Thermal immersion circulator

Model: SV310

User Manual



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Benefits of Low-Temperature Cooking and Sous Vide

Vacuum low-temperature cooking maximizes the preservation of nutrients in food since the food does not come into direct contact with air or water; very little or no oil needs to be used and only a very little amount of salt is needed to preserve taste. This cooking method maintains and even enhances the taste of everyday foods.

Vacuum low-temperature cooking ensures that heat is evenly distributed throughout the food; not only making it taste great, but also preserving the color of the ingredients. Furthermore, the thermal immersion circulator will save lots of energy in comparison to an oven or gas stove, as well as reduce smoke pollution in the kitchen.

You don’t need to be a trained chef! Even if you don’t have any cooking experience, you can prepare healthy and delicious meals using the thermal immersion circulator which will help you achieve perfectly cooked foods.

Thanks to precise temperature and time control, it is possible to ensure that food is not scorched or dried out due to overcooking, in particular for food cooked at medium and low temperatures.

Preparation for Low-Temperature Cooking

- **Vacuum sealing machine**

  A vacuum sealing unit will remove most of the air from bags, providing an airtight seal that will prevent air or liquid from going in. You can use a chamber vacuum sealer or a suction vacuum sealer depending on your needs. We supply both kinds of vacuum sealers.

- **Vacuum seal bags**

  Vacuum seal bags will allow you to thoroughly pack foods, ensuring that no air or liquid gets inside. Please ensure that the vacuum seal bags you use can withstand temperatures up to 100 °C or 212 °F.

- **Thermal circulator with cooking water tank or sous vide water bath**

  Start by placing the cooking rack into the water tank (failure to use the cooking rack may result in a unit breakdown); next, fill the tank or water bath with enough water to cover the food, and set the cooking temperature. For the immersion thermal circulator, you must also ensure that the water tank can withstand temperatures up to 100 °C or 212 °F. For sous vide

water baths, fill the bath with water and then set the temperature and time (the unit is equipped with a thermostat controller).

Safety

Please follow all safety precautions:

- Only operate the unit according to the specific instructions contained in this manual to avoid damaging the unit.
- Ensure that the power supply conforms to the standard.
- The unit must be connected to a grounded electrical socket.
- Always turn off the power supply before moving the machine.
- Do not touch the liquid with your bare hand to check the temperature; use the temperature display or a thermometer.
- When putting food into the water bath, always ensure that the water level is between the minimum (MIN) and the maximum (MAX) levels to avoid damaging the unit.
- Do not touch hot surfaces while the unit is running or right after it has been used in order to avoid injury.
- Should there be water on the top part of the unit (above the MAX water level), please turn off the power and dry it before continuing.
- Always keep the unit and its power cord out of the reach of children to avoid danger.
- Do not let children play with the unit.

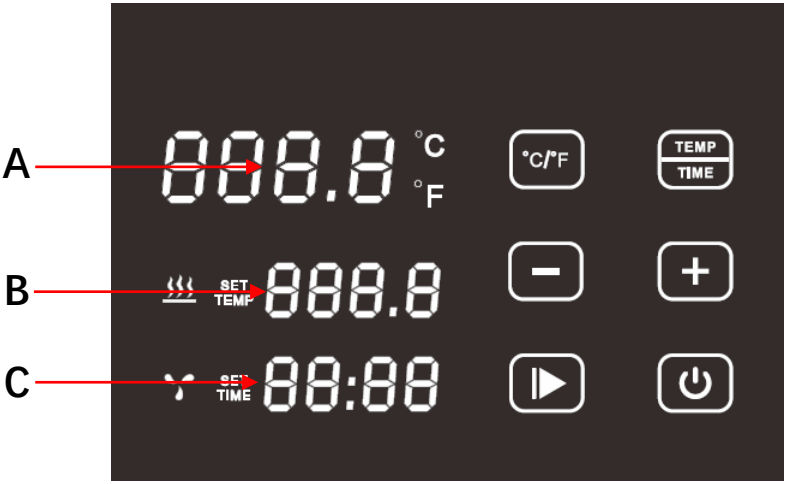
- This appliance is not intended for use by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised, or given instructions by a person responsible for their safety concerning safe use of the appliance, and understand the hazards involved.
- Please ensure that the power receptacle and fan outlet at the back of the unit do not come in contact with liquid.

Technical Specifications

Rated voltage:	110–120V~
Rated frequency:	60 HZ
Rated power:	1800 W
Temperature setting range:	5-95 °C/41-203 °F
Time setting range:	5 minutes to 99 hours 59 minutes
Display accuracy:	0.1

Size: 5.6 ″ × 6.3 ″ × 12.8 ″ (142 mm × 160 mm × 326 mm)

Product Functionality



1. Power

- When the power is turned on, the button and indicator light are on. After two seconds, the machine goes into power-saving mode (only is on).
- When the unit is in power-saving mode, press to wake up the unit; it will enter standby mode and is then ready to be used. At this point, the temperature display (A) indicates current water temperature, the SET TEMP display (B)

shows the previous water temperature setting, and the SET TIME display (C) indicates the time setting for the previous operation.

- In standby mode (the indicator is fully illuminated), press  to enter power-saving mode (only  is on).
- When the unit is on, press  to enter power-saving mode directly.

°C/°F

2. Temperature button

Press on “°C/°F” to select the temperature display unit of your choice – Celsius or Fahrenheit.

TEMP/TIME

3. Temperature/time setting button

Press on “TEMP/TIME” to switch between the temperature and time setting. When the SET TEMP display is flashing, use the “+” and “-” buttons to set the desired target temperature; when the SET TIME display is flashing, use the “+” and “-”

buttons to set the desired target duration.

*After the display flashes 10 times, if no temperature or time has been set, the unit will exit the setting mode. To reset it, press “TEMP/TIME”.

*Press and hold the “TEMP/TIME” button for 3 seconds; the display indicates the temperature and time that have been set.



4. Start/stop button

- In standby mode, press  to start the unit.
- In work mode, press  to stop the unit.

+ -

5. Setting buttons

Press on the “TEMP/TIME” button to select the setting you want to adjust (temperature or time), then use the “+” and “-” buttons to set it to the desired temperature or time.

6. Digital display (A) – Temperature

Displays actual temperature.

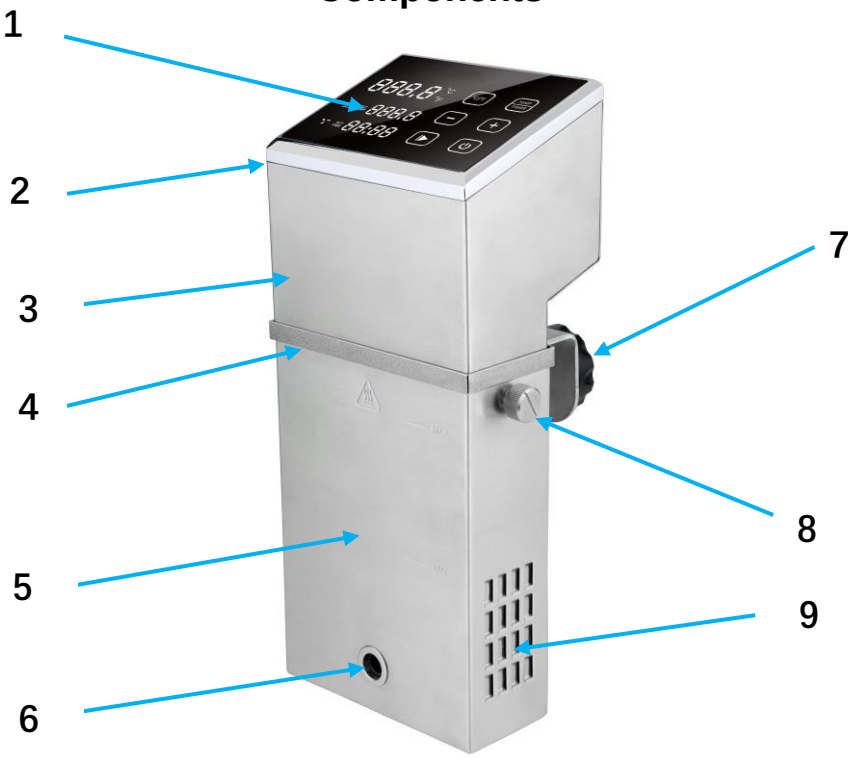
7. Digital display (B) – Temperature (SET TEMP)

Displays the set temperature.

8. Digital display (C) – Time (SET TIME)

- In standby mode, the set target time is displayed.
- In working mode, the remaining duration is displayed.

Components



1. Control panel
2. Upper cover
3. Upper body
4. Connecting ring
5. Lower body
6. Water outlet
7. Handle
8. Quick release screw
9. Water inlet

Operating Instructions

1. Select the appropriate cooking container. To fix the unit to the container, turn the knob counterclockwise to create a gap between the main body of the unit and the knob; insert the unit into the container; tighten the knob clockwise to secure the unit onto the container.
2. Add water to the container making sure that the water level is between the minimum and maximum allowed water levels.
3. Connect the power cord; the digital display and buttons will light up. The unit will enter power-saving mode after two seconds, only  will be illuminated; press  to put the unit into standby mode.
4. Press “°C/°F” to select the temperature unit. The default setting is °C. Your choice will be stored in the unit’s memory and the next time the unit is turned on, it will default to this unit.
5. Press “TEMP/TIME”; using the “+” and “-” buttons, adjust the temperature and time to the desired values.
6. Once set, press  to start the unit. After the temperature in the container reaches the programmed temperature, the time

display starts counting down, and the vacuum-packed food can be placed into the container cooking.

7. Once cooking is done, the unit will beep. Press ⏯ to complete the process.

   Note: if no action is taken after 20 seconds, the unit will emit a continuous beep; the water temperature will remain at the preset temperature.

8. Remove food from the container; it is ready for the next step.
9. After using the unit, unplug it and store out of reach of children.

Notes:

1. Food must be vacuum packed before sous vide cooking.
2. The water level (after the food is put in) should be higher than “MIN”, but lower than “MAX” marked on the unit.
3. In order to prolong the service life of the unit, drain the water after each use and clean the container.

Maintenance

To prevent burns, please ensure that the machine is off and at room temperature before cleaning.

1. After cleaning, position the unit vertically; do not position it horizontally or upside down.
2. Be careful not to damage the components inside the unit during cleaning. If components are damaged, ask a specialist to check and repair the unit. To avoid the risk of damage or injury, only use the services of an authorized repair specialist.
3. Discard water after each use. Always fill with fresh water. If the water is reused many times, mineral substances may adhere to the surface of the unit and negatively impact its performance.
4. If there is a noticeable decrease in the performance of the unit, or if you notice that there is a buildup of residue or dirt, please disassemble the back cover of the unit to clean the components. Ideally, clean the unit after 20 uses or after 100 working hours.

5. If the unit is hot, do not use it in cool water; the unit should be at room temperature and used in cool water. Likewise, do not use a room temperature unit in hot water. Disregarding these instructions will adversely affect the performance and service life of the unit.

Care and Cleaning

Preparing to Clean the Unit

In preparation to clean the unit, please ensure you have food-grade vinegar (white vinegar, apple vinegar, etc.) on hand.

Importance of Regular Cleaning

Standard tap water contains minerals. When water is heated to a certain temperature, it may cause scale deposits on the unit. Water scale can affect the performance of the unit. We suggest cleaning the unit after every 20 uses if the accumulated usage time is less than 200 hours. Water hardness varies depending on your location; because of this, you may need to clean the unit more often.

Cleaning Instructions

1. Pour water into the container until the “MAX” line of the unit. Add 5g vinegar into the water. (CAUTION! If the vinegar accidentally comes into contact with your eyes, rinse your eyes immediately with lots of water. See a doctor if needed.)
2. Turn on the machine; set the temperature to 80 °C (176 °F);

set the time to three hours (03:00), press ⏯. After three hours, the machine will beep. Once it beeps, turn it off.

Quick cleaning procedure: simultaneously press ⏯ and **“-”**; the temperature display (B) will indicate 80 °C, the time display (C) will indicate 03:00; release the buttons. The temperature and time displays, (B) and (C), will blink 10 times. If you need to switch temperature unit, press “°C/°F”, otherwise, press ⏯ to start the cleaning process. During the process, the display indicates the remaining time.

3. Check the unit to ensure it is thoroughly clean. If it is not, you can add vinegar and repeat step two above. If it is clean, drain the vinegar and wash the unit with fresh water before drying and storing it.

Error Codes and Troubleshooting

Error code	**Cause**	**Troubleshooting**
E01	The water level is lower than the minimum required water level, or higher than the maximum allowed water level.	Turn off the unit. If water level is too low, add water until level reaches a minimum requirement. If water level is too high, remove water until it is no higher than the maximum allowed water level.
E02	Indicates a possible problem with: 1. heating pipe; 2. internal wiring of the unit; 3. temperature sensor.	Contact an authorized repair specialist to fix the unit.
CLEAN	The unit has been	Unit must be cleaned.

	running continuously for more than 100 hours.	Refer to the **Care and Cleaning** section.
LP	The unit suddenly loses power during normal use.	

*If any other issues arise, please get the unit checked by an authorized specialist. DANGER! Do not attempt to fix the unit yourself.

Warranty and After-Sales Service

1. When using the unit, please ensure to do so on a clean and level surface.
2. Warranty is limited to damage caused by production defects and normal household use.
3. In the case of improper use or other non-product quality problems, there will be a charge for parts and maintenance.
4. Please keep your receipt.

Maintenance Card

Customer Name: Tel.:

Email: Address:

Machine Model: Purchase Date:

Supplier:

	Date	Cause	Repaired by
Repair record			

Thank you

Thank you for choosing the SV310 thermal immersion circulator. We are confident that you will enjoy your cooking experience with this appliance. Please do not hesitate to contact us if you have any questions about the unit.

eurodib

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