Low-temperature Oven

User's Manual

Thank you for purchasing and using this product. In order to make full use of the appliance and reduce unnecessary loss and injuries, and know the appliance much better, please read the user's manual carefully and keep it for file for future reference.

WARNING! Any modification and incorrect installation, adjustment or maintenance could lead to property loss or injuries. Please connect with the supplier if you need adjustment or maintenance and they should be done by the trained professional stuff.

WARNING! This appliance is not applied for the physical, sensory or mental defect, or people who lack of experience or knowledge (include child).

WARNING! Please make the wall, clapboard, kitchen equipment or decoration board with non-combustible materials if the appliance is closed to them. Or you should cover them with non-combustible insulation materials and keep eyes to the fire regulation.

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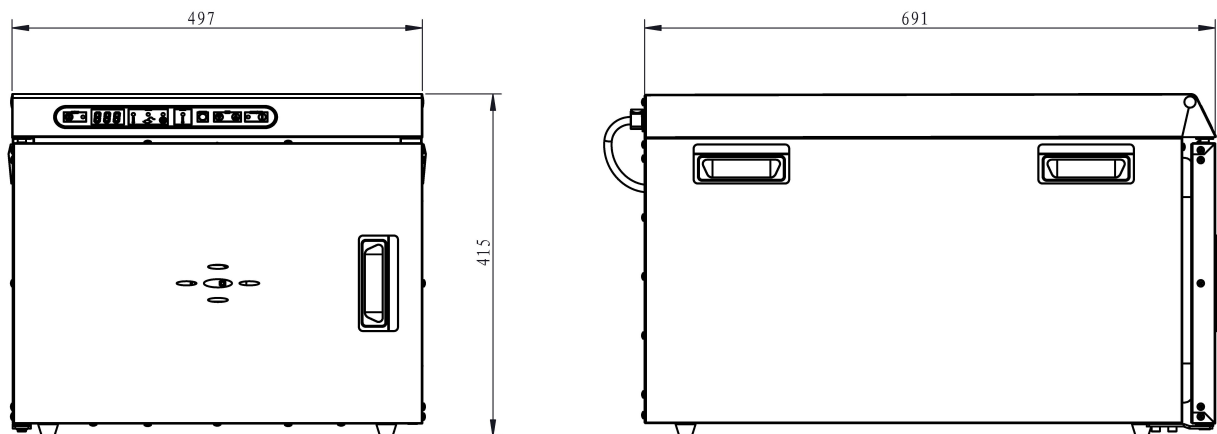# 1. Introduction

1.1 Introduction

The low-temperature oven is controlled by the computer board, which is easy operating, safe and beautiful. The appliance has function of baking, roasting and heating, which can make different kinds of dishes and taste good. The appliance has temperature controller and timer which can adjust the temperature and time according to different kinds of food and save the labor power. The chef can set the baking time and temperature according to his experience to produce delicious food.

1.2 Technical Parameter and Dimension Diagram

A. Technical Parameter

Model	Dimension(mm)	Volts	Power (kW)	Capacity
HBT-311	691x497x415	230V/50/60Hz	1.2kW	3 units of 400*600mm trays

B. Dimension Diagram

1.3 Safety Instruction

1. The appliance should locate on a stable place and should be kept away from the flammable substance of both side at least 10cm. Install a suitable power switch, fuse and leakage protector near the appliance. Do not pile up any sundries in front of the switch in order to operate easily.

2. All the operators must comply with the electrical safety guidelines and make sure the service power is corresponded to the supply power of the nameplate. Make sure the appliance is safety grounding.

3. Make sure to use the oven under the safe situation. If any error, please ask for maintenance immediately.

4. Please test the oven before running. Make sure the oven has been tested and is safe to run.

5. All the electrical inspection and installation should be done by the professionals. Stop the oven, cut off the power and cool down the appliance before unloading the components.

6. Do not touch the oven when it is running since it is very hot. Be careful when you are dealing with the food for scald.

7. This appliance is not applied with the embedded mounting.

1.4 Warranty

The appliance is used for baking only. Our company is not responsible for the damage caused by any other usage. The following are not covered by the warranty:

——Use the appliance incorrectly or not comply with the design intention.

——Install or maintain the appliance improperly.

——Keep on using the appliance while the components are damaged.

——Change the components by yourself without the written permission of the distributor.

——Force majeure

2. Installation

2 .1 Installation

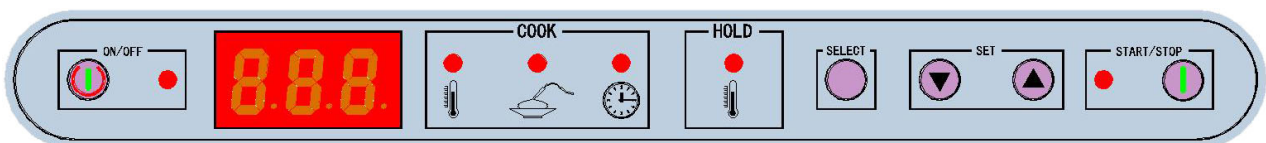1、Please leave space of the rear and both sides of the appliance for electrical connection.

2、It is suggested that the rear of the appliance keep 100mm space with the wall.

3、The appliance should place on the strutting, such as metal platform.

4、Do not place the appliance on the floor.

5、If the appliance is located near the wall, clapboard or drawers, it is suggested that they are made of non-flammable materials or covered by non-flammable insulation. Please comply with the fire regulations.

2.2 Electrical Connection

1、The power is 230V/50~60Hz and should be safety grounding.

2、The air switch should over 10A.

3、Connect the fire wire and zero wire in accordance with the power cord standards.

4、Please connect the connection thermal   which is at the back of the appliance when installation.

3. Operation

A. Control Panel Drawing

B. Working State Instruction

1 、Power on

When the power is on for the first time, the buzzer will sound. After all the indicator lights and nixie tubes illuminate for 0.5 seconds, only the power indicator light illuminates and the other indicators and nixie tubes will turn off.

2 、Power off

When the power is on for the first time for 0.5 seconds or turn on the appliance (standby and running, warming), press the on/off switch to turn off the appliance, the power indicator light illuminates, and the other indicator lights and nixie tubes off. All the other keys do not work except for the on/off switch.

3 、Standby State

Press the on/off key when the appliance is off or press the run/stop key when the appliance is running / warming to access the standby state.

4、Running State

When the appliance is on standby state, press the running / stop key to access the running state, the running indicator light illuminates, and the setting indicator light of the chamber flash (display the actual temperature of the chamber). After 4.5 seconds (display the warming temperature of the chamber), the indicator light illuminates. Thus to display the chamber actual temperature and the chamber setting temperature recycle.

5 、Warming State

When the core temperature reaches the setting temperature on running state or the setting working time reduces to 0:00, the appliance enter the warming state and the buzzer sound for 3 times. The warming indicator light flashes (display the chamber actual temperature). The indicator light illuminates after 4.5 seconds (display the chamber warming temperature). Thus to display the chamber actual temperature and the chamber warming setting temperature recycle.

C. The Setting of the Working Mode Parameter

1 、Temperature Setting of the Chamber

Select the chamber setting mode through the selecting key on the standby or running mode. The chamber setting indicator light illuminates. You can enter the desired temperature by adjusting the minus or plus key. The setting scope is 0-110℃.

2、 Food Core Temperature Setting

When the appliance is on standby or running, you can choose the core state of the food by setting the choose key. At this time, the core temperature indicator light illuminates, you can enter the temperature value by adjusting the minus or plus keys(Noticed: Do not set the food core temperature after working time is set since they can not coexist).

3、 Working time Setting

When the appliance is on standby or running, you can choose the working time state by setting the choose key. At this time, the working time indicator illuminates, you can enter the desired value by adjusting the minus or plus keys (noticed: do not set the food core temperature after working time is set since they can not coexist).

4、 Warming Temperature Setting

When the appliance is on standby or running, you can choose the warming temperature state by setting the choose key. At this time, the working time indicator illuminates, you can enter the desire value by adjusting the minus or plus keys (noticed: you can set the warming temperature under warming mode). The setting scope is 0-110℃.

D. Indicator Instruction

1、 Power indicator

The power indicator is on when the appliance is power on for the first time or the power is off. The power indicator will be off in other modes.

2、 Setting indicator of the chamber

The indicator will flash when the nixie tubes display the actual temperature of the chamber during operation, and will illuminate when they display the setting temperature of the chamber. The indicator will illuminate when setting the chamber temperature.

3、 Indicator of the Core Temperature Setting

(After setting the core temperature on running state, please stop at the core temperature setting mode)When the nixie tubes display the chamber actual temperature on running state, the indicator will flash. The indicator will illuminate when the nixie tubes display the setting core temperature, as well as setting the core temperature.

4、 Working Time Setting Indicator

(After setting the working time on running state, please stop at the working time setting mode) The nixie tubes display the working time during running state, and the indicator will illuminate 4.5 seconds and flash 4.5 seconds. The indicator will illuminate when setting the working time.

5、 Warming Setting Indicator

The indicator will flash when the nixie tubes display the actual temperature of the chamber on warming state and it will illuminate when the nixie tubes display the warming setting temperature. The indicator will illuminate when setting the warming temperature.

6、 Running Indicator

The indicator illuminates when the appliance is power on for the first time or on running. Otherwise, the indicator will be off.

D. Operation Process

1、When the appliance is power on, the nixie tubes and indicator will illuminate for 0.5 second and the buzzer sound for once. After, the nixie tubes and indicator will be off except for the power indicator, which indicates the appliance is off.

2、 Press the on/off key to access the standby state when the appliance is off and pretermit the setting mode of the chamber. You can choose the desired mode through modes setting keys and set the desired value by adjusting plus or minus keys (noticed:

the core temperature setting can not coexist with working time setting). After setting, press the run/stop key to access the running state. The nixie tubes will display the actual temperature of the chamber. At the same time, the chamber setting indicator will flash for 4.5 seconds and the nixie tubes will display the setting temperature of the chamber. The setting indicator of the chamber illuminates and after 4.5 seconds, the nixie tubes will display the actual temperature of the chamber and the setting indicator of the chamber will flash. Recycle.

3、You can press the mode setting choose key on running state and choose the desired modes (you can not set the warming mode. Please choose the core temperature setting or working time setting only according to the current state). After setting, please keep the appliance running. If the core temperature reaches to the setting temperature or the working time reduce to 000, the appliance will enter to warming state, and the buzzer will sound for three times.

4、When the appliance is on warming state, the nixie tubes will display the actual temperature of the chamber, and the warming setting indicator flash for 4.5 seconds. After that, the nixie tubes will display the warming setting temperature, and the warming setting indicator illuminates. After 4.5 seconds, recycle. You can press the run/stop key to back to standby state, or press the on/off key to turn off the appliance.

Notice: if the mode parameter is set improperly on standby state (such as the chamber temperature is set lower than the environment temperature or the working time is set to 000), you can press the run/stop key after setting, and the buzzer will sound for six times and enter the warming state.

4. Cleaning and Maintenance

1. Please cut off the power and keep the appliance cool before cleaning and maintenance.
2. All the maintenance should be done by the professionals.
3. Please clean the appliance with wet towel with warm water and non-acidic and non-corrosive cleaner if you use the appliance for the first time. Do not clean the body with acid or corrosive cleaner.

4. Please clean the chamber properly after using and please clean the appliance according to the requirements below:

    A. Take out the tray and bracket from the oven.

    B. Turn on the oven.

    C. Run the appliance for 10 minutes at about 80℃.

    D. Clean the appliance with cloth after it cool down.

    E. Do not clean the appliance with acid, corrosive or chloric cleaner, even they are diluted.

    F. Do not spray the appliance with water gun. Please clean the appliance with cloth with warm water.

5. Check the appliance under the operation of the professionals once a year at least.

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NOTICE:

Do not spray the appliance with water.

Do not inundate the appliance.

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5 . Transportation and Storing

    Handle the appliance with care and avoid severe vibration during transportation. Do not place the packed appliance in the open air for long time. It should be locate in a well-ventilated and non-corrosive gas warehouse. Do not convert the appliance. Take rainproof measure if the appliance is stored temporary.

6. Troubleshooting

Error	Causes	Remedy	Remark※
The oven do not work	The power wire loose	change the power cord	ask the professionals for help
	The fuse of the switchboard damage	change the fuse	
	The electric system is installed improperly	re-mount the electric system correctly	
501The light flash and display 501	The temperature sensor of the chamber is short circuit.	change the temperature sensor	ask the professionals for help
	The temperature of the sensor of the chamber is over 142℃ or lower than -30℃.	Adjust the temperature	
The light flash and display 502	the core temperature sensor is short circuit.	change the temperature sensor	ask the professionals for help
	the temperature of the core temperature sensor is over 128℃ or lower than -30℃	adjust the temperature	
The water leak out from the seal even the door is close	The door seal damage	change the door seal	
	The door magnet damage	change the magnet	

Notice!
   If the power cord jacket is damaged, you must change the wire with oil resistant soft jacket wire（NO.57 of GB/T 5013.1（IEC 60245，IDT）） or the dedicated components bought from the manufactory or maintenance departments. The maintenance should be done by the professionals.

6.Circuit Diagram

connecting terminal

E grounding

E
L
N

E
L
N
N
01

silicon gel
electric
hot plate

1.2kW/230V/50Hz

winding
displacement

chamber probe

chamber induction needle

main control panel

facial control panel

**warming and blue heating oven
connecting   diagram**