

ShapeWash 020S/040S

Ultrasonic Cleaning Machine

User Manual **V1.0**

RAYSHAPE[®]

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General Information

Instructions

This manual contains technical information, safety guidelines, and detailed operation instructions for ShapeWash ultrasonic cleaning machine.

Please read this manual carefully before using the device. Failure to comply with the safety and operating instructions required by this manual will result in consequences for the user's responsibility.

All information contained in this manual is up to date at printing but may be subject to change without notice when the product is upgraded.

The images used in this manual may differ from your device due to differences in specific models and specifications.

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Instructions of mark



Warning: This could result in serious personal injury or equipment damage if it was failed to comply with this requirement.



Attention: This could result in minor personal injury or equipment damage if it was failed to comply with this requirement.



Important Information: The normal operation of the device or the quality of printed products would be influenced if it was failed to comply with this requirement.



Protection requirements : The precautions should be taken as required.



Hazard indication: Description of specified hazard.

Safety Guidelines

Before operating with the device, please read the following safety guidelines to identify the potential risks you may experience during the usage. Then make sure to comply with the related requirement defined in the manual and take appropriate precautions during operation.

Any operation that fails to fulfill the safety guidelines may result in personal injury or equipment damage, and the users themselves should finally take the corresponding consequences.



Risk of flammability of cleaning solvent

The printed parts should be cleaned with cleaning solvent, such as IPA or 95% alcohol.



Please keep good ventilation and keep away from heat and fire sources when storing or using cleaning solvent.



Do not use heating function.



Keep away from children

Please keep the device and cleaning solvent out of the reach of children.



Disassembly or modification is strictly prohibited

It is strictly prohibited to disassemble or modify the device without authorization. In addition, do not use accessories that are not designated by RAYSHAPE officially.



Risk of electric shock



The specification of power must meet the operating requirements of the device.



A grounded electrical outlet should be applied.



Replaced with a new one before usage if it was found that the power cable is aging or damaged.



Risk of scalding



Do not use heating function.

Safety Guidelines



Wear protective gloves



Please wear disposable medical gloves when operating the devices to avoid direct contact with the resin material.



Good ventilation



Keep good ventilation at working area.



Before started



Do not use ultrasonic without solvent inside the tank.



There will be some noise when the device is ON.



Do not move the machine with cleaning solvent in tank to avoid spilling.

Product Information

Technical Specification

| | ShapeWash 020S | ShapeWash 040S |
|----------------------------|---|---|
| Main Parameters | | |
| Washing volume | 240 x 135 x 100 mm | 300 x 240 x 150 mm |
| Technology | Ultrasonic Cleaning | |
| Cleaning solvent | IPA, Alcohol | |
| Compatible resin materials | ShapeMaterials Basic/Functional/Advanced /Dental Series | |
| Environmental requirement | Ambient temperature 18~28° C | |
| Ultrasonic | | |
| Ultrasonic frequency | 40 kHz | |
| Washing time | Customized setting (1-30 minutes) | |
| Rinse tank | | |
| Volume capacity | 3.2 L | 10 L |
| Raw material | SUS304 | |
| Power | | |
| Input | 100~120VAC, 50/60Hz 220~240VAC, 50/60Hz (Depending on the country/region) | 100~120VAC, 50/60Hz 220~240VAC, 50/60Hz (Depending on the country/region) |
| Rated power | 120 W | 240 W |
| Size and weight | | |
| Device size | 270 x 185 x 230 mm | 380 x 290 x 280 mm |
| Device weight | 3.25 kg | 7.2 kg |
| Package size | 340 x 250 x 445 mm | 500 x 445 x 350 mm |
| Package weight | 4.3 kg | 9.2 kg |

Unpacking

Unpacking

Packing list

ShapeWash 020S

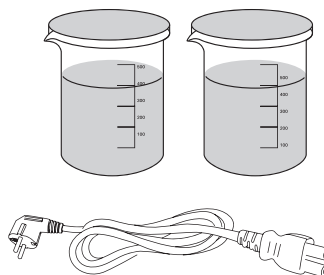
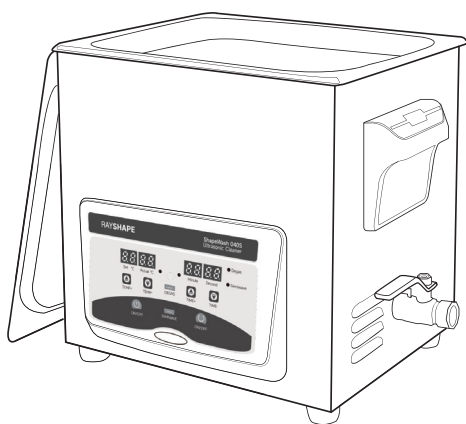
| No. | Name | Quantity |
|-----|----------------|----------|
| 1 | ShapeWash 020S | 1 |
| 2 | Beaker | 2 |
| 3 | Power cord | 1 |

ShapeWash 040S

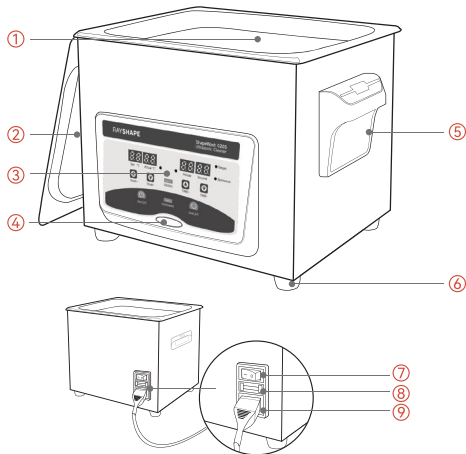
| No. | Name | Quantity |
|-----|----------------|----------|
| 1 | ShapeWash 040S | 1 |
| 2 | Beaker | 2 |
| 3 | Power cord | 1 |
| 4 | Drain hose | 1 |



After unpacking, please check the type and quantity of the attached accessories according to the list above. In case of any missing parts, please get in touch with the dealer in time.

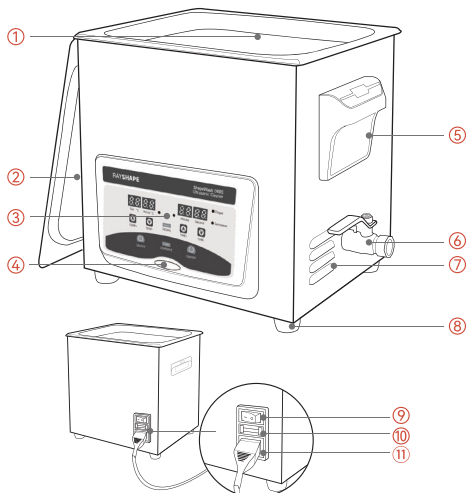


Equipment



ShapeWash 020S

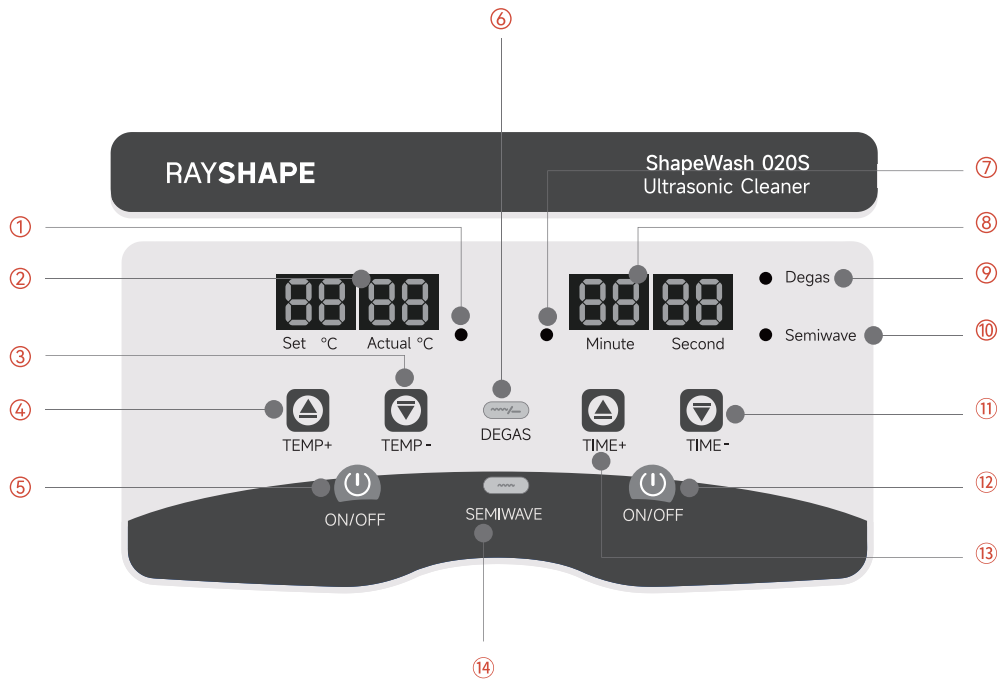
| No. | Item |
|-----|-------------------|
| 1 | Tank |
| 2 | Lid |
| 3 | Operational panel |
| 4 | Model label |
| 5 | Handle |
| 6 | Feet |
| 7 | Power switch |
| 8 | Fuse (spare fuse) |
| 9 | Power plug |



ShapeWash 040S

| No. | Item |
|-----|-------------------|
| 1 | Tank |
| 2 | Lid |
| 3 | Operational panel |
| 4 | Model label |
| 5 | Handle |
| 6 | Drainage |
| 7 | Ventilation holes |
| 8 | Feet |
| 9 | Power switch |
| 10 | Fuse (spare fuse) |
| 11 | Power plug |

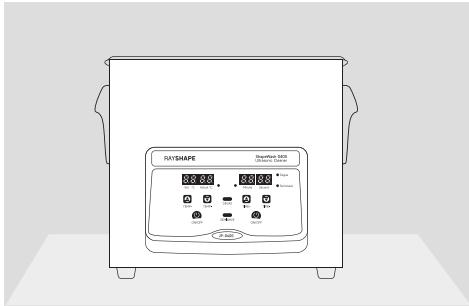
Interface Introduction



| No. | Function | No. | Function |
|-----|------------------------|-----|------------------------|
| 01 | Heater indicator | 08 | Digital display screen |
| 02 | Digital display screen | 09 | Degas indicator |
| 03 | Temp - | 10 | Semi-wave indicator |
| 04 | Temp + | 11 | Time - |
| 05 | Heater ON/OFF | 12 | Ultrasonic ON/OFF |
| 06 | Degas | 13 | Time + |
| 07 | Ultrasonic indicator | 14 | Semi-wave |

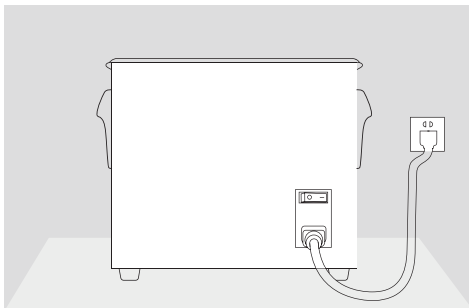
Installation

Installation



Platform

The platform shall be more than 40cm in width, 40cm in length, and more than 10kg in bearing capacity.



Connection of power cord

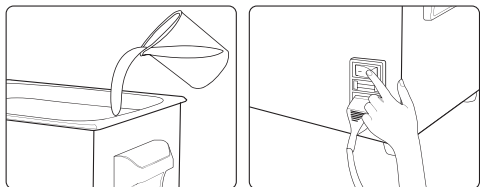
Installation interface is on the bottom right behind the equipment.

Please connect the equipment with the power outlet using the power cord, which is included in the accessory kit.

 **Make sure that a grounded power outlet is applied.**

Operation Guide

Operation Guide

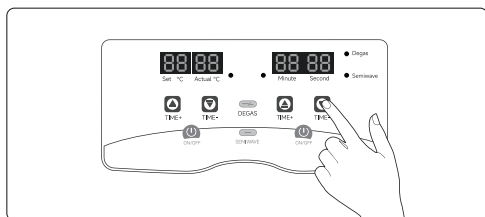


Direct Washing (suitable for large printed models)

Step 1

After removing the lid, put the printed model into the tank, add cleaning solvent (alcohol or IPA) into the tank, and please make sure the printed model is immersed.

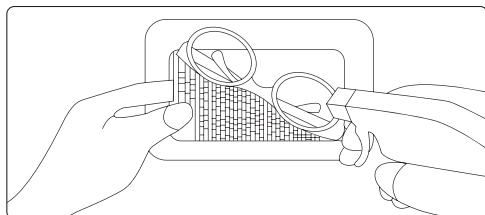
Connect the power cord, then turn on the switch.



Step 2

Set cleaning time by clicking on the "time+" or "time-" button, then click on the "Ultrasonic ON/OFF" button to start cleaning.

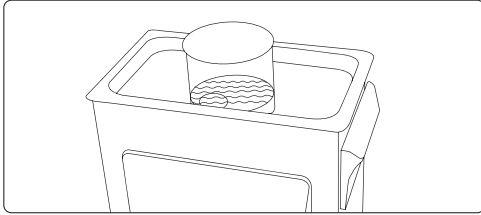
The cleaner will automatically stop when the countdown ends, or you can manually control it by clicking on the "Ultrasonic ON/OFF" button again.



Step 3

After ultrasonic cleaning, take the model out, hold it above the tank, and then spray it with the spray bottle filled with cleaning solvent.

Operation Guide

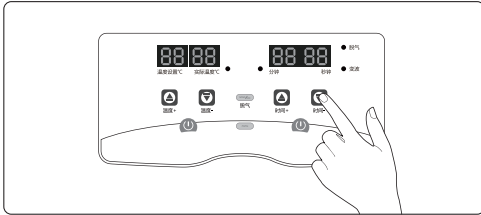


Indirect Washing (suitable for small printed models)

Step 1

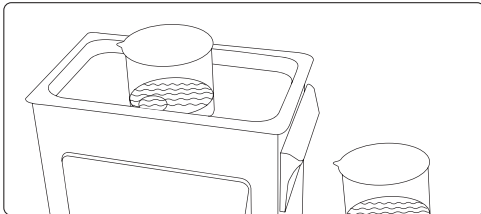
Put printed models into a beaker with cleaning solvent (alcohol or IPA) and make sure models are immersed, then put the beaker into the washing tank. Add clean water into the tank to the same liquid level as inside of the beaker.

 Do not turn ON the device without water!



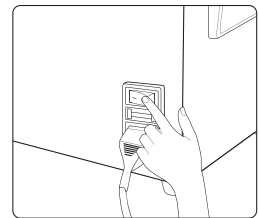
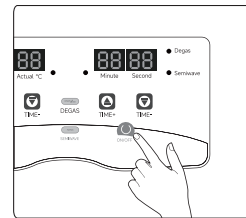
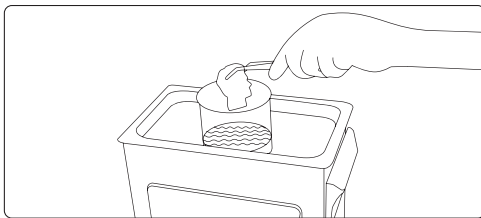
Step 2

Set cleaning time by clicking on the "time+" or "time-" button, then click on the "Ultrasonic ON/OFF" button to start cleaning.



Step 3

After the 1st round of ultrasonic cleaning, take models out of the original beaker and put it into another one with clean solvent, then put the new beaker into the washing tank for the 2nd round of cleaning.



Drying

After cleaning, take out models and blow-dry them afterward.

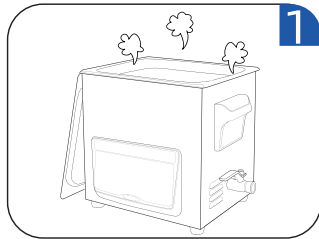
If it still feels sticky on the surface of printed models, please repeat the above cleaning procedure.

Turn off the power

Please turn off the power switch, empty it, and clean the tank for subsequent use.

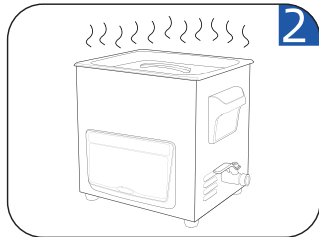
Maintenance

Maintenance



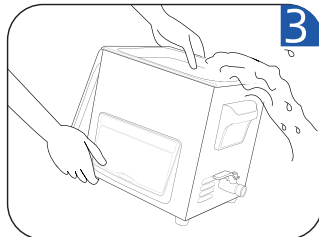
Do not start without liquid

It may damage the machine or seriously reduce the service life if the machine is turned on without any liquid for more than 15s.



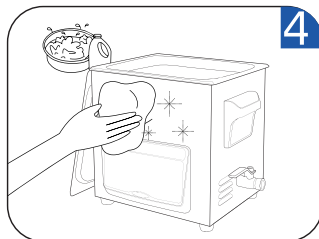
Do not wash continuously for a long time

It is recommended to stop the machine after 20 minutes of cleaning work to extend the service life.



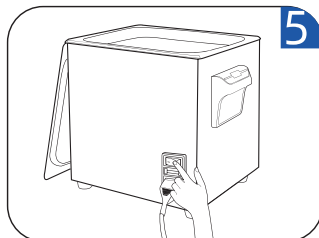
Do not store solvent in the washing tank for a long time

After use, please empty and clean the washing tank.



Do not rinse the machine directly with water

Please use a dry towel to dry the cleaning tank and the machine's enclosure.



Please plug off the equipment after use.

Turn off the power in time.

Troubleshooting

| No. | Description | Reason | Solution |
|-----|----------------------|--|---|
| 1 | Not working | <p>A. The cable is not plugged or damaged.</p> <p>B. Fuse burn-out</p> <p>C. Other reasons</p> | <p>A. Check and re-plug the cable, and confirm the connection</p> <p>B. Replace with the spare fuse</p> <p>C. Contact after-sales service</p> |
| 2 | Time control failure | <p>A. Timer failure</p> <p>B. Other reasons</p> | Contact after-sales service. |
| 3 | Cleaning issues | <p>A. Too high or too low liquid level</p> <p>B. Not suitable cleaning liquid</p> <p>C. Other reasons.</p> | <p>A. Add solvent to a liquid level that the model is just immersed.</p> <p>B. Choose cleaning solvent according to recommendation from resin material manufacture.</p> <p>C. Contact after-sales service</p> |
| 4 | Electric leakage | <p>A. Power socket is not grounded.</p> <p>B. Machine grounding is damaged.</p> | <p>A. Make sure a grounded power socket is used.</p> <p>B. Contact after-sales service</p> |
| 5 | Scrap | Seriously damaged or needed to be scraped | Please follow the requirements of local laws and avoid environmental pollution. |

Warranty

1.Warranty period

RAYSHAPE ShapeWash washing units are provided with 12 months of warranty and lifetime maintenance services.

2.Preconditions

- The equipment failure is not caused by human reasons or force majeure.
- A valid proof of purchase.

3.Scope

-Appearance parts should be deemed to be free of quality problems upon sign-of and not included in the list of warranty components.

4.Service

For warranty service requests which are complied with the warranty conditions, the supplier should bear the cost for spare parts, repairing and transportation.

5.Non-warranty circumstances

- Equipment failure caused by human reasons or force majeure;
- Fail to provide a valid proof of purchase.

6.Warranty service

Supplier would offer maintenance service to the request which is not complied with the warranty condition or out of the warranty period, but the cost related to spare parts and transportation should be undertaken by the requester accordingly.

7.Service response

The supplier will provide online technical support to the requesters within 4 hours in the time period of 09:00-17:00 on working days.

For more information:

Sales Inquiries

✉ sales.os@rayshape3d.com

☎ +86 400 0983 356

Comments and suggestions:

✉ feedback@rayshape3d.com

Your feedback is greatly appreciated, and your comments and suggestions will be fed back to our sales, R&D, and technical support departments to help us provide better products and services.

Warranty Card



1Year Warranty Card

This warranty card, along with the valid invoice, will be guaranteed for one year after the purchase.

For the warranty details, please refer to the product user manual.

Reseller Name : _____ Invoice NO. : _____ Purchase Date : _____
Product Model : _____ Serial Number : _____ Dealer's Seal : _____

* This is the basic proof of the warranty. Please fill in it carefully and hand it over to the customer for safekeeping

Customer Name : _____ Contact: _____ Phone Number: _____
Address : _____ Service Evaluation: Excellent Good Normal Bad
Customer Signature : _____

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