

Installation Instructions

Water flow system ice cube making machine



LB55A,LB80A,LB100A,LB120A,LB150A,LB175A,LB210A,LB300A, LB300TA,LB400TA,LB500TA,LB600TA,LB700TA,LB1000TA, LB1500TA,LB1950TA,LB2200TA,IB200A,IB255A,IB320A

Catalogue

Ice Maker Overview
Reception and Inspection
Ice Maker Exterior Structure and Interface Names
Foot Installation and Foot Placement
Installation of Water Supply4
All-in-one Machine Installation Diagram
Split Machine Installation Diagram
SK/SM Control Panel Operating Manual
LCD Control Panel Operating Manual 8-15
Ice Thickness Adjustment Instruction16
LED Control Panel Operating Manual
Routine Precautions20
Electrical Safety Matters
Maintenance
Ice Maker Work Steps
Fault Self-diagnosis
Fault Detection
Berore Calling for Service
Warranty
Out-of-service machine treatment

Ice MakerOverview

- 1.Our company's ice maker adopts advanced technology and technique method, and the strict and comprehensive quality inspection ensures the excellent performance.
- 2.The core component of the ice maker is compressor which adopts the world famous brand, such as Embraco, Secop, Tecumseh. Together with the reasonable configuration of the refrigeration system, makes the performance of the ice maker more reliable and the energy consumptionlower.
- 3.Food grade 304 stainless steel shell, elegant and durable, corrosion resistant, easy to clean.
- 4. The refrigerating capacity of water-cooling type ice makeris stable, it is not affected by ambient temperature. It can make ice leisurely with enough output in hot summer.
- 5.Advanced industrial microcomputer control system can make ice making and ice collecting process automatically. It has many kinds of protection functions which makes the ice maker convenient and safe to use.
- 6.Our company's products have passed ISO9001-2008, CE, RoHS certificates

Receiving And Checking

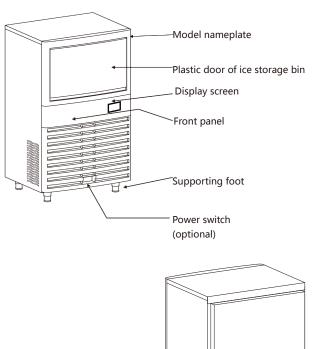
Thank you for selecting our company's automatic ice maker. In order to protect your legitimate rights and interests, please pay attention to the following things when receiving and checking the machine:

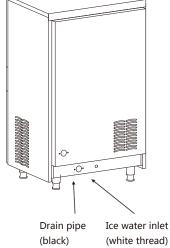
- 1. The outer packing of the machine is intact.
- 2. Machine's model is consistent with your purchased.
- 3. The appearance of the machine is in good condition.
- 4. The attached partsare complete.
- 5. The internal components of the machine are in good condition.

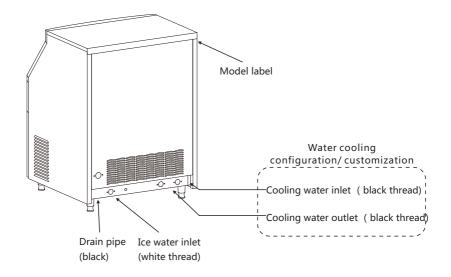


In the process of transportation, due to improper stacking or handling, the lubricating oil in the compressor will flow into the refrigeration pipeline, resulting in a serious lack of oil for the compressor. Once the electricity is switched on, the compressor will be burned in a short time. Therefore, we strongly suggests that after the customer receive our machine, place the machine in the right position for a day, so that the lubricating oil can flow back to the compressor, then install and use the machine.

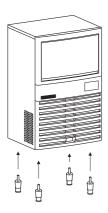
Ice Maker Exterior Structure and Interface Names







Foot Installation And Foot Placement

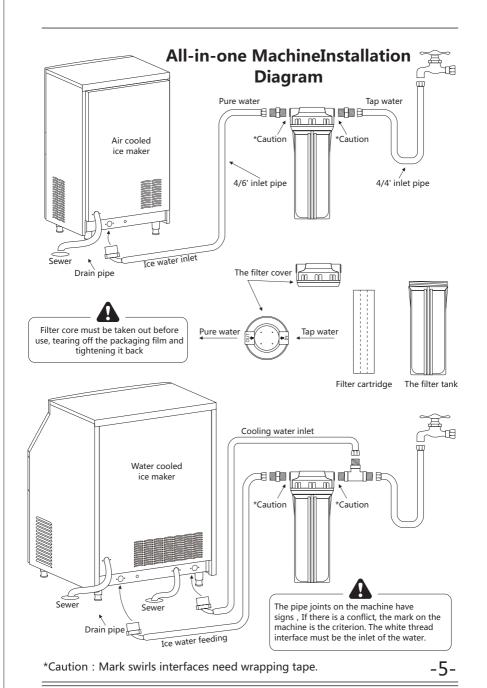


- 1. Screw the feet of the ice maker to the baseplate.
- 2. Each foot must be screwed up and tightened so as not to bend.
- 3. Put the ice maker in a sturdy and flat position.
- 4.Adjust the height of the foot to make the ice maker level.
- 5. The ice maker is not suitable used in the outdoors. The normal using ambient temperature is between 10-38 degrees centigrade, and the water temperature is between 5-30 degrees. Our maximum ice production temperature is: ambient temperature: 21 degrees, water temperature 10 degrees centigrade. High temperature will seriously reduce the amount of ice production. We suggest that the client put the ice maker in a room with cold air.

- 6. ice making machine should not be installed in the environment without sewer and water seepage, and it is strictly prohibited from high temperature equipment.
- 7. air-cooled ice making machines (such as refrigerators, ovens, etc.) rely on air circulation to dissipate heat. So it is necessary to keep the space above 15cm to benefit the heat dissipation.

Installation of Water Supply

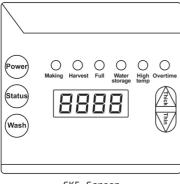
- 1.The ice maker must use drinkable normal atmospheric temperature filtered water.
- 2. Water pressure of water supply must be controlled between
- 0.3~3MPa, if over pressure pressure reducing valve need to be installed. Don' t make the water inlet hose be squeezed.
- 3. The two ends of the water inlet hose are 3/4 " internal thread (20mm) and 1/2 " internal thread (15mm) joints with silicone seal washers, so no need to wind tape.
- 4. The water filter is equipped with a filter element, unscrewing it with a filter wrench before using the water filter. Take out the filter element, tearing up the packaging film of filter element, putting it back as it used to be and screwing up it. Changing the filter element every half year in the process of use.
- 5.Please notice that the filter cover has the water inlet and the water outlet direction marks.
- 6.Connecting the joint of 3/4 "with the water inlet of the machine(white
- 3/4" outer thread), and connect the joint of 1/2 "with water supply pipe. 7. Water-cooled ice maker, added one inlet and one outlet joints of
- 3/4" external thread pipe, the black color distinguishes them from the water intake of making ice.
- 8. The ice maker is drained by gravity. Therefore, it is necessary to ensure that the drainage pipe has sufficient slope and drop.

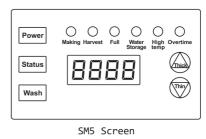


Split Machine Installation Diagram

1. The installation of the split machine shoul d pay attention to the water cooling type more than the condensation into the drain Master control part of split ice make age two joints, 2. The bottom of the ice storage tank has a drain outlet at the bottom. First, the 4/6 outer thread connecting head in the fittings is screwed into the central hole at the bottom of the ice storage bucket, and then connected with the 4/6 hose, and finally exported to the sewer. Automatic cleaning drain pipe Condensation water inlet water inlet pipe pipe(water cooling) Ice storage bin 4/6'threaded joint (black) Screwed into a central drainage holes at the bottom of the ice storage bin The condenser drain pipe has pressure and cannot be co nnected with other drains to prevent the case from flowi ng into the machine and must be inserted into the sewe r independently. Master control part of split ice maer (water cooled) The unipolar filter presented by our company can not meet the drinking water standard. Please buy and re place it on your own! Ö The air condenser Ice water feeding interface (white) *Caution: Mark swirls interfaces need wrapping tape. Automatic cleaning drain interface (black)

SK/SM Control Panel Operating Manual





SK5 Screen

- Power 1. When the machine is in working state, press his key to stop the program and shut down automatically.
- 2. When the machine is not working, press this key to start it immediately. Status When the machine is in working state, press this key to jump to execute the deicing subroutine. There are two situations:
 - 1. When appropriate ice is available, his key can stop the ice making process and turn to the deicing process.
 - When there is no ice or too thin, this key will be transferred to the deicing process, which will automatically jump to the ice making process after 6 minutes of deicing time.
- Wash 1. Short press once to control the blue light's turn on/off
 - 2. Press 3 seconds long to execute the cleaning subroutine.

 After minutes, jump the ice making subroutine automatically.
- Thick 1. Press once, the screen number is+1, ice making time is +1minutes.
- Thin 2. Press once, the screen number is-1, ice making time is -1minutes.



Adjusting ice thickness can only be observed after de-icing.

Ice-making time under normal conditions is mostly within 15-30 minutes.

No more than 3 minutes at a time to adjust ice thickness

LCDControl Panel Operating Manual (Available for some models)

General description: This is a fully automatic ice making machine, all programs of the LCD control panel have been set up in the factory. Usually, the user just need to do some simple operation. Please place the machine in the appropriate location and connect to power supplies. (If your machine has red switch on the machine's back or left side, please turn on it. I=Turn on, O=Turn off) Then the LCD control panel will light up, the machine will run automatically, the user need no any other operation. If you want to stop the machine, just close the red switch.

Note: Unplug the power supplies after finishing the day's work .

I. Button instruction

A. There are five tangibly buttons below the control

panel



Pictures	Name	Function	
O	On/Off button	Turn on/off the machine and set the program	
	Model button	Adjust the running model	
%	Clean/Set button	Clean and set	
4	Schedule/+ button	Increase the thickness of ice and the duty time.	
1/4	Light/- button	Reduce the thickness of ice and duty time,control the light.	

B. The exact instruction about the function of the buttons

a. On/Off button

- 1. Press it to turn office machine in the status of power ON.
- 2. Press it to turn on ice machine in the status of power OFF.
- 3. Press it to schedule time in the status of time schedule setting.
- 4. Press it to turn off the machine in the status of time schedule.

b. Clean/Set button

- 1. Press the button in the status of power OFF, releasing the button when it flashes, machine works on manual clean.
- 2. Press the button in the status of manual clean, machine go to drain step and then enter into rinsing process after drain finished. Press the button in the status of rinsing, machine will go to drain and then go to next procedure.
- 3. Press the button goes to manual clean, in the status of ice freezing, ice harvest and ice full .

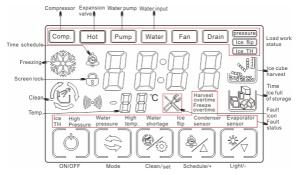
c.Schedule/+ button

- 1. Press it to enter time schedule setting when power OFF.
- 2. In the status of time schedule setting, press the button to increase 10 minutes, long pressing to increase time continuously.
- 3. In the status of setting, press the button to increase one of the parameter, long pressing to increase continuously.

d. Light/- button

- 1. In the status of setting, press the button to reduce one of the parameter, long press to reduce continuously.
- In the status of time schedule setting, press the button to reduce 10 minutes, long press to reduce continuously.
- 3. In the status of non set, press the button to turn on/off the blue light.

II. LCD control panel status instructions (Drawing instruction)



- 1. Switch on: LCD control panel lights up.
- 2. Switch on time-delay:

Water inlet: Display time C00, icons of Clean, Freezing, Ice cube harvest and Ice full of storage light up.

Switch on clean: Display time is cleaning time, Clean icon lights up.

Pressure balance: Icons of Clean, Freezing, Ice cube harvest and Ice full of storage light up. If condenser sensor had fault, Fault icon lights up, Condenser sensor icon lights up, temperature displays EE.

- 3. Manual clean: Clean icon flashes. Displays time is cleaning time.(It will not display icon, if the programhas no cleaning function..
- 4. Ice freezing: Rreezing, Comp. and regarding icons light up.

Display time is ice freezing time. After entering the countdown program, it displays remaining time for ice making. In the status of delayed shutting down, **Freezing** icon flashes

If condenser sensor had fault, **Fault icon** light on, **Condenser sensor** icon lights up, temperature displays **EE**.

- Ice harvest: Ice cube harvest icon light up. Display time is ice cube harvest time. In the status of delayed shutting down, Ice cube harvest icon flashes. If condenser sensor had fault, Fault icon lights up, Condenser sensor icon lights up, temperature displays EE.
- Ice full: Ice full of storage icon lights up. Display time is ice full time. All the load works will be turned off.

Ice full of storage icon works with ice chute board. When the ice chute board close, Ice full of storage icon lights up, Ice full of storage icon goes out when ice chute board opens. No button pressed for 60 seconds, screen locked, screenlock icon lights up. Press any key to unlock.

Ice full is released (compressor is on delayed status), Ice full of storage icon flashes, turn on delay. If condenser sensor had fault, Fault icon light on, Condenser sensor icon lights up, temperature displays EE.

- 7. Fault: **Faulticon** lights up, corresponding fault status icons light on. All the load works will turn off.
- 8. Switch off: Displays OFF.
- 9. Schedule time setting: **Timeschedule**icon lights up. Display time is the schedule time to turn on the machine.
- Schedule status: All icons of Clean, Freezing, Ice cube harvest, Ice full of storage light up. Time schedule icon flashes. Displaying scheduled time counts down.
- 11. Condenser fault, **Fault icon** lights up, **Condenser sensor** icon lights up, and the machine working.
- 12. Ice chute board or ice full switch faults, **Iceflip** lights up, **Faulticon** flashes.
- 13. Overtime ice making fault, if it happens 10 times consecutively, **Freeze overtime** icon lights **Faulticon** flashes.
- 14. Overtime ice harvest fault, if it happens 3 times consecutively, **Harvest overtime** icon lights **Faulticon** flashes.
- 15. High temperature fault, (condensation temperature is over 65 degree Celsius), **High Temp.** icon lights up and **Faulticon** flashes.
- 16. Water shortage fault, after 4 minutes water inputting continuously, water is still not full, **Water shortage** icon lights up and **Fault icon** flashes.
- 17. High pressure fault, HP switch open (the function is invalid without HP switch), **High pressure** icon lights up and **Faulticon** flashes.

III. Several frequently-used procedures setting for your reference. Please operate as the following steps when you need.

A. How to adjust the thickness of the ice?

Step 1.When the is on making ice model. Press the discretional one of the five buttons to unlocked.



Step 2. Press Schedule/+ button, the position which displays temperature will flash $\,$ "00" $\,$.



Step 3. Press Schedule/+ button and Light/- button to adjust. Press Schedule/+ button for one time, the position which displays temperature will appear "01" as the following picture. It means the ice making time will be increased 1 min, the ice will become thick.



Press Light/- button for one time, the position which displays temperature will appear "-1" as the following picture. It means the ice making time will be reduced 1 min, the ice will become thin. After setting, you need no other operation, the machine will resume making ice automatically.

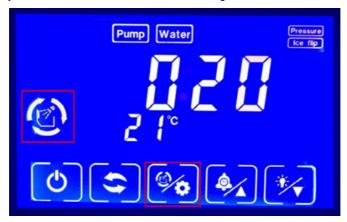


B. How to clean the machine?

- Step 1. Press the discretional one of the five buttons to unlocked.
- Step 2. Press **On/Off button**, the control panel will appear '**OFF'** as the following picture.



Step 3. Press **Clean/Set button**, the control panel will display clean pattern. Usually, 2 minutes to clean the machine is enough.



Step 4. Press Model button 3 times to back to making ice model.



C. How to set the program when the ice storage is full?

When the ice storage is full, the control panel will display'full ice 'pattern as the following picture.



Step 1. Use ice shovel to clean the ices which cover on the ice chute board.

- Step 2. Press the discretional one of the five buttons to unlocked.
- Step 3. Press **On/Off button** to turn off the machine, the control panel will appear'**OFF**'. Step 4. Press **On/Off button** to turn on the machine, then press 3 times **Model button** to back to making ice model.

Ice Thickness Adjustment Instruction (Available for some models)

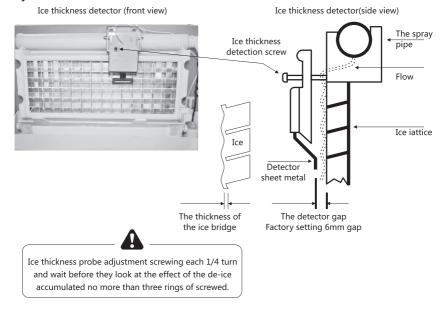
The ice thickness detector works as follows:

When the ice maker starts working, the pump will draw water from the sink to the shower pipe. The water passes trough the pipe, then flows into the tank from the top of the ice lattice.

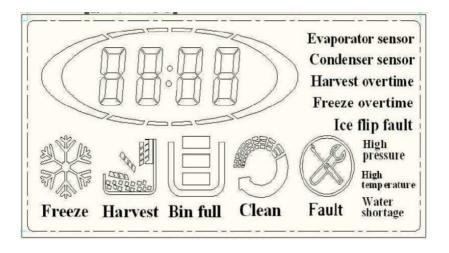
When the water is circulating, the compressor works to cool down the ice lattice. The water will gradually cool to 0 degree celsius. The ice will appear and thicken in the ice lattice.

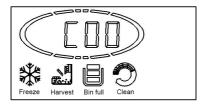
The narrow gap between the detector and the ice lattice will reduce to a certain extent, the water which passes through the pipe comes into the gap and contact with the metal detector, detector signal detects the circuit control chip for more than 8 seconds, it means completing the process of making ice. So the gap between the detector and the ice lattice is the key to control the ice thickness

Adjusting screw clockwise to increase the thickness of the ice, adjusting screw counter-clockwise to reduce the thickness of the ice. Every adjustment should not exceed half a lap, and you can see the effect of the ice after the adjustment.

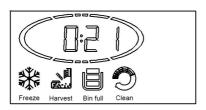


(Available for some models)

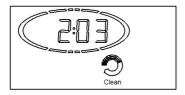




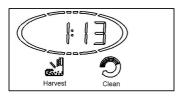
Power-on Delay Water Intake Situation Display.



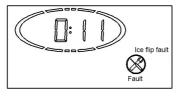
Power-on Delay: After water intake finish, displays Standby time.



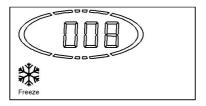
Clean Display



When ice harvest, press Clean button Display: Clean light flashes, enter into cleaning.

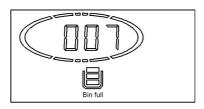


Fault: Light flashes, corresponding fault item lights ON.

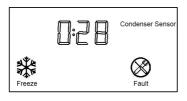


Freeze: Displays ice freezing time, after freeze finish, began to harvest, it will dis la 30s countdown.

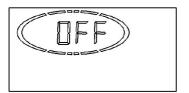
Harvest: Displays ice harvest time.



Bin Full: Light ON when ice bin full. Light flashes after ice were taken out.



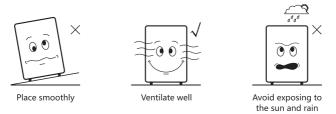
Condenser Sensor and Fault Light ON.



Standby Display: No operations within 2mins, the backlight becomes dark, will recover bright against any operations.

Routine Cautions

- 1. When transportation and mobile location, the ice machine tilt shall not exceed 45 degrees.
- 2. Ice machine, please use independent water source, and check regularly to prevent water pressure is too low, fluctuations or filter clogging.
- 3. Do not store any sundries in the ice storage room, or freeze any food in the ice storage room and keep the ice shovel clean.
- 4. Switch the ice storage bucket plastic door, should be light open and light closed, don't beat box door, after taking the ice, please turn off the sliding door of the ice storage bucket.
- 5. Ice machine should be far away from the heat source. It is strictly prohibited to use in high temperature or low temperature environment. It is necessary to avoid direct sunlight in order to avoid affecting the heat dissipation of the machine.
- 6. It is forbidden to wash the surface of ice machine directly with water, otherwise it may lead to short circuit, leakage and other faults.
- 7. After the ice machine is used for a period of time, if it is stopped for a long time, it should be electrified every two months for four to six hours.



Electrical Safety Matters

- 1. Plug and pull plug is strictly prohibited when wet, the plug must be unplugged before maintenance and cleaning work.
- 2. Must ensure that the socket is equipped with grounding wire, and safe grounding
- 3. The electrical control system has more than 36V voltage, the use of not free to open and touch. If necessary, please contact the manufacturer or qualified professional and technical personnel.
- 4. The power connection should be marked according to the nameplate, use the specified power supply, and determine the wire specifications used in the connection circuit can meet the requirements. Please use special power outlet and fuse if necessary.
- 5. When the ice machine is stopped, the power plug should be unplugged or cut off the power supply.

Maintenance

In order to improve the reliability and service life of the ice maker, and to avoid the increase of the energy consumption coefficient of the ice production, the maintenance and maintenance should be carried out according to the requirements of this manual.

- 1. Often clean the environment around the ice maker to keep clean, do not plug the ice machine in the case of ventilation shutters.
- 2. Cleaning of the shell can be cleaned with a neutral cleaning agent, and then wipe clean with a rag which is made of soft material. Commercial stainless steel cleanser and polishing agent can be used when necessary.
- 3. Filter element should be checked regularly. Most of the ordinary filter element is replaced in half a year, and the senior core should be replaced on time according to the description.
- 4. Water pipes can be washed directly when the water tank and the ice storage barrel are cleaned. Do not let water pressure is too large, do not directly flush the water pump and the above part of the ice, to prevent the leaching circuit part.
- 5. Air-cooled ice machine condenser maintenance: three months to clean an air-cooled condenser. A vacuum cleaner with a soft brush or a brush is arranged in the direction of the fin to avoid the damage of the fin to affect the refrigerating efficiency.
- 6. Maintenance of the wintering: in addition to turning off the water source and power supply, the water tank of the ice machine is also needed, residual water in the inlet and drain pipes.

Any maintenance of the ice machine is not within the manufacture's warranty.



Before cleaning and maintenance work, be sure to turn off the water and power, pull out the plug.



If the scale of the ice machine is serious, or the waterway is blocked, please call the after -sale service telephone. There will be a charge for door-to-door service.



The wind condenser fin edge is sharp, please be careful when cleaning.



The filter cartridge should be replaced periodically.

-21-

Ice Maker Work Steps

The working steps of the ice maker are divided into three parts:

- 1. The automatic cleaning of the ice machine (once, time 2 minutes) When each ice maker starts, the automatic 2 minute cleaning program is automatically carried out to clean the floating objects in the ice grid and the tank. In 2 minutes the sink uninterrupted water, pump operation. The user can hear the noise of the pump work flow from the top of the ice grid down into the sink, and then overflow from the sink, from the drain outlet of the ice storage bucket.
- 2. Ice (cycle work, the longest 40 minutes)

After the completion of automatic cleaning, the pump will delay 45 seconds to start, and then the ice began. When making ice, the water pump works continuously from above the ice grid to the sink, and the water will slowly become cold until it freezes. Ice thickness is measured by the ice thickness detector during the ice making process. When the thickness of the test is reached, the program will turn to the de-icing step. If the gap of the ice thickness detector is too large, it will be forced into the de-icing program after more than 40 minutes of ice making time.

3. De-icing (cycle work, up to 4 minutes)

In the de-icing procedure, ice will be heated, ice and ice grid will be the connection will be melted, when the ice due to weight and can not be attached to the ice grid, it will fall off, complete a de-icing process.

When the ice falls, the water plate will be turned over, and then the water retaining plate will be reset due to the dead weight, and then the machine starts to make ice again. When the ice bucket is too much ice, the ice block can not be reset, and the control chip is judged to be full of ice and temporarily shut down until the water retaining plate is reset.

Fault self-diagnosis

- 1. Pump -- can directly observe whether there is water from the ice grid up, if there is no pump failure.
- 2. Refrigeration--after 10 minutes of ice making, the water in the sink will be significantly cooler, and you can feel the water temperature directly by touching the ice grid or running water.
- 3. Influent-- one by one in the automatic cleaning process can be observed in the tank overflow pipe constantly flowing into the ice storage tank. In the process of ice making, you can put your hand into the water tank to feel the amount of water, the normal situation accounts for more than half of the sink.

Fault Detection

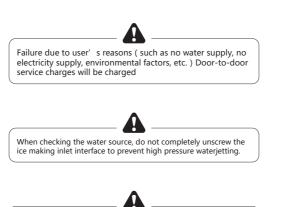
Fault	Possible Cause	Solution	
Ice maker does not start.	Poor contact of socket.	Replace the socket.	
	Ice storage bin is full of ice.	Remove the ice, the machine will run automatically.	
	The cover of ice tray does not reset.	Adjust the cover to make it reset free.	
Ice maker shuts down after operation	The water supply has not been opened or not connected firmly.	Recheck the water supply.	
	Ice maker didn' t be placed horizontally.	Adjust the feet to be horizontal.	
	High-voltage temperature control switch action.	Open the front panel, clean the condenser.	
Lack of ice production.	Didn't clean more than two months .	Open the front panel, clean the condenser.	
	The water temperature is too high (Usually it happens in summer).		
	The environment temperature is too high.	Clean up the surrounding sundries and use electric fan to makes the temperature cool down and the air circulating.	
	The environment space is small or closed.	Clean up the surrounding sundries to make air circulating.	
	The water inlet valve fails and keeps open (the water tank is overflowing).	Replace the water inlet valve.	
The transparency of ice cube is poor or the shape of the ice is incomplete.	Improper adjustment of ice thickness detector.	Reset the ice thickness detector	
	The water quality is poor.	Install the filter, replace the filter element	
	The water tank and ice tray is too dirty.	Clean the ice maker and replace the filter element.	
	The water inlet valve filter screen is dirty.	Clean the water inlet valve filter screen.	
	Large amount of running water above ice tray.	Tighten silicon tube of water pump, regulate water flow.	
	The drain valve fails and keeps close (Split ice maker).	Replace the drain valve.	
The ice cube can not drop	The ice is too thick.	Adjust the Ice thickness.	
from the ice tray.	The ice detector is dirty and loose.	Clear the probe and check the connection.	
Excessive noises.	The ice maker placed instability, foot hangs in the air.	Place the ice maker smoothly.	
	The shell of the ice maker touch other objects.	Avoid touching other objects.	
The shell of the ice maker	The door of ice storage bin is not completely closed.	Completely shut down the ice storage tank.	
has condensed water.	Working in a high temperature and humid environment.	Normal phenomenon.	

Before calling for service

If the ice maker is abnormal, please confirm the following contents before making a phone call :

- 1. Is the water source supply of the ice maker normal? The method of inspection is to loosen the ice water inlet (6" joints) behind the machine, when loosening to a certain extent, the water will leak out. The water source supply will be normal when the water is exuded for a long time, otherwise, there is no water.
- 2. Whether the ice maker has been connected to the power supply or not? The ice maker produced by our company is fully automatic without manual operation. You just need to connect the power supply and open the red switch on side of the back of the ice maker. Please let the person who understand the electricity to check whether the ice maker is electrified, focus on checking the plug base.
- 3. Model and series No. of our ice maker.

There is model and series No. nameplate on the side panel of the machine.



Plastic parts of the ice maker do not belong to the scope of warranty.

Warranty

- 1. Our company undertakes to guarantee the machine warranty period of one year, in the warranty period, free of artificial service and replacement of parts.
- 2. The plastic parts of the machine are not covered by the warranty.
- 3. Our company's warranty is limited liability, do not bear all the joint and several liability in addition to the ice maker itself.
- 4. Our company's warranty scope does not include the daily maintenance, cleaning or the maintenance and failure caused by not installing or using in accordance with the instructions.
- 5. The warranty service shall be completed by the agency dealer or maintenance organization authorized by our company.

Out-of-service machine treatment

The insulating material between the metal shell and the ice storage bin is combustible polyurethane foaming material. After the machine is waste, please treat it according to the national or local regulations on the treatment of combustible waste.



The instruction is the undivided part of the ice maker.

The user must keep it properly.