



SD-D300H, D400H

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INTRODUCTION

Thank you for your choice. Please keep this operating manual to use properly. First of all us use in safety places and follow the manual when transfer to a third party. The company has the right to change specifications without previous notice.

SAFETY REGULATIONS

1. Description of Symbols



Warning
Information for avoiding injuries or fatal accidents



Environment
Information about the operating environment



Warning of Explosions
Safety instruction to avoid explosions



Attention
Information about technical matters.



Attention to High Temperatures
Instructions to avoid injuries caused by high temperatures

2. Instructions

For a safety and faultless using of the device you read the following instructions and follow them.



- Connect the device only to the suitable power supply.
- Check the power supply cord before you stick it into the electrical outlet.
- Do not use power bars to extend the power supply cord.
- Do not touch the device with wet hands during the usage because it may cause an electrical shock.
- If unexpected sound, smell or smog is generated by the device, pull out the main plug and contact supplier immediately.
- Disconnect the power supply plug before cleaning or maintenance.
- If you use radiation or contaminated samples the responsibility is only up to you.
- Avoid injuries : never put your hands or other parts of your body in the working device.
- **Do not clean living creatures in this device.**



- It is important that the device stands up on a horizontal, stable and firm subsurface to avoid vibrations.
- Make sure that the device can not slip away.
- To avoid heat congestion or fires make sure that there is enough space for air circulations.
- Avoid direct solar radiation.
- Do not set the device outdoors.
- To set the device in wet or dusty places could cause overheating, short circuits or fires.

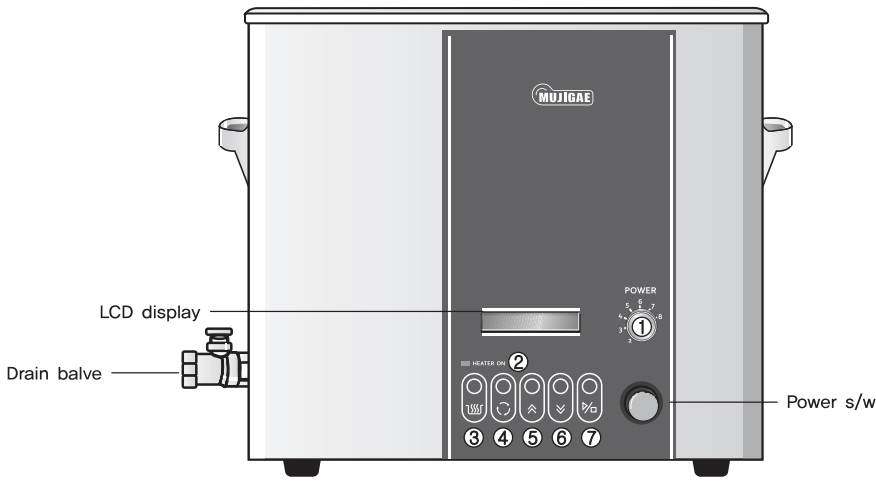
INTRODUCTION

Ultrasonic Cleanser is used for cleaning with the various kinds of dirt like finger marks or oils on the surface located in the irregular narrow spaces at the corner. Display Current/Setting temperature and Operation time (1~60min.) Built in the function of SWEEP and Ultrasonic output control to maximize the cleaning efficiency.

1. Specifications

- Digital timer (1~60min.)
- Ultrasonic output control
- Frequency : 40Khz
- SWEEP function
- Temperature control (30~80C)
- Stainless body/tub

2. Name/Function of Parts



- 1) Ultrasonic output Control Knob – control the output (20~100%)
- 2) Heater-on : on/off lamp to display for the mode of Heat-n operation
- 3) Heater : Mode for Heater operation
- 4) Mode button : Time>Temperature in a cycle
- 5) UP : Increase the setting value of Time/Temperature
- 6) Down : Drop the setting value of Time/Temperature
- 7) Start/Stop button : on/off for Ultrasonic operation, set a time min./ sec.)



- Do not use this device in area with potentially explosive atmosphere.
- Do not use inflammable materials for cleaning liquid.
- Do not use the material of acid and alkalinity cleaning liquid to avoid the water leak.



- This device should only used by persons who are familiarized with safety instructions approved by manufacturer.
- Pay attention that no liquid reaches the controller or inward of the capsule.
- You have to keep the device clean if you want to get a longer life of it.
- Pull out the power cable if you did not want to use the device for a longer time.



- Do not put heat-sensitive items at the device.
- The heat-sensitive item cause a damage or change the shape of item during operations. (glasses, plastic items)
- Pay attention when you lift up the lid, hot condensation water may drop down or hot steam could come out.

3. Parts

Ultrasonic cleaner, Cover, Manual, Fuse(10A x 2)

4. Before installation

There are 2 kinds of method allowed.

- 1) Direct cleaning ; operate the device after the items and liquid added in the tub same time.
- 2) Indirect cleaning : First add the items in the baker with liquid then move to the tub to operate(mainly used for the acid or other corrosive solutions.)

SPECIFICATIONS



SPEC. MODEL	Ultrasonic frequency	Gross weight	Inside diameter (W x L x H)	Outside diameter (W x L x H)	Capacity	Ultrasonic output	Current
SD-D300H	40KHz	8,5kg	290×240×150	390×290×310	2,64gal	200W	3,05A
SD-D400H		14,3kg	500×300×150	600×350×315	5,81gal	400W	3,62A

SPEC. MODEL	Ranges	Power	Materials
SD-D300H	Ultrasonic operation(0~60min.) Heat-on(30~80c)+/-10%	(AC220V/60Hz for option) AC120V/60Hz	Tub(sus-304) Body(sus-430)
SD-D400H			

NOTE

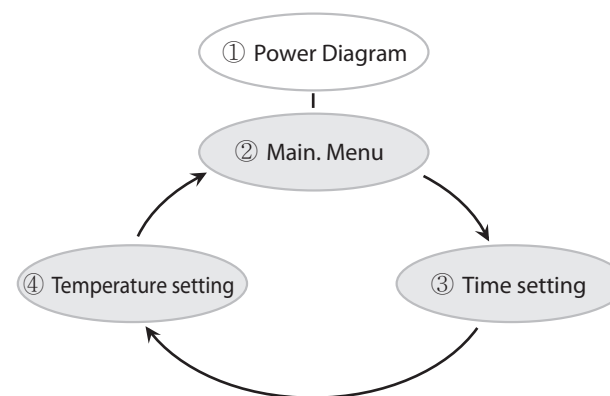
- Do not impact the device or drop from the high place.
- Keep the operation time max. 60min.
- * Keep the break time 15min. after the max. operation time 60min.
- Do not operate without the liquid.
- Do not use highly inflammable/acid liquid

HOW TO USE

- 1) Avoid the place of 
- 2) Plug in the power plug into the power cutlet.
- 3) Fill the water [1000HT:600ml, 2200HT:1200ml] in the tub.
 - Add the liquid of 16plus or 11un for better performance.
 - (NOTE : It may cause the shape changes during the Heat-on mode with Glasses or Plastic items.)
- 4) Add the items into the tub.
- 5) Turn on the power.
- 6) Push the button of 
- 7) Take out the items to rinse all the remained on the surface.
- 8) Cover up the cover after use.

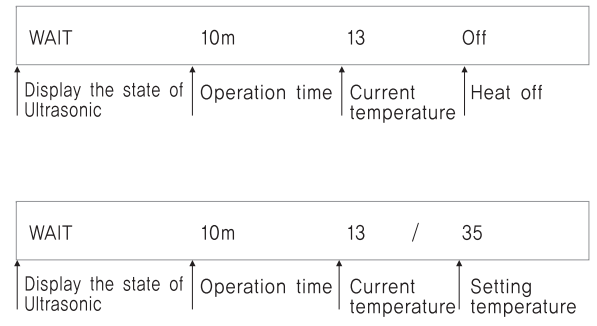
HOW TO SET

1. Setting Diagram



2. Description of Main menu

Start to explain with Wait-mode



Push the ON/OFF button (⏻) for Heater and ON/OFF button (⏻) for Ultrasonic operation.

3. Time Setting

Push the button (⏻) for Time setting.



Set the time to push the UP/DOWN button (⏮/⏭). Finish the setting when return to the Wait-mode (Step 2).

4. Temperature Setting

Push the button (⏻) for Heat mode.



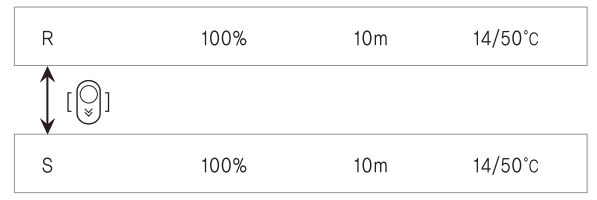
Push the UP/DOWN button to set the temperature (⏮/⏭). Finish the setting when return to the Wait-mode (Step 2).

OPERATION

1. Ultrasonic Operation

Push the ON/OFF button (⏻).

2. Sweep Operation



Push the (⏻) for Ultrasonic operation ON

Push the (⏻) for Sweep operation ON

Push the (⏻) for Sweep operation OFF

Push the (⏻) for Ultrasonic operation OFF

* Sweep function ?
Operate two different Frequency repeated to clean more widely during ultrasonic operation.

HOW TO KEEP

1. Eliminate the liquid after the plug off from the power.
2. Wash the tub and keep well in dry condition.
(NOTE : Do not use a scrubber for washing the tub to reduce scratches or the efficiency of cleaning.)

EMERGENCY

Problems	Solutions
In case of No Ultrasonic operation	<ol style="list-style-type: none">1. Check the Power plug in.2. Check the Fuse box.3. Ask the Service center to repair(A/S). (We expect the some problems with ultrasonic generator (1644-5897)
In case of the increasing temperature of liquid during operation.	Do not operate the device over the maximum of 60min. (The temperature of liquid may increase up to 70~80C.)
In case of No Ultrasonic operation (display a normal state on LCD)	Ask the Service center to repair(A/S). (We expect the some problems with ultrasonic generator.)