A.Timer failure B.other reasons	A.Replace timer or digital control panel B.Inquiry our after service engineer	
3	No heating	A.Heater power switch bad linkage B.Fuse burn out C.Heating pad burn out D.Digital display board out of control E.Incorrect temperature setting F.Other reasons	A.Check heating plug and connect well.check outlet line with multimeter:if OK and resistance value is few hundred OHMs. B.Change the same specification fuse C.Replace the bad heating pad if open circuit D.Check the broken part and change it E.The set temperature must be 3°C higher than the actual temperature before heating can be turned on. Please reset the temperature. F.Inquiry our after service engineer	Suggestion 50-60°C
4	Temperature control failure	A.Thermostat loosen B.Thermostat tube broken C.Digital display out of control D.Other reasons	A.Fasten the thermostat header. B.Replace thermostat. C.Check the broken part and change it. D.Inquiry our after service engineer	
5	Not well cleaning	A.too high too low liquid surface B.too high too low temperature C.Not suitable cleaning liquid D.Other reasons	A.Adjust liquid into the best surface B.Adjust temperature into the most fitted C.Stop and switch off power supply,replace suitable liquid after the previous liquid cool down D.Inquiry our after service engineer	Suggestion 50-60°C
6	Electricleakage	A.The equipment ground wire is not connected well. B.The internal live line or neutral line of the equipment falls off	A.Check whether the internal ground wire and power cable grounding of the device are connected. B.Check if the internal live wire or neutral wire of the machine is fall off.	
7	Scrap	Not repairable or discarded	According to the state related laws and designated units for discarded medical equipment	
8	Other problems		Consult our after service: +86-755-297847256	



WARNINGS



Donot operate when tank is empty



Donot use flammable solution



Please use the ground wire correctly



Caution pollution when disposal this product.

MAINTENANCE CARD

Ultrasonic cleaner			
EX factory date:			
Machine number:			
Work voltage			
Work current			
Rated power			
Maintenance care records			
	Maintenance care solution	replacement part	contact person
01			
02			
03			
04			
05			
06			
07			
08			
09			
10			
11			
12			
Please contact supplier if trouble cannot be removed !			



Please scan the code
for instructions

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Solemnly Declare

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