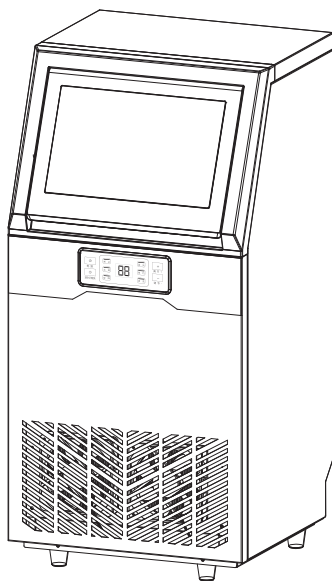


# COMMERCIAL CUBE ICE MAKER

## USER'S MANUAL



This manual is applicable to the following products:

Commercial cube ice maker

For your safety and correct use of this product, please read the manual carefully before use

The product is based on the actual product inside the packaging box

## Safety precautions

-  Warning: There should be no obstacles around the machine and ventilation should be maintained.
-  Warning: Do not use any machinery or other means to accelerate the defrosting process except as recommended by the manufacturer.
-  Warning: Do not damage the refrigeration circuit of the machine.
-  Warning: Do not use any electrical appliances in the food storage room of the machine except for the types recommended by the manufacturer.
-  Warning: The insulation material of the box is cyclopentane, which is flammable. Please stay away from sources of fire and do not burn. It is recommended to have professional personnel handle it when disposing of it.
-  Warning: Do not store explosives, such as combustion supporting spray, in the appliance.
-  Warning: Only connect to drinking water sources.
-  Warning: New hose components that come with the device should be used, and old hose components cannot be reused.
-  Warning: The refrigeration system contains high-pressure refrigerant and must not be damaged. Maintenance of the refrigeration system should be carried out by professionals.
-  Warning: If the power cord is damaged, it must be replaced by professionals from the manufacturer, their repair department, or similar departments to avoid danger.
-  Warning: When maintaining the machine, the power must be disconnected first
-  Warning: When placing appliances, make sure that the power cord is not stuck or damaged.
-  Warning: Mobile multi socket or portable power supply should not be placed on the back of the appliance..

This device is used for household and similar purposes, such as:

A kitchen area in a store, office, or other workplace;

Customers of farms, hotels, motels, and living environments;

A family hotel style environment;

A catering industry and similar non retail applications.

# DIRECTORY

|                                                      |    |
|------------------------------------------------------|----|
| IMPORTANT SAFETY TIPS-----                           | 2  |
| INSTALLATION AND CONNECTION-----                     | 3  |
| 1) OPEN THE PACKAGING-----                           | 3  |
| 2) MACHINE PLACEMENT POSITION-----                   | 3  |
| 3) THE WATER CONNECTION OF THE MACHINE-----          | 3  |
| 4) ELECTRICAL CONNECTIONS-----                       | 7  |
| OPERATING INSTRUCTIONS-----                          | 8  |
| 1) OPERATION INTERFACE DESCRIPTION-----              | 8  |
| CLEANING AND MAINTENANCE OF ICE MAKERS-----          | 9  |
| 1) CLEANING OF INTERNAL AND EXTERNAL COMPONENTS----- | 9  |
| 2) PREPARE THE LONG-TERM STORAGE OF THE MACHINE----- | 9  |
| CIRCUIT DIAGRAM-----                                 | 10 |
| COMMON FAULT DIAGNOSIS-----                          | 11 |
| 1) NO ICE MAKING-----                                | 11 |
| 2) LOW ICE PRODUCTION CAPACITY-----                  | 12 |

## ► 1. IMPORTANT SAFETY TIPS

Attention: When planning to connect to a water source for use, "Warning: Only connect to drinking water sources". When not planning to connect to the water source for use, "Warning: Only refill drinking water" and use a drinking water bucket of no more than 7.5kg or a maximum of 7.5kg of bottled water for filling.

- When using electrical components, basic safety precautions must be taken to reduce the risk of fire, electric shock, and injury. Please read the user manual in full before using any electrical components.  
Before use, the machine must be installed correctly according to the installation program.
- Important safety tips.
- Please do not place the power cord on carpets or other heat sources. Do not place the power cord in areas where people or objects are moving or immerse it in water. Due to the risk of overheating or fire, the use of extension cords is not recommended.
- If the power cord is damaged, in order to avoid danger, it must be replaced by professionals from the manufacturer, its maintenance department, or similar departments.
- The plug must be unplugged when the machine is no longer in use.
- Before cleaning or repairing the machine, please unplug or cut off the main power supply.
- Attention: If the machine needs maintenance, it is strongly recommended to have professional personnel operate it.
- Never pull the power cord out of the plug by hand. You must hold the plug with your hand and then pull it out in a straight line.
- Do not store explosives, such as combustion supporting spray, in the appliance; This appliance is used for household and similar purposes, such as in the kitchen area of shops, offices, or other workplaces- Customers from farms, hotels, motels, and residential environments- Family hotel style environment- Catering and similar non retail applications.

**WARNING:** Do not use the ice maker outdoors and should not be exposed to rain. The ice maker should be placed around unobstructed areas and used indoors with smooth ventilation. It is important to prevent direct sunlight from shining on the machine and ensure that the front, back, left, and right sides of the machine are at a sufficient distance from the wall to facilitate heat dissipation. For specific requirements, please refer to the installation instructions in the manual.

- After using the machine, please do not overturn or tilt it, as it may cause abnormal noise and abnormal ice size, and more seriously, may lead to water leakage.
- If the machine has just been moved outdoors in winter, please wait for the temperature of the machine to rise before turning it on.
- Except for the types recommended by the manufacturer, electrical appliances shall not be used in the food storage room of the appliance

### **WARNING:**

- The machine must be grounded.
- Only connect to drinking water sources that meet local drinking water standards
- Except for the methods recommended by the manufacturer, mechanical equipment or other methods shall not be used to accelerate the defrosting process, and the refrigeration circuit shall not be damaged
- The refrigeration system contains refrigerant in a high-pressure state and must not be damaged. Special care should be taken during installation and handling. Installation and maintenance must be carried out by manufacturers or professionals. Scrapping must be disposed of by designated recycling departments
- There is insulation material inside the ice maker, which belongs to combustible materials and must be kept away from fire sources. Maintenance is necessary, Must be carried out by manufacturers or professionals Scrapping must be disposed of by a designated recycling department.



WARNING: FIRE HAZARD/  
COMBUSTIBLE MATERIALS

## ► 2. INSTALLATION AND CONNECTION

Attention: The installation must be carried out by professional personnel according to the instructions.

### 1) OPEN THE PACKAGING

**WARNING:** Do not use foam and other packaging materials as toys for children and people with limited cognitive ability (or people with mental retardation) to avoid danger to them.

**ATTENTION:** Please remove all packaging when using, otherwise the machine may not function properly.

- a) Remove the packaging and check if the machine is intact;
- b) Water stains inside the ice maker case: All ice makers undergo strict water injection inspection and operation testing before leaving the factory, so there are a small amount of water droplets remaining in the case, which is a normal phenomenon.  
Please do not worry.
- c) Open the attachment package and check if the attachments are complete:  
Standard accessories: 1 manual, 2 zip ties, 1 drainage pipe, 1 spare sink plug, 1 ice shovel, 1 hook, 4 adjustable machine legs.  
Tap water accessories: 1 set of filter kit, 6 C-type blue cards, 2 inlet pipes, and 1 adapter.  
Self suction accessories: 1 silicone tube and 1 self-priming head. (Only applicable to self suction models)

### 2) MACHINE PLACEMENT POSITION

- a) This series of machines should be placed in a clean and well ventilated area, not outdoors, and should not be exposed to sunlight or rain
- b) This machine cannot be placed near any heat source.
- c) The ambient temperature around this series of machines should not be lower than 3 °C and not higher than 40 °C, and appropriate spacing should be kept around to maximize the ice making effect and heat dissipation of the machine
- d) The machine should be placed on a stable horizontal base or ground. When installing, please calibrate the horizontal position in the front, back, left, and right directions
- e) Please do not place any items on the top of the ice maker.
- f) There must be at least enough clearance between the left and right sides and the rear to maintain good air intake and facilitate ice making and maintenance.

| Position | Distance (cm) |
|----------|---------------|
| Side     | 30            |
| Back     | 30            |
| Front    | 30            |

### 3) THE WATER CONNECTION OF THE MACHINE

**WARNING:** The ice maker can only be connected to a drinking water source, and the water source must comply with local drinking water standards

If drinking tap water is used, the water supply to the ice maker must be connected to a filter to improve the drinking standard. Do not directly connect tap water, If there is an ice making malfunction caused by tap water, our company will not be responsible for maintenance.

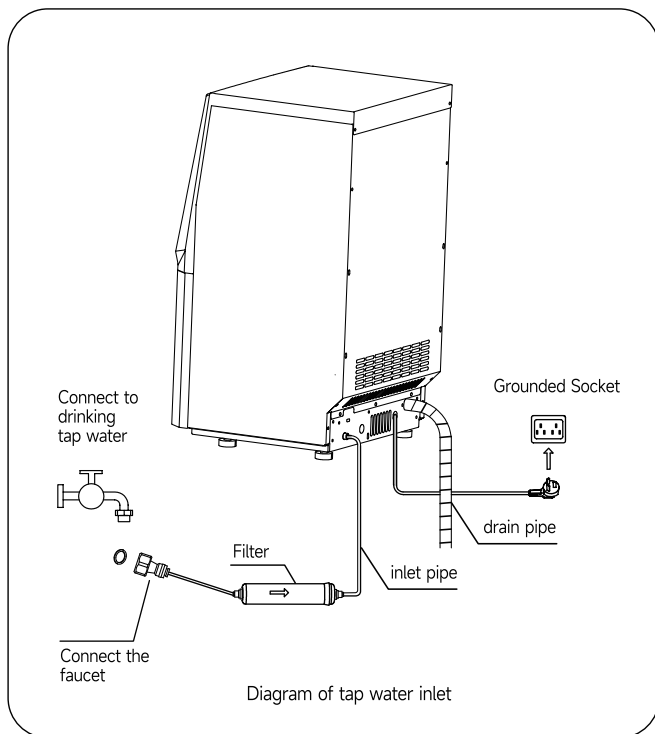
The water supply pressure should be between 0.1 and 0.4 MPa. If the pressure is greater than 0.4 MPa, a pressure reducing valve needs to be connected.

Machine drainage should be placed lower than the drainage interface because it is drained by the self weight of water.

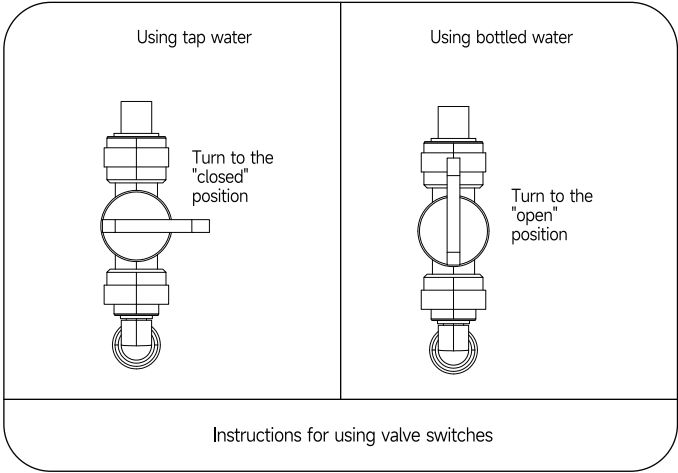
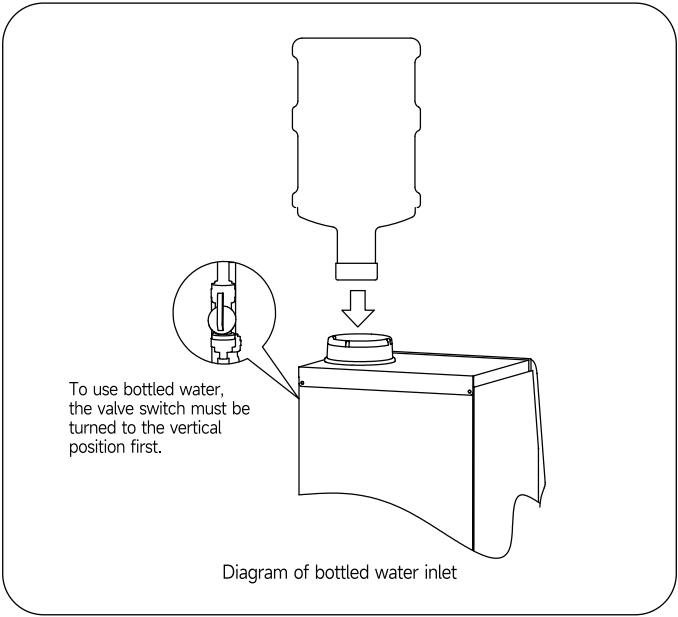
#### 3-1) MACHINE WATER INGRESS

The following are installation instructions for each water inlet method, subject to the actual purchased model.

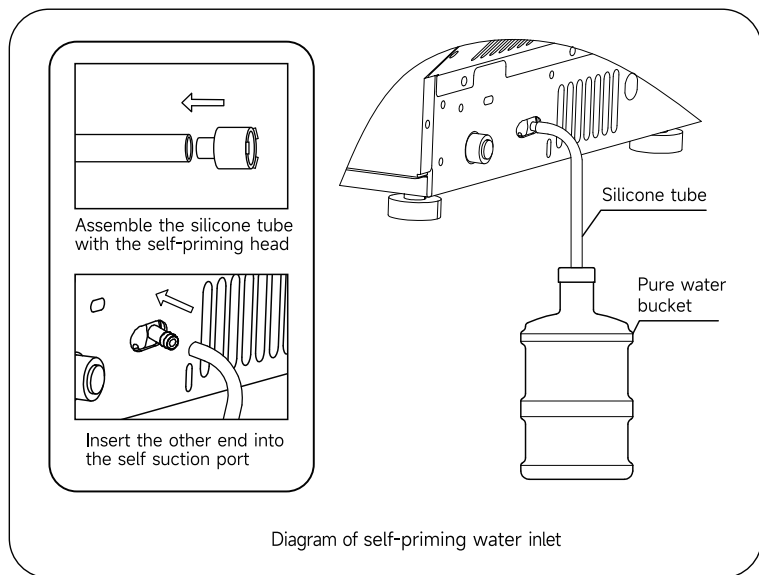
##### A) Tap water



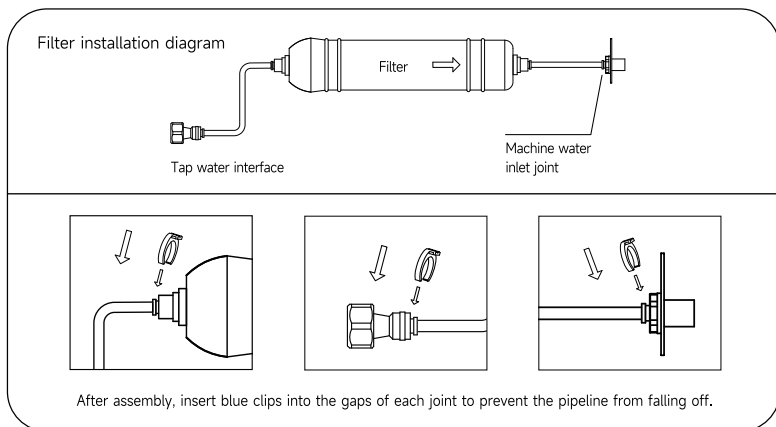
B) Bottled water (tap water)



### C) Self absorbing water (tap water)



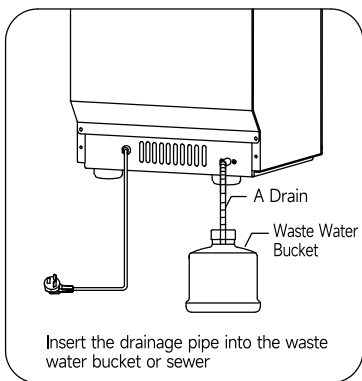
### D ) Filter installation diagram



### 3-2) MACHINE DRAINAGE

**WARNING:** Due to the melting of ice in the machine's inner container, it is necessary to connect a drainage pipe before using the machine, and insert the drainage pipe into the wastewater tank or sewer. Otherwise, our company is not responsible for any losses caused by water leakage to the floor.

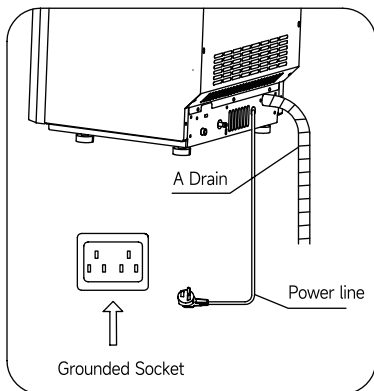
**ATTENTION:** One end of the drainage pipe should be connected to the machine's drainage outlet, and the other end should be connected to a waste water bucket or sewer pipe. It must be proven that the other end of the drainage pipe is lower than the machine's drainage outlet.



### 4) ELECTRICAL CONNECTIONS

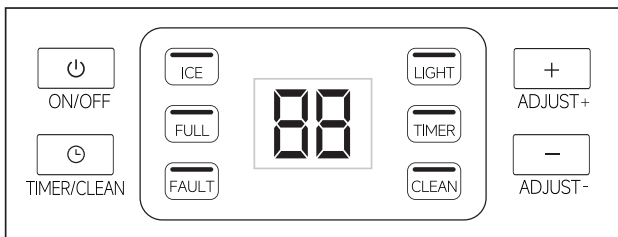
**WARNING:** This machine must use a grounded terminal block and socket.

- a) The fuse current of the electrical box must be greater than 10A. If it needs to be replaced, it must be completed by professional personnel.
- b) If the power cord or plug needs to be replaced, it must be completed by a professional after-sales service engineer.
- c) The voltage fluctuation shall not exceed  $\pm 10\%$  of the rated voltage, otherwise a voltage regulator shall be installed.
- d) The blue light installed inside the machine cannot be replaced by the user and must be replaced by professional personnel.



## ► 3. OPERATING INSTRUCTIONS

### 1) Operation interface description



Special note on malfunction light: For models with electronic floating ball, malfunction light also represents water shortage light. It will light up when there is water shortage and turn off after water replenishment is completed.

#### **ON/OFF button:**

Press the power button in standby mode, the ice making indicator light will remain on, the display screen will show a running light effect, and the machine will enter ice making mode. When the countdown for ice making is 8 minutes, the display screen will show the countdown time.

#### **ADJUST the "+" and "-" keys:**

Adjusting the ice making time and scheduling the startup time are both displayed on the digital block display screen. Attention: During the ice making process, the digital block displays the countdown time for ice making, and the reservation switch displays the time when the reservation switch is turned on.

- 1) Adjust the ice making time and control the thickness of the ice cubes through the "Adjust+/Adjust -" keys. The adjustment range is from -8 to 10. The smaller the number, the shorter the ice making time and the thinner the ice; The larger the number, the longer the ice making time, and the thicker the ice. Adjustments should be made based on the size of the ice cubes. Ice cubes that are too thin or too thick are not conducive to de icing.
- 2) The minimum ice making time for reservation switch is 1 hour, and the maximum is 23 hours.
- 3) When the machine enters standby mode, the blue light is on. Long press "Adjust -" and "Blue light indicator" to turn off, and then long press "Adjust -" and "Blue light indicator" again to turn on.
- 4) Fahrenheit/Celsius switching: Long press and hold for 10 seconds to adjust +.

#### **TIMER/CLEAN key:**

- Automatic self-cleaning program, with a default cleaning time of 30 minutes. Plug in the power plug of the machine that fills the water tank with water, and (in shutdown mode) press and hold the "timed cleaning" button on the control board for more than 5 seconds to enter the automatic cleaning function. The time countdown area displays 30 meters.
- Cancel automatic cleaning: Press the "Power" button on the control panel to forcibly stop the self-cleaning program. Or when the program ends, the system will automatically be in a shutdown state.
- Timing: In standby mode, click this button to enter the scheduled power on setting, press the adjust+/- keys (adjustable for 1-23 hours).

#### **Forced de icing key:**

During the ice making process when the machine is turned on, hold down the power button for 5 seconds to enter the ice melting program. After the ice melting is completed, enter the ice making program. The on/off button time is valid within 5 seconds.

## 4. ICE MAKER CLEANING AND MAINTENANCE

### WARNING:

1. This ice maker is used for manufacturing and storing ice cubes. To ensure the hygiene of the ice cubes, please follow the following principles:

- Wash your hands before removing the ice cubes and use the plastic ice spoon provided in the attachment to remove the ice.
- Please do not put any other items in the refrigerator except for ice cubes.
- Clean the refrigerator before use. Keep the ice spoon clean and clean with a neutral cleaning agent. After removing the ice, close the door to prevent dust from entering.

2. The use of any electrical appliance must follow basic guidelines, especially:

- A high humidity environment increases the risk of short circuits or electric shocks. If in doubt, please cut off the power supply of the ice maker.
- Please do not directly pull off the power cord to shut down the machine.
- When there is no adult supervision, this ice maker cannot be used alone by children or elderly people.

### 1) Cleaning of internal and external components

ATTENTION: Before performing any cleaning or maintenance steps, unplug the power plug. After sales service personnel should inspect and clean the condenser at least once a year to ensure better performance of the ice maker. Do not use alcohol or other substances to clean the ice maker, as this may cause plastic parts to crack.

#### a) Peripheral

Use a clean and soft cloth to wipe the periphery of the ice maker at least once a week, and then use a damp cloth dipped in neutral cleaning agent to remove grease or other impurities.

#### b) Ice spoon cleaning (weekly)

Immerse the ice spoon in a mixture of neutral cleaner and water for at least 3 minutes, then rinse with clean water and shake dry.

ATTENTION: Drying with a cloth may contaminate again.

#### c) Refrigerator cleaning (weekly)

Open the ice retrieval door and remove all the ice cubes.

Clean the inner wall of the refrigerator with a neutral cleaner, then rinse with clean water.

Wipe the inner wall with a cloth soaked in neutral cleaning agent, rinse with clean water, and finally dry the inner surface with another clean cloth.

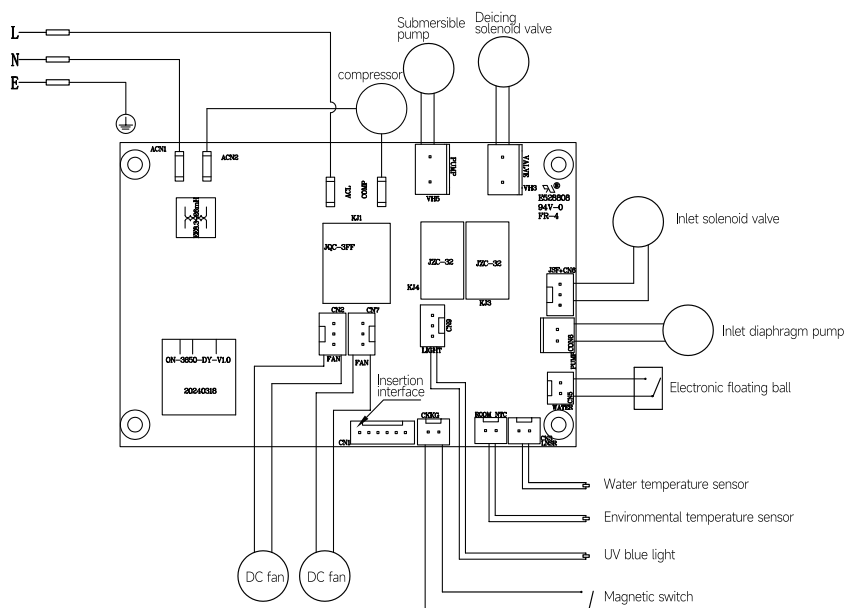
#### d) Water pump cleaning (weekly)

The water pump must be cleaned once a week. Before cleaning, remove the power plug of the machine, then remove the water pump from the inner groove, clean the water inlet of the water pump with a small brush, and then reposition it in the sink

### 2) Long term storage of ice makers

- a) Unplug or cut off the power supply;
- b) Turn off the water supply faucet and remove the inlet pipe;
- c) Remove all ice cubes and drain the water from the refrigerator and water tank;
- d) Wash and dry the inner walls of the refrigerator and water tank.

## 5、CIRCUIT DIAGRAM



## ► 6. COMMON FAULT DIAGNOSIS

### 1) Common fault codes

| Display Code | Inspection items                                                       | Possible reasons                                                                                                                           | Resolvent                                                                                               |
|--------------|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| E1           | Environmental temperature sensor                                       | Loose connector, poor contact, short circuit in wiring harness, and no power supply to power board                                         | Reinsert the power supply, Replace the environmental temperature sensor and power board                 |
| E4           | Water shortage in waterways                                            | The baffle has not detected any movement for three consecutive times, and the fault light is on                                            | Tighten the water outlet plug of the sink, open the water source, clean or replace the submersible pump |
| E5           | No action detected by the ice melting baffle for two consecutive times | Check if the ice making is working properly, check if the fan is working properly, and confirm that the ice skate is in the reset position | Repair waterways according to E4, inspect or replace fans and circuits, inspect and adjust ice skates   |

### 2) No ice making

| Fault phenomenon         | Inspection items        | Possible reasons                                                   | Resolvent                                                                |
|--------------------------|-------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------------|
| Ice maker not running    | Power cord              | Not plugged into the socket                                        | Insert into the socket                                                   |
|                          | Control board fuse      | Blown or damaged                                                   | Check and replace                                                        |
|                          | Refrigerator            | Ice full, ice blocks pressing down on the evaporator swing blades  | Remove ice cubes or remove ice from the evaporator swing blades          |
|                          | Power supply            | If there is no such situation, then the proximity switch is faulty | Replace proximity switch                                                 |
|                          |                         | No power or low voltage                                            | Contact the power supply department                                      |
|                          | Water supply faucet     | No water or low water pressure                                     | Increase water pressure                                                  |
|                          | Inlet valve             | Blocked filter or damaged inlet valve                              | Clean the filter screen or replace the inlet valve                       |
| Compressor not running   | Power supply            | Voltage too low                                                    | Contact the power supply department                                      |
| stop it                  | Air inlet               | The intake air is blocked                                          | Leave a minimum distance of 15cm between the left, right, and back sides |
|                          | Condenser               | Excessive accumulation of dust                                     | Cleaning the condenser                                                   |
|                          | Refrigeration system    | Refrigeration system leakage                                       | Contact after-sales service personnel                                    |
|                          | Compressor              | Connection line broken or detached                                 | Contact after-sales service personnel                                    |
| Water tank without water | Floating ball           | Float stuck or blocked                                             | Replace or clean the float ball                                          |
| water leakage            | Water inlet             | Loose or improperly installed                                      | Tighten or reinstall                                                     |
|                          | Inlet or drainage pipes | Leakage caused by rupture                                          | replace                                                                  |

### 3) Low ice production capacity

| Fault phenomenon               | Inspection items      | Possible reasons                                                                                                                 | Resolvent                                                       |
|--------------------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Ice making time too long       | Water supply pressure | The water pressure is too low and the supply time is too long each time                                                          | Increase water pressure                                         |
|                                | Water temperature     | Excessive water temperature                                                                                                      | Reduce water temperature                                        |
|                                | Ambient temperature   | The ambient temperature is too high or too low                                                                                   | Place at a suitable temperature                                 |
|                                | Cryogen               | Refrigerant leakage                                                                                                              | Contact after-sales service personnel                           |
| Insufficient or thin ice cubes | Condenser             | Excessive accumulation of ash in the condenser leads to poor air intake, high condensation temperature, and long ice making time | Cleaning the condenser                                          |
|                                | Filter screen         | Blocked filter screen, resulting in poor water flow                                                                              | Clean or replace the filter screen                              |
|                                | Water pump            | Water pump malfunction causing poor water flow                                                                                   | Replace the water pump                                          |
|                                | Ambient temperature   | The ambient temperature is too high                                                                                              | Placed in a slightly lower temperature position                 |
|                                | Air inlet             | Poor air intake leads to high condensation temperature and long ice making time                                                  | Leave at least 15cm of space on the left, right, and back sides |



Due to technological iteration, the parameters and configurations stated in this manual may be adjusted. The final execution standard shall be based on our latest released version and delivered products.

