

SOUSVIDETOOLS

BLAST CHILLER



USER GUIDE



IMPORTANT - READ BEFORE USE

Please read this user manual carefully before using the appliance.



APPLICATION

Quick-freeze is a method of cooling food quickly to prevent bacteria from growing. Bacteria grows fastest between 8°C (46°F) and 68°C (154°F). Therefore, rapid cooling of cooked food, from 90°C (158°F) to 3°C (37°F) within 90 minutes, will make food storage and subsequent consumption safer. This method of food preservation is common in the catering industry. Recently, due to its characteristics of ensuring food safety and quality, it has been popularized in ready-to-eat food.

At present, it mainly appears in small and medium-sized catering operators, bars, restaurants, small hotels, nursing centers and schools.

SAFETY REGULATIONS

- Before connecting the power to the machine, make sure the voltage and frequency are consistent with those on the rating label.
- Be sure to connect the machine to a suitable high sensitivity leakage switch (30mA)
- The socket must meet the requirements of current national laws and regulations, and the safety laws and regulations require the grounding of the machine mandatorily. To protect the machine from electrical overload or short circuit, the power supply is connected through a differential leakage switch with manual reset and high sensitivity
- Be sure to disconnect the power supply before performing any cleaning or maintenance
- Wear gloves for maintenance of the motor and the refrigeration system located within the machine
- Do not insert a screwdriver or other device into the protective fence (e.g. heat exchange vent, evaporator, etc.)
- Do not touch electric parts with wet hands or bare feet
- Do not block the heat exchange port of compressor or evaporator to ensure good operation of the machine

SAFETY REGULATIONS

- The unit should only be operated by properly trained people
- Installation, routine and special maintenance (e.g. cleaning and maintenance of cleaning systems) shall be performed only by authorized technicians who are professionally trained and have a good knowledge of refrigeration and electrical systems.
- This device is not suitable for use by persons (including children) with physical, sensory or intellectual decline or lack of experience and knowledge
- Children should be supervised to make sure they don't play around machines
- If the machine power supply device fails, be sure to ask the identified professionals of manufacturer to replace, so as to avoid safety accidents
- It is absolutely forbidden to modify or remove the safety devices provided (protective grilles, hazard labels, etc.). The manufacturer shall not be responsible for the consequences caused by the violation of this instruction
- In the event of a fire, do not water the fire. Use a carbon dioxide fire extinguisher to cool the motor room as soon as possible
- Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- Do not damage the refrigerant circuit.
- Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.
- The refrigerant and insulation blow gas are flammable, when disposing of the appliance do so only at an authorized waste disposal centre. Do not expose to flame.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- **WARNING:** Keep clear of obstruction all ventilation openings in the appliance enclosure or in the structure for building-in.
- The A-weighted emission sound pressure level is below 70 dB(A).
- The appliance shall be disconnected from its power source during cleaning or maintenance and when replacing parts. The removal of the plug has to be such that an operator can check from any of the points to which he has access that the plug remains removed.
- The alpha-numeric characters on the label means the climatic class of the appliance as below: $-32\text{ °C} \pm 2\text{ °C}$ on appliances of test room climatic class 0, 1, 2, 3, 4, 6 or 8; $-43\text{ °C} \pm 2\text{ °C}$ on appliances of test room climatic class 5 or 7.
- Warning; Risk of fire / flammable materials
- Per inner tray holder cannot be loaded more than 5KGS.

INSTALLATION

- Do not push or pull the machine during handling to avoid capsizing or damage to parts
- Do not lean the machine against the door
- The machine should be placed in a well-ventilated place away from heat sources and explosive objects
- The installation plane shall be flat
- Comply with minimum clearance requirements ($\geq 100\text{mm}$) to ensure good operating performance, ventilation and maintainability
- Before connecting the power to the machine, make sure the voltage and frequency are consistent with those on the rating label. To allow normal voltage variations of $\pm 10\%$, the machine should be connected to a valid ground connection.

STORAGE

- Turn off the power and unplug the machine
- Empty the refrigerated bin and clean it carefully
- Keep the door slightly open to ensure ventilation and avoid mildew or odors

DISPOSAL OF THE DEVICE

Protection of the Environment

At the end of the life of your product, it should go to a specially adapted waste-recycling centre.

The symbol on the product or on its packaging indicates that this product may not be treated as household waste. Instead it should be taken to the applicable collection point for the recycling of electrical and electronic equipment.

By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about the recycling of this product, please contact your local council office or your household waste disposal service.



PRODUCT FUNCTIONS

Rapid cooling process

This program can quickly reduce the temperature of cooked food (from +90°C to +3°C in 90 minutes) to avoid being in the critical range of +8°C to +68°C, thus preventing spoilage.

Quick-cooled cooked food can be stored in refrigerator at +3°C for up to five days.

Quick-frozen program

Quick-freeze (reduced from +90°C to -18°C in 240 minutes) prevents the formation of ice crystals in foods, thereby reducing loss of juice and vitamin.

This procedure applies to cooked and raw foods. Frozen cooked and raw foods can be stored at -18°C for up to 2 months and 12 months respectively.

Save program

At the end of each quick-cooling or quick-freezing program, the machine will automatically enter the preservation program, and keep the food center temperature unchanged after the quick-freezing and quick-cooling program. In this program phase, the machine will be used as an ordinary refrigerator, but it is not recommended to store for a long time.

Food storage

For optimal performance, food storage should follow the following instructions:

Save program stage

- Do not place hot food or uncovered liquids in the machine
- Wrap or protect foods, especially if they contain aroma
- Arrange your food properly so that it doesn't block air flow. Avoid placing food on paper trays, cardboard, or wooden boards, which may hinder air flow
- Try to avoid frequent or prolonged door opening

Quick-cooling or quick-freezing process stage

- Do not open the door from the beginning to the end of the program
- In order to achieve faster and better quick-cooling and quick-freezing efficiency of food and better low-temperature sterilization effect of the machine, please start the machine at the lowest temperature and run it for 20 minutes before quick-cooling and quick-freezing food.
- Keep food open, do not cover or wrap the food in film or place food in a closed container
- Do not use trays or containers deeper than 65mm
- Do not stack food, and the thickness of the food should be less than 40mm.
- Use aluminum or stainless steel containers without a lid

CONTROL PANEL

1 Power button

When the power is connected, the machine is in standby mode. Long press the "Power" button, machine will be in standby mode. At this time, the temperature displays the current temperature in the cabinet, and the time displays the time value set last time.

When the machine is in the work preparation mode or during the work, Long press the "Power" button, machine will go back to standby mode.

2 Set button

Under preparation mode, press the SET button to switch temperature, time (hour or minutes) setting. When the temperature light shines, rotate the button to set the target temperature. The range can be set: $-30^{\circ}\text{C} \sim +25^{\circ}\text{C}$ ($-22^{\circ}\text{F} \sim +77^{\circ}\text{F}$); When the hours or minutes shines, rotate the button to adjust hours or minutes. The range can be: 00:10-99:59. Press the SET button to go back after all setting are done.

*It will exit automatically if no other setting is taken after you press SET. Temperature will be the room temperature or the food sensor temperature in the display.

While the machine is working, press and hold the SET button to view the set temperature and time.

Temperature unit switch: in preparation mode, long press the hard frozen button (8) and sensor button (7) at the same time to switch the temperature unit ($^{\circ}\text{C}$ or $^{\circ}\text{F}$).

*After pressing the start/stop key to start refrigeration, the temperature unit cannot be switched again.

3 Start/stop button

After setting the required temperature and time, press the START/STOP button and the machine starts to work, the cooling indicator lights up, and the time starts counting down.

Pressing the START/STOP button during work stops the machine and the temperature indicates the temperature inside the cabinet (if the food probe button (7) is pressed, the food probe temperature is displayed).

A Considering the problem of the internal pressure of the compressor, in order to protect the life of the compressor, the compressor should not be started frequently in a short time, so the cooling equipment should be delayed for a few minutes after the machine is restarted, that is, delayed start, press the START/STOP button. After 2 minutes, the compressor starts, and after another 2 minutes, the evaporator fan starts.

B In the soft quick freezing mode, when the START/STOP button is pressed to start, if the temperature inside the cabinet is less than or equal to the set temperature, the compressor will not start until the temperature in the cabinet is greater than or equal to the set temperature, and the compressor will start.

C In the hard quick freezing mode, when the START/STOP button is pressed to start, if the food probe temperature is less than or equal to the set temperature, the compressor will not start until the food probe temperature is greater than or equal to the set temperature, and the compressor will start.



CONTROL PANEL

4 Rotating controller (“+” & “-” adjustment)

Use the SET button to choose the content, rotate to adjust the temperature or time. (When the rotating controller turns clockwise, the value increases; when it turns counterclockwise, the value decreases.)

5 Quick freeze shortcut keys

Press this shortcut key, the temperature has been set to $-18^{\circ}\text{C}/0^{\circ}\text{F}$, the time is 04:00; then press the START/STOP button, the machine starts to work with the set target temperature and time.

6 Quick cold shortcut keys

Press this shortcut key, the temperature has been set to $+3^{\circ}\text{C}/+38^{\circ}\text{F}$, the time is 01:30, then press the START/STOP button, the machine starts to work with the set target temperature and time.

7 Food probe keys

Insert the food probe into the inside of the food and press the key. The probe icon will light up and the temperature digital tube shows the temperature of the food probe. Then press the key to switch back to the temperature inside the cabinet.

Food probe use precautions

- (1) The tip portion (A) of the food probe is a temperature sensor. When inserted into the food, the tip portion cannot be leaked out, otherwise the temperature of the hard freeze monitoring is not accurate;
- (2) Pull out the food sensor is prohibited in any situation.

Food probe schematic:



8 Hard frozen Button

Press this button, the hard quick freeze indicator lights, and the machine runs at the target temperature of the food probe, which is hard frozen. Without pressing this button, the machine runs at the target temperature of the cabinet, which is soft frozen.

**To use the hard freeze mode, make sure the food probe is inserted into the food and press the hard freeze button before pressing the START/STOP button. Otherwise, you need to stop the machine first, press the hard freeze button and start the machine. **

9 Temperature digital tube

Display the current temperature inside the cabinet after power on.

Display the actual temperature value inside the cabinet or probe during the working process.

10 Time digital tube

Display the last set time value after starting.

Show the remaining working time during the working process.

Temperature return difference function

During the cooling process, when the temperature reaches the set value, the compressor stops working. The compressor will not restart until two minutes have elapsed and the temperature is greater than or equal to the set temperature of 3°C (5°F).

TECHNICAL SPECIFICATION

Voltage/Power	220-240V ~ 50Hz / 300W
Rapid cooling capacity (food centre temperature) +90°to+3° in 90mins	3.5kg
Quick-frozen ability (food centre temperature) +90°to-18° in 240mins	2.5kg
Foaming agent	C5H10
Refrigerant	R290
Copies	2×GN1/2 (325×265mm)
Overall size W×D×H mm	480×450×602
Cavity Size W×D×H mm	330×270×214
NW.(Kg)	28.3 KG

MAINTENANCE

This section is applicable to routine maintenance by properly trained personnel. Special maintenance and program related contents shall be performed by authorized professionals.

- In order to ensure the stability of the whole machine, cleaning and maintenance must be carried out.
- The refrigeration system (condenser) must be cleaned by a professional.
- The drain hole should be cleaned regularly to avoid being blocked. Be sure to cover the drain hole plug when cleaning.

Safety

It is necessary to turn off the machine power before performing any cleaning and maintenance.

- For daily maintenance, it is forbidden to remove the protective/safety device (grid and sticker, etc.)

Machine cleaning

Before the initial cleaning operation, clean the interior and accessories with a small amount of water and a mild soap to remove the characteristic "new" odor. Properly arrange all the accessories in the cabinet.

- Use a damp cotton cloth to carefully clean the outer surface of the machine as described below
- Use a neutral detergent, do not use chlorine or abrasive cleaners to avoid the formation of dirt residues
- Do not use utensils that may cause scratches and rust, use water to rinse and dry carefully
- If hard residue occurs, use soap and water or a neutral detergent, if necessary, use a wooden or plastic scraper
- Rinse with a little water and dry thoroughly after cleaning
- Do not sprinkle water directly onto the machine because water can seep into the electrical components, affecting their normal function.
- Clean the lower part of the machine and adjacent areas daily with soap, water, and non toxic chlorine free cleaner
- If the food probe is black, it can be washed with lemonade.

Special maintenance (only performed by professionals)

- Clean the condenser regularly
- Check door seal strip to ensure good seal
- Check electrical system is working properly
- Check the surrounding heating elements (using amps)

MAINTENANCE

Regular inspection

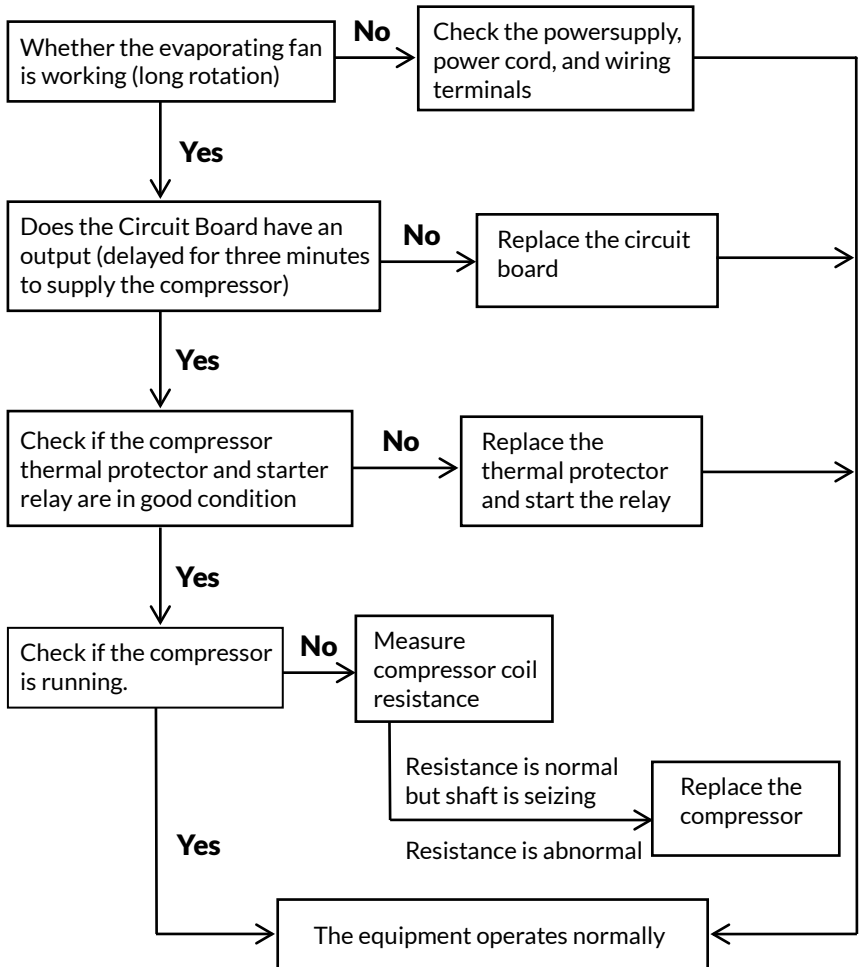
- Check that the plug is correctly plugged into the power socket
- Check if it is affected by heat source
- Check if the machine is placed horizontally
- Check if the door seal is sealed
- Check if the heat exchange tuyere is blocked
- Check if the condenser air filter is full of dust. If found, clean the air filter immediately.

TROUBLESHOOTING

Error	Problem	Troubleshooting
HI	Cabinet temperature probe high temperature alarm, cabinet temperature high temperature alarm set to 45°C/113°F.	Press the START/STOP button to start the cooling. After 2 hours, check the temperature inside the cabinet. If the cabinet temperature is greater than or equal to the high temperature alarm temperature of 45 °C / 113 °F, the temperature display column alternately displays the cabinet temperature and HI until the temperature is lower than the alarm temperature. At this time, check whether the door of the machine is closed, or stop the machine to check whether the temperature probe or compressor is faulty.
LO	The cabinet temperature probe is low temperature alarm, and the cabinet temperature low temperature alarm temperature is set to -45 °C / -49 °F.	Press START/STOP to START the refrigeration, and test the temperature inside the cabinet 2 hours later. If the temperature of the cabinet is less than or equal to the low temperature alarm temperature of -45°C/-49°F, the temperature display bar will alternately display the temperature of the cabinet and LO until the temperature is higher than the alarm temperature. At this time to stop the cabinet temperature probe and other devices to check whether there is a fault.
E01	Communication failure code. If the motherboard and panel cannot communicate normally, the panel displays E01.	<p>At this time to power off and restart the machine or check the connection between the motherboard and the panel cable is connected to the right.</p> <p>Restore factory value parameters: In the work preparation mode, press “-18°C/0°F” button and “+3°C/38°F” button” together for 3 seconds, the temperature bar will display “rS”, and then automatically shut down. Long Press the Power button to restart, and the machine parameters will be restored to factory Settings. The factory value parameter is: temperature unit:°C; Set the temperature value: -18°C; Setting time: 4:00.</p> <p>If there is no mention of the fault, do not disassemble the machine at will. Please contact our authorized professionals for related testing and maintenance to avoid safety failure.</p>

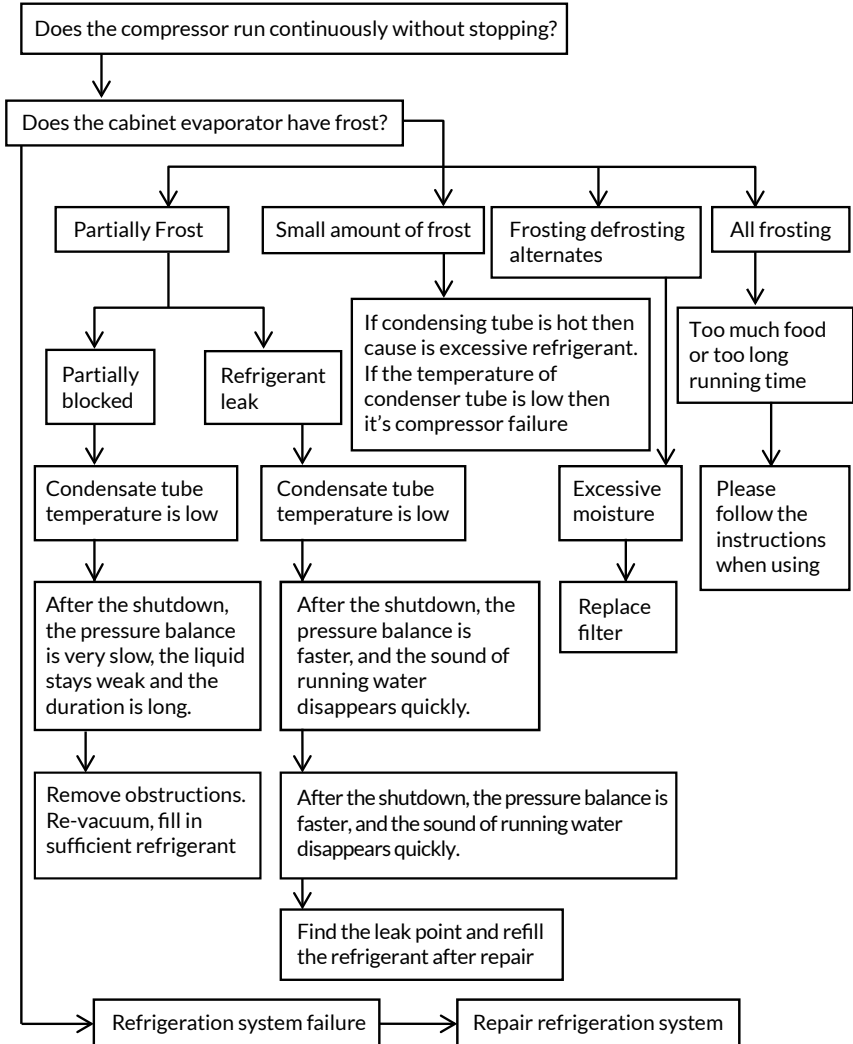
TROUBLESHOOTING

No power supply, compressor does not work



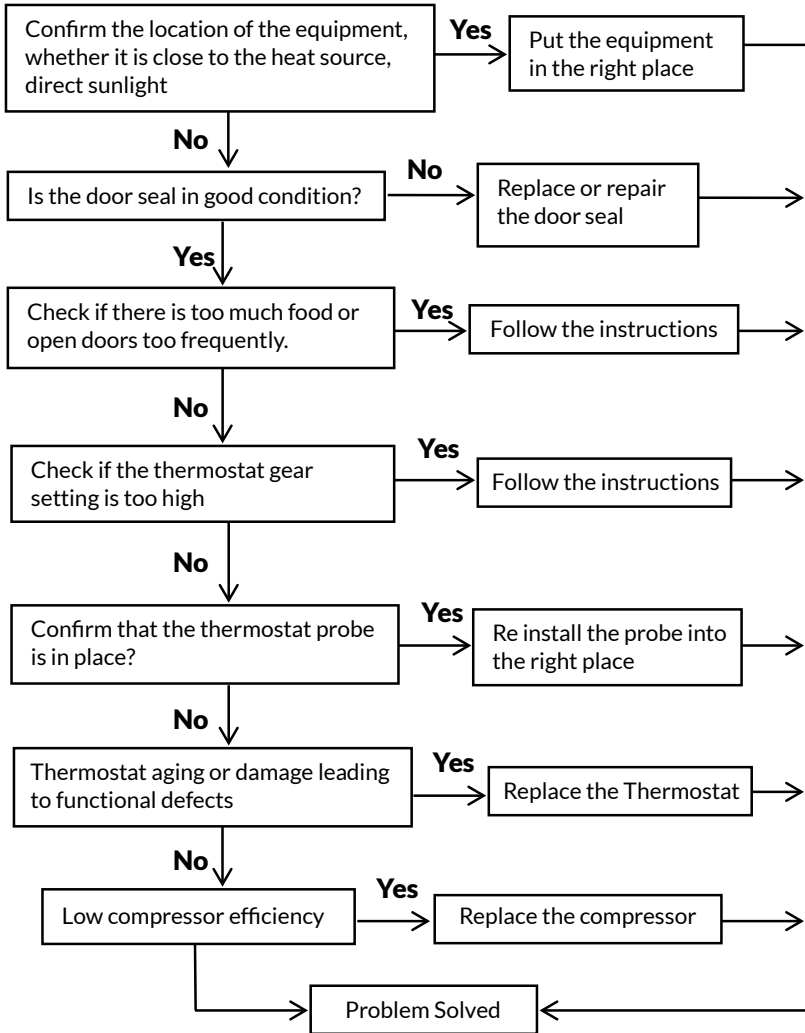
TROUBLESHOOTING

No cooling, compressor works



TROUBLESHOOTING

Poor refrigeration effect



WARRANTY & AFTER SALES SERVICE

- 1 Make sure the working platform is flat, clean and tidy.
- 2 Warranty is limited to damage caused by production defects.
- 3 The cost of parts and maintenance will be charged due to improper use or other non-product quality problems.
- 4 Please keep the purchase vouchers.

Maintenance Card

First Name:

Last Name:

Phone:

Email:

Address:

Machine Model:

Purchase Date:

Supplier:

Repair Record

Date	Cause	By



sousvidetools.com

HEADQUARTERS

Central Barn, Claughton Business Park,
Hornby Road, Claughton, Lancaster, LA2 9JX

0800 678 5001

01524 770 060

enquiries@sousvidetools.com

www.sousvidetools.com

