ICE MAKER User's Manual

- IU-0170-AC / IU-0170-AH IC-0170-AC / IC-0170-AH IU-0220-AC / IU-0220-AH IC-0220-AC / IC-0220-AH IU-0270-AC / IU-0270-AH IC-0270-AC / IC-0270-AH
- · As this product is designed for indoor use, please refrain from using it outdoors.
- Make sure to familiarize yourself with this user's manual prior to using the product and ensure easy access to this manual.
- Appearances, design and/or color of this product may be changed with no prior notice for improvement of the product's performance.





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Features of the Product

Thank you for purchasing this product.

Please read through this user's manual as it aims to prevent injuries to user's due to lack of caution and to ensure customer satisfaction.

New, highly-created technologies, Fast cooling anytime of the year, Unmatched ice making performance.

- 1. MICOM controller
 - Provides the optimal ice making environment through the automatic ice level control sensor.
- 2. Equipped with automatic ice quantity control sensor
 - Automatic sensor controls ice making system when the ice tank is filled.





Water tank

- 3. Crystal-pure ice
 - Crystal-pure with freezing point depression principle.
- 4. Ergonomic design
 - Convenience from ergonomically designed sliding/slope door.
- 5. Convenient cleaning
 - Equipped with condenser minimizing dust collection on its body.
- 6. Optimal space utilization
 - Front inlet/outlet with built-in construction enables optimal space utilization.







Safety cautions

Safety caution symbols are shown to prevent safety incidents from incorrect applications and to provide better convenience. Make sure to understand the following symbols and their meanings before continuing on.



Failure to comply with the warning listed below may result in death, serious injury or fire for the user.



Failure to comply with the warning listed below may result in death, serious injury or fire for the user.



Failure to comply with the warning listed below may result in personal injury or property damages for the user.

Make sure to apply earthing.

Do not disassemble.

Risk of electric shock.

- * Personal injury: Any injury or burn requiring long-term outpatient treatment for full recovery.
- * Property damage: Damage to one's property such as the house or a piece of furniture.
- ** Label: A piece of paper attached to the product containing a warning. If this is contaminated or not clearly visible, make sure to contact the distributor from whom you purchased the product or the customer service center.

Each of following symbols has the meaning listed next to it.



Obligatory.



Generally prohibited.



Not allowed to come into contact with.



Make sure to unplug the power cord.



- Make sure that the voltage of the power source matches that on the label.
- Product label is on the back side of the product.



- Wrong voltage poses risks of fire or electric shock as well as malfunctioning
 of the product.
 - Make sure that the voltage is correct when you move the product to a new place.













Warning

- Hold and pull the plug itself.

- Do not remove the grounding prong.
- The unit must be installed in accordance with the state and local electrical and plumbing codes.

Make sure that the power plug is free from foreign objects and always push the plug fully.

- Dust or water on the pins of power plug, or improper contact with the power outlet may result in fire or electric shock.

■ After pulling out the power plug, wait for more than 3 minutes before plugging it back again. - Otherwise, parts of the ice maker get overloaded and may malfunction.





Warning

Do not apply excessive force on power cord to bend it, or put it under heavy object to cause damage. – It may cause an electric leak or electric shock.

- It may cause an electric leak or electric shock.

- Do not use a damaged power cord or when the metal contacts are loosened.
 - It may cause an electric shock or fire. So contact the service agency if required.

 When earthquake or fire occurs, or strange sound or smell is detected, stop operation right away and pull off the power plug from the outlet,

- When the power cord is damaged, do not arbitrarily replace it but contact the service agency for it.
- Do not pull of the power plug nor move the product while operation.

Do not use the product in a humid or damp place

Do not use it in the bathtub, shower room or swimming pool.
 When water permeates through the internal part of the product,

- Do not move it to the bathtub or water bin.

it may cause a failure or electric shock.

- It may cause a failure or fire.
- It may cause a leak of water.

Handling for abnormal cases













For cleaning and maintenance, pull off the power plug and close the water supply valve. Perform the work after the operation stops.

- It may cause an electric shock or injury.

- Be sure to clean the condenser filter on the front panel one or more times in a month.
 - When dust is accumulated in the condenser filter, ventilationis not made. So it may cause low product performance, excess electric charge, and product failure.
- Install the product in the place where the temperature is within 41 ∼ 100.4 °F.
 - In case of 41 °F or below, it may cause winter snowing.
 - In case of 100.4 °F or above, it may cause a product failure.
- Use the product while the supply pressure is within 14.22 ~ 71.12 psig and the water temperature is within 50~ 90 °F.

- It may cause an electric shock or injury.

When installing the product, be sure to connect to the cold water pipeline.

- If you connect to the hot water pipeline, it may cause a product failure.













- Be sure to use the drinking water supply.
- When moving the product, do not go over 45 degrees on the incline.
 - It may cause a product failure.
- Do not make the drain hose twisted or kinked. – It may cause water leak, failure or no water supply.
- The outlet must be occupied by this ice maker only.
 When multiple plugs are connected through the power strip, it may cause a fire.
- Do not let children climb or hang on the ice maker.
 The ice maker's fall may cause an injury.



- This product is for indoor use 41 \sim 100.4 $^\circ\mathrm{F}.$
- When the product is used outdoors, it may cause a deformation, discoloration or electric shock.















- Use this product as described in the user manual.
 If you do not follow the instructions, it may cause an electric shock
 - or property loss.
 - When transferring the product to another person, transfer the user manual also.
- When the product is not used for a long time (e.g. long-term outing), stop water supply, remove ices from the ice maker, and pull off the power plug.
- Do not use the product near the fireplace.
 It may cause a fire.
- Install the product in a sanitary place.
 Because you can eat the ice, install the product in a sanitary and clean place.













- When storing the ice made for a long time. move it to the refrigerator.
 - The ice box in the ice maker has no freezing function except for the coldness of ice.
 - If the ice is stored in the ice box for a long time, the ice melts, So store the ice in the refrigerator.
- Do not frequently press the operation switch. - If you frequently pressed the operation switch,
 - it may cause a product failure





- When water leak happens, pull off the power plug, close the water supply valve, and contact the purchased site or customer center.
 - If you pull off the power plug with wet hands, it may cause an electric shock.
- Use the product in two or more hours after installation. - It takes the time to stabilize the refrigerant in the ice maker.







A Please frequently clean the ice box in the ice maker for sanitation.



Product names

[FRONT]

[BACK]



Cautions for installation

[Installation place]

Install the product in the place with no heat generator......

 Install the product away from the heat generator such as heater and gas stove.

Do not install it in the place where the ambient temperature is within 41 \sim 100.4°F.

Install the product in a place that has good ventilation......

- Bad ventilation causes a bad ice making performance.

Install the product in an even and flat place.....

 Unstable installation causes vibration, noise, ice non-forming, and low performance. (Recommended incline: within 1 degree)

Install the product in a sanitary place......

- Because you can eat the ice, install the product in a sanitary and clean place.
- Be sure to use the drinking water supply.









[Installation place]

Install the product inside a house......

- Do not place the product outdoors.
- Place the drain hose to slope downward for better drainage.

Install the product in the place where children cannot access......

 Be cautious for preventing children's accidents. Especially, keep children from playing with ice in the ice manufacturer.





- Make sure to comply with the following.
- As the product utilizes water, the installation site requires facilities for supplying and draining water.
- Leakage may occur due to diverse causes during or after installation, thus make sure that the installation site is equipped with a perfectly working draining facility.
 Leakage may lead to electric shocks due to moisture, thus comply with the following rules to prevent this from happening.



- 1. If the product needs to be installed indoors in any type of room where a leakage could occur, make sure to install a drainage system and and make the floor waterproof.
- 2. Even if the product is to be installed in a kitchen, drain is required at all cost, thus make sure to connect the draining hose.
- 3. The draining floor needs to be sloped to enable natural draining even if the draining hose is damaged or removed, and install a water overflow protection compartment preventing wall to avoid damage.
- * Adjust the feet at the bottom of the product to ensure that it is standing evenly if the floor is sloped.
- * Icetro shall not be held liable for damages from not complying with the abovementioned regulations, including removal of the water supply/draining hoses and a poor draining system.

How to install

1. Unpacking ice maker

 After removing the packing box of the ice maker, take out the provided parts from the ice maker.

2. Assembling feet

- Assemble 4 height adjusting on the bottom of the ice maker.

3. Adjusting the horizontal level

 Turn the feet to set level and use the front feet to maintain evenness.

4. Connecting water piping

	Appropriate water temperature	Water pressure	Appropriate piping / hose size
Ice making water supply	50 \sim 90 $^\circ { m F}$	14.22 ~ 71.12 psi	3/8" FPT(NPT)
Ice making water drain	—	—	3/4" FPT(NPT)

Too high temperature of the ice-making water will decrease the amount of ice produced; too low pressure will prevent ice from being made at all. Install an auxiliary pressure pump in this case.



Ice making water supply inlet(3/8" FPT)



2. Use the product while the supply pressure is within $14.22 \sim 71.12$ psig and the water temperature is within $50 \sim 90$ °F.

3. Apply caution as the door or drain hose may suffer condensation and water



drops may fall on the floor. 4. Make sure to fully tighten the water supply/drain hoses to prevent incidental removal.







Protecting water supply hose

- Do not put any heavy object or tread on the water supply hose.

Appropriate water pressure, water temperature and ambient temperature

- Use the product while the supply pressure is within $14.22 \sim 71.12$ psig, the water temperature is within $50 \sim 90$ °F, and ambient temperature is within $41 \sim 100.4$ °F.
- 1. Connecting power
 - This ice maker is designed power supply and using an exclusive receptacle.
- 2. Supplying water
 - Open the faucet to supply water.









3. Cleaning

 Start 'WASH' operation after starting to supply water to clean the water distributor and evaporator (For better ice making performance)

4. Starting operation

- Turn off the power switch 'ICE' on the front panel.

5. Ending the operation

- According to the ambient temperature and water temperature, it may differ but a round of ice making ends in 15 to 30 minutes after the operation starts.
- In case of initial use or use after cleaning, remove the first made ice and use the ice made from the second time.



Indicator description



POWER indicator(green)

- Lights up when power is supplied.

POWER indicator flashes

 Water not supplied properly: Upper limit sensor does not work within 5 minutes after opening the water supply valve(LOW)
 Delayed ice making: Ice cubes are not made within 65 minutes (10 seconds for low limit sensor)
 Delayed ice delivery: Ice cubes are not delivered within 5 minutes (ICE FULL not detected) for 3 times in a row

FULL indicator(yellow)

- Lights up when the ice tank is full.

• FULL indicator flashes

1)Water not supplied properly: When upper limit sensor works for more than 10 minutes before lower limit sensor is on(HIGH).

ERROR indicator(red)

- Lights up or flashes together with POWER indicator in case of any issue.
- POWER(green) flashes and ERROR(red) stays on
 High voltage switch issue for more than 10 seconds
- Both POWER(green) and ERROR(red) flash
 - : High voltage switch issue for more than 3 times

Cleaning and Disassembling

[Read the following carefully for proper handling!]

Warning : Pull off the power plug before cleaning the product or replacing the parts of it.

It may cause an electric shock or fire.

 Do not directly spray water on the ice maker. It may cause a product failure, electric leak or electric shock.

It may cause erosion or damage to the product.

 Do not use the soap powder, benzene, thinner, muriatic acid, petroleum, boiling water, and touch brush because they can cause erosion or damage to the product.

When using the detergent

- Wipe the product after soaking the soft cloth with lukewarm water or neutral detergent.
- When using the neutral detergent, be sure to wipe the product with a clean wet towel again.



Danger





[Cautions for cleaning the external panel(stainless steel)]

* How to remove rust

How to clean rusted parts

1. Rust spots in early stage

 Rust spots in early stage mean that the stainless steel itself is not severely affected, thus mild detergent or any commercially available cleaning agent will restore original state. Rust will be removed with ease and at low cost if regular cleaning is done at appropriate intervals.

2. Red rust

- Rust spots that are not removed after a short period of time will turn into thick reddish -brown rust and will damage the surface of the stainless steel. These are much harder to remove and the surface will not be fully restored; thus, it is important to remove rust spots early on.

If commercially available cleaning agents do not work, use sandpaper or a stainless steel brush to remove the rust before applying the agent for easier removal. This process requires treatment, such as refurbishment after cleaning.

3. Rust from iron

- Rust from coming into contact with welding spatter, rust from the metal bar above the stainless steel part, or contact between the stainless steel parts and general metal parts are caused galvanic corrosion. This causes the metal to rust first, and it will eventually cause the stainless steel to rust too if it is not removed. As such, make sure to clean and remove rust immediately with a mild detergent. However, when the rust has gotten really bad, it must be removed with 15% nitric acid solution or commercially available stainless steel cleaner.

4. Rust from exhaust gas or acid rain

In environments, such as a factory complex or heavy transport sites, the product will become contaminated in a short amount of time due to exhaust fumes or acid rain and rust spots will quickly form. Light rust can be washed off with a mild detergent or soapy water, but heavy rust will require 15% nitric acid solution or commercially available stainless steel cleaner.

5. Rust from salt deposit

- In environments, such as windowsills or pipes on the porches of an apartment complex, that are close to the seashore where the product may be directly exposed to the sea winds, STS304 or STS316 will get rusted in no time, and this will occur much faster than in other types of environments. These cases require special treatment, such as using painted stainless steel or regular cleaning.

6. Rusts from disinfectants or cleaning agents

- Sites, such as pools or public baths, that use chlorine-based agents to sterilize the water, especially those for cleaning bathrooms, contain chlorine content that attaches to and rusts the stainless steel surface. Thus, it is important to thoroughly wash off such agents after using them, and a 15% nitric acid solution or commercially available stainless steel cleaner are required for removing this type of rust.

Cleaning Method

[Cleaning the ice box and water tank]

- Set the power switch to OFF.
 * If the product was in ice making operation, it stops after delivering current cubes.
- 2. Unplug the power cord from the outlet.
- 3. Close the water valve.
- 4. Open the door of the ice maker.

Caution Be careful not to bump your head into the edge of the door while it is open.

- 5. Remove the sensors from the front and side of the water tank.
- 6. Remove 1 bolt on the right of the ice damper.
- 7. Remove 2 bolts on left and right and remove the tank. Remove the ice probe sensor at the water distribution cover.
- 8. Remove the 2 bolts at the top to disassemble water distribution cover.
- 9. Distill 0.022 lb of mile detergent for dish washing with 0.79 gal of warm water $93 \sim 113$ °F and immerse a clean cloth in the distilled solution to clean the parts where the ice tank and the distribution cover were removed.
- 10. Wash the disassembled water tank, water distribution cover and ice damper with distilled mild detergent.



Door

High water

level sensor

Ice probe sensor

Water tank

Water distribution ICE

OFF

WASH



10. Reassemble in the reverse order.



Assemble the high water level sensor on the front as in the figure. (Make sure that the topmost and bottom holes from the 6 holes of the fixing clip are left unused.)

Caution

Make sure that the top projected part of the water distribution cover goes under the opposite surface.







* Make sure to clean the product at least once a month.

[How to clean air filter]

 Pull the air filter from the front grille to the left, remove dust with a vacuum cleaner and wash with lukewarm water(about 75 °F) or mild detergent. Completely dry the filter before inserting into the grill again.

Front grille-



* Make sure to clean the product at least once a month.



Ice machine cleaning and sanitizing

The type and concentration of sanitizing agent(Ice Maker Cleaner, Sanitizer, mild or neutral detergent, and so forth)recommended Comply with 40 CFR 180.9403 or

Be registered with the USA Office of pesticides program Antimicrobials Division As a food contact sanitizer and

- If produced by a device, as defined per 40 CFR 152.5003, be demonstrable to be efficacious per USEPA performance. The device shall maintain a USEPA Site manufacturing device establishment number and
- If produced by a device, as defined per 40 CFR 152.5003, have in place and readily discernable to the operator a monitor or indicating device that the device is producing adequate amounts of sanitizing agent during the sanitization operation.

General Information

End user has liability for maintenance of ice machine according to manual. Maintenance procedure is out of coverage under insurance. Proper management of hygiene and maintenance of ice machine enhance reliability and performance of the machine owned by end user as well as decrease water and electricity consumption.

Unwanted repairs would be minimized caused lacking of maintenance if ice machine is managed in accordance with our regulatory guidelines. The table in below indicates least requirements of maintenance activities and frequencies of them carried out by end user and service engineers.

The values are the minimum requirements. Evaporator needs to be cleaned more often if water under improper condition is supplying to ice machine. Dust off and clean condenser more frequently every week if its air filter was clogged completely.

*** Warning**

Consult with dealer of service center of ice machine to perform maintenance if you don't understand mandatory safety notices and procedures.

Interior cleaning and sanitization

General information

Clean and sanitize ice machine every six months in order for efficiencient operation. Consult a qualified service agency to test water quality and take appropriate treatment if ice maker requires more frequent cleaning and sanitizing.

Ice machine must be taken apart for cleaning and sanitizing if interior of ice machine is not in good condition.

*** Caution**

Use only approved Ice Machine Cleaner and Sanitizer (Purchase of Ice Machine Cleaner is possible at our company or our dealers)

Read and understand all labels printed on bottles before use.

Do not mix Ice Machine Cleaner and Sanitizer solutions together for use.

*** Warning**

Wear rubber gloves and safety goggles(and or face shield) when handling Ice Machine Cleaner or Sanitizer.

Cleaning Procedure

Ice machine cleaner is used to remove lime scale and mineral deposits.

It can't be used to remove algae and slime.

Refer to sanitization procedure following page for removal of algae and slime.

Cleaner	Water
150 ml (5.3 oz)	4 Liter
Sanitizer(5.25% Sodium Hypochlorite)	Water
200 ml (7.05oz)	5 Liter

Mix 4 liters of water and 150ml of sanitizer together in plastic or stainless steel container.

Step 1. Set the switch off after ice falls from the evaporator at the end of a Harvest cycle. Or, set the switch off and allow Harvest and ice falling cycle finish automatically to stop the machine.

Caution!

Never use anything to force ice off from the evaporator. Damage may result.

Step 2. Remove all ice from the bin. (Move all ice to proper container in case of reusing ice) Warning!

Disconnect electricity power to ice machine at the electric switch box before proceeding.

Step 3. Remove parts for cleaning.

- Open the Bin Door. Remove The Sensors located on the Water Container's front and side. Disassemble the Ice Damper, the Water Container and the Water Distribution Tube by removing screws.
- Step 4. Soak all components into a solution of 4 liters of cleaner and water mixture. Use a nylon brush or cloth to clean the components thoroughly. Soak the parts for 15~20 minutes for heavily scaled parts. Shake the parts occasionally. Lukewarm water is better for cleaning. Rinse all parts and components thoroughly with clean water.

- Step 5. While components are soaking into the solution, use a soft bristle brush to clean food zone surface of bin. Clean interior of door, door rail, bin and evaporator mounting bracket thoroughly and rinse them with clean water.
- Step 6. Replace all removed parts after cleaning
- Step 7. Set the switch to WASH position to start automatic cleaning. Water is supplying automatically.Add 40ml of cleaner to the Water Container.(Place the switch in the OFF position when adding the cleaner to the Water Container)
- Step 8. Wait until the cleaning cycle is complete(approximately 21 minutes) then place the switch in the OFF. Turn the switch back in WASH and Repeat the wash cycle when cleaner residue still stay in the Water Container.
- Step 9. Lime scale and mineral deposits disappear when cleaning and rinsing is complete. If foam is found in the Water Container and rinse is incomplete, Repeat step 8 once again.
- Step 10. Cleaning is complete in Step 9. Step 10 is sanitization. Proceeding with sanitization once a month is essential. All components in step 3 are soaking into a solution of 5 liters of sanitizer and water for 10 minutes for sanitization. Run over or add the solution to the large size of parts. Rinse the parts thoroughly. Use running tap water only for rinse to prevent contamination. Dry the parts naturally by not using cloth or sponge.
- Step 11. Use solution of mixed sanitizer and water. Use a cloth or soft bristle brush to clean food zone surface of bin. Clean bin door, door rail, storage bin and evaporator mounting bracket thoroughly and rinse with running tap water to prevent contamination.
- Step 12. Replace the part. Place the switch in OFF position.
- Step 13. Set the switch to WASH position to start automatic cleaning. Water is supplying automatically. Add 30ml of sanitizer to the Water Container.
- Step 14. Wait until the sanitization cycle is complete (approximately 21 minutes) then place the switch in the OFF. Turn the switch back in WASH and Repeat the sanitize cycle when sanitizer residue still stay in the Water Container.
- Step 15. Set the switch in ICE position and operate the ice machine. Ice machine is switched to ice making cycle. Discard all ice made in the first cycle. Use ice made from second cycle.





Product error guide

Туре	Cause	Display Lamp	Solution	Release	Status
No water supply	No water supply in time	POWER lamp blinks	 Check the amount of water supply Check the connections 	Automatically it converts to initial mode after 1 hour after turning off, or it releases the error when the machine is switched to stop mode	Stop
Ice making delayed	No completed ice making within 65min. (10sec detection of Float_L)	POWER lamp blinks	 Clean the condenser Clean the evaporater Use machine under the ambient tempertature of 109.4 °F Check the cool section (Contact with service center) 	Releases the error when the machine is switched to stop mode	Stop
Harvest delayed	No dispensing icecube whithin 5min (Non-sensing ICE FULL) : happens 3 times in a row	POWER lamp blinks	 Clean the evaporator (remove incompleted icecube) Use the machine over the ambient tempertature of 41 °F : Avoid over cooling environment Check the cool section (Contact with service center) 	Releases the error when the machine is switched to stop mode	Stop
Detected a full load of ice	Storage is full of ice	FULL lamp is on	Remove some ice	When undetection of ICE FULL at a double check(Low), it automatically converts to ice making mode	Stop
High pressure error	Detecting high pressure swith disorder(High) for 10sec.	POWER lamp blinks and ERROR lamp is on	 Clean the condenser Check the fan motor working and contact an expert 	Releases when detected normal working of high pressure switch for 10sec, (Low), it converts to initial mode	Stop
High pressure error	Detecting high pressure swith disorder(High) 3 times in a row	POWER lamp and ERROR lamp blinks		Automatically it converts to initial mode 1 hour after turning off, or it releases the error when the machine is switched to stop mode	Stop

Ice probe sensor

- To maintain the ice bridge thickness of 55 mm(0.22in), the height of the sensor is fixed by factory default.
- When ice is too thick, rotate the control counterclockwise for adjusting the thickness.
- If you want to make the ice thicker, rotate the control screw clockwise. To make it thinner, rotate the control screw counter-clockwise. If you rotate the control screw one round, as shown in the right figure, the sensor moves in the arrow direction and the ice thickness is adjusted by 0.7mm(0.03in).
- Periodically clean the sensor part. When contaminated, the ice may not be even in thickness.



Control Screw

Ice Making and Detachment Operations

- When ice cubes are made at the ice making evaporator, low water level sensor works and ice delivery starts.
- As the evaporator is sloped like a dice, ice cubes will automatically fall into the ice tank and are collected when they are removed by high pressure gas.



Maintenance

1. General maintenance and check

- The user must install and use the product as mentioned in this manual.
- If you cannot understand the installation procedure and satety instructions, contact the service agency.
- To use the product for a long time, maintain the product according to the following procedure every month.

2. Checking the ice maker

- Be sure to turn off the power first.
- For preventing water leak, check all connection parts and pipelines.
- Be careful not to have vibration caused by rubbing between the cooling plate and other plates
- For ventilation, do not place any other materials near the ice maker.
- Be sure to clean the condenser filter on the front panel one or more times in a month.



Maintenance schedule

- * Following maintenance schedule is for reference.
- * More frequent maintenance will be needed in accordance with the local hygiene regulations, water quality, and conditions of the site.

Inspection schedule	Area	Details
Daily	SCOOP	 Clean the ice scoop with mild detergent. Make sure that the scoop is completely rinsed.
Monthly	Air Filters (Air cooled model)	 Check for any dust and clean dirty parts with warm water and mild detergent.
	Outside water filter	1. Check if the pressure is appropriate and adjust as needed.
	Outside of ice maker	 Clean with clear and soft cloth applied with mild detergent to clean any accumulated dust or oil. Use nonabrasive detergent to clean any part discolored by chlorine(green spots).
Every 6 months	Ice maker and ice storage tank	 Make sure to clean them in accordance with the instruction on the user manual. Frequently check if these are clean.
	Parts inside ice tank area	1. Separate each part and wash them with detergent.
	Condenser (Air cooled model)	1. Check if cleaning is done properly. Use a brush or a vacuum cleaner as needed.
Yearly	Water inlet valve and drain valve	 Close the valve to block the water supply hose and drain water. Clear the port of the water inlet valve and check if the water inlet valve and drain valve leak or operate properly.
	Water hose	1. Check the hoses and clear or replace them as needed.

What to check

[Sensor system]

- 1. Fill-up sensor
 - This ice maker is designed as a type of ice storage system.
 - The automatic sensor detects when the amount of ice reaches the threshold and stops making ice.
 - The sensor also detects when the user takes out some ice cubes and resumes the ice making process so that fresh batch of ice is supplied.
 - This ice maker operates automatically as a fixed system.
- 3. Ice level detecting sensor
 - Height of the sensor is set to maintain specific quantity of ice cubes as factory default.
 - If you need thicker ice cubes, set the sensor bracket at the front part higher, and lower the bracket if you need thinner ice cubes. (Refer to page 26 for details)
 - Make sure to clean around the sensor on regular basis.
 Thickness of ice cubes will vary if the sensor gets contaminated.



Water tank



High water level sensor

Before contacting the customer service center

If the ice maker operation is not in good status, check the following items. If the symptom still persists, contact the purchased site.

Operational status	What to check	Measures		
1. Ice maker does not work	1. Is Power supplied?	1. Supply power.		
	2. Is the power switch set at "ICE"?	2. Set the power switch at "ICE".		
	3. Is power supplied at 115 V \pm 10 %?	3. Check the power and make sure to use the proprietary plug.		
	1. Is water valve closed?	1. Open the water valve.		
2 Water is not	2. Is water inlet hose installed properly?	2. Check and take necessary measures.		
supplied.	3. Is water working?	3. Check the water source.		
	4. Is water valve working?	4. Check and contact the customer service center.		
 The product works but fails to make quality ice cubes. (Ice quality is poor 	 Check if the water distributor is not clogged. 	 Remove any foreign object from the water distributor hole. 		
	2. Is water working?	 Remove any foreign object from the filter of water supply valve. The tap has to be closed for this. 		
	3. Is compressor working?	3. Check and contact the customer service center.		
	4. Is the air filter at the front part dusted and ventilation is poor?	4. Clean the air filter thoroughly.		
large)	5. Is the fan motor of the condenser running?	5. Check and contact the customer service center.		
	Is there any heat source or heating device around?	6. Make sure that any heat source has to be as far from the ice maker as possible.		
	7. Is sufficient water supplied, or does the water tank have enough water?	 Check water supply and try turning off the product and turn it back on. 		
4. This is not a malfunctioning case.	 Water flowing inside the storage tank is not malfunctioning and is for adding flexibility to movement of ice cubes. The product may vibrate a bit but it is not a malfunctioning case. 			
5. Ice cubes are	 Is the ambient temperature around the ice maker lower than 41 °F? 	 Ambient temperature around the ice maker must be higher than 41 °F. 		
too cold.	2. Is water sufficiently supplied?	2. Lack of water causes overcooling. Control the amount of supplied water.		
 Ice maker is too noisy or makes strange noises. 	1. Is the floor level stable or solid enough?	1. Make sure that the floor is fully even.		
7. Ice tank is filled with water.	1. Is drain hose clogged?	1. Remove any foreign object from drain hose.		

Specifications

11			Specifications				
π	em	UNIT	IU-0170-AC IU-0170-AH		IC-0170-AC	IC-0170-AH	
Max ice makir	kimum ng capacity	lb/day	170				
Cooling	capacity	32℃	lce cubes a	Ice cubes are produced 30 minutes after powe		powering on	
Storage	capacity	lb		77	.1	13	2.2
Dime W x (includ	ensions D x H ling foot)	inch	26.0 x 1	27	.3 × 39.0	26.0 x 27	7.3 x 44.9
Power	source	Single phase			115 V ,	/ 60 Hz	
Rated	current	А			7.	.0	
Deelvine	Before	lle	1	54	1.3	16	5.3
Packing	After C	ai	1	71	.9	18	2.9
	Compressor	kcal/h			10	72	
Freezing	Refrigerant	GAS			R-4	04A	
capability	Condenser	Air cooling			Fin-tuk	be type	
lce :	shape	-	DICE		HALF DICE	DICE	HALF DICE
Size of ice	e / quantity	inch	0.86 x 0.86 x 0.8 / 126	86	0.37 x 1.14 x 0.86 / 180	0.86 x 0.86 x 0.86 / 126	0.37 x 1.14 x 0.86 / 180
Cooling	g method	-			Air coole	ed model	
lce thickr	ess control	-			High water	level sensor	
lce deliv	ery control	-			Low water I	evel sensor	
lce detectio	fill—up on control	-	Full-tank sensor				
High p switch	oressure I sensor	-	Automatic recovery based on high pressure switch(HPS			re switch(HPS)	
Time	control		MICOM-CONTROL				
Operating	temperature	_	Temperature of supplied water : 50 \sim 90 °F Ambient temperature : 41 \sim 100.4 °F Water pressure : 14.22 \sim 71.12 psig				

* The maximum calculated production is based on ambient temperature and a water temperature of 50 °F. There may be deviations depending on the installation conditions, which may become severe during high temperature periods, such as summer.

Specifications

14			Specifications				
IU	em	UNIT	IU-0220-AC	IU-0220-AC IU-0220-AH IC-0220-		IC-0220-AH	
Max ice makir	kimum ng capacity	lb/day	220				
Cooling	capacity	32℃	Ice cubes are	e produced 30	minutes after	powering on	
Storage	capacity	lb	77	' .1	13	2.2	
Dime W x (includ	ensions D x H ling foot)	inch	25.9 x 27	25.9 x 27.3 x 37.9		7.3 x 44.0	
Power	source	Single phase		115 V ,	/ 60 Hz		
Rated	l power	W		1070	(MAX)		
Packing	Before	lh	15	4.3	16	5.3	
1 dering	After		17	1.9	18	2.9	
	Compressor	kcal/h		13	49		
Freezing	Refrigerant	GAS	R-404A				
Capability	Condenser	Air cooling		Fin-tube type			
lce :	shape	<u></u>	DICE	HALF DICE	DICE	HALF DICE	
Size of ice	e / quantity	inch	0.86 x 0.86 x 0.86 / 126	0.37 x 1.14 x 0.86 / 180	0.86 x 0.86 x 0.86 / 126	0.37 x 1.14 x 0.86 / 180	
Cooling method		-		Air coole	ed model		
lce thickn	Ice thickness control -			High water	evel sensor		
lce delive	ery control	-		Low water I	evel sensor		
lce detectio	Ice fill-up detection control		Full-tank sensor				
High volta	age sensor	-	Automatic recovery based on high voltage switch(HPS)			e switch(HPS)	
Time	control			MICOM-C	CONTROL		
Operating	temperature	_	Temperature of supplied water : 50 \sim 90 °F Ambient temperature : 41 \sim 100.4 °F Water pressure : 14.22 \sim 71.12 psig				

* The maximum calculated production is based on ambient temperature and a water temperature of 50 °F. There may be deviations depending on the installation conditions, which may become severe during high temperature periods, such as summer.

Specifications

11			Specifications					
It	em	UNIT	IU-0270-AC IU-0270-AH IC-0270-A			IC-0270-AH		
Max ice makir	kimum ng capacity	lb/day	270					
Cooling	capacity	32℃	lce cubes a	Ice cubes are produced 30 minutes after powerin		powering on		
Storage	capacity	lb	7	7.1	13	2.2		
Dime W x (includ	ensions D x H ling foot)	inch	25.9 x 2	7.3 x 37.9	25.9 x 27	7.3 × 44.0		
Power	source	Single phase		115 V ,	/ 60 Hz			
Ratec	l power	W		1400	(MAX)			
Dealing	Before	lla	15	54.3	16	5.3		
Packing	After C	ai	17	1.9	182.9			
	Compressor	kcal/h	1678					
Freezing	Refrigerant	GAS		R-4	.04A			
capability	Condenser	Air cooling		Fin-tuk	be type			
lce :	shape	-	DICE	HALF DICE	DICE	HALF DICE		
Size of ice	e / quantity	inch	0.86 x 0.86 x 0.86 / 126	0.37 x 1.14 x 0.86 / 180	0.86 x 0.86 x 0.86 / 126	0.37 x 1.14 x 0.86 / 180		
Cooling method		-		Air coole	ed model			
lce thickr	Ice thickness control			High water	level sensor			
lce deliv	ery control	-		Low water I	evel sensor			
lce fill-up detection control		-	Full-tank sensor					
High volta	age sensor	-	Automatic recovery based on high voltage switch(HPS			e switch(HPS)		
Time	control		MICOM-CONTROL					
Operating	temperature	_	Temperature of supplied water : $50 \sim 90$ °F Ambient temperature : $41 \sim 100.4$ °F Water pressure : $14.22 \sim 71.12$ psig					

* The maximum calculated production is based on ambient temperature and a water temperature of 50 °F. There may be deviations depending on the installation conditions, which may become severe during high temperature periods, such as summer.



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