



Commercial Ice Machine



User's Manual

Model: VPIM-420/1000

Be sure the ice machine has been standing upright
for at least 24 hours prior to plug-in.



Valpro Commercial Refrigeration
5256 EagleTrail Drive Tampa, Florida 33634
Email: info@valpromail.com
<http://www.valprorefrigeration.com>

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We reserve the right to make changes in specifications and design without prior notice.

NOTICE: Model IM-420 is an ice-making unit and does not include an ice storage bin. If you order a bin, please follow this manual and the manual accompanying the bin regarding installation, adjustment of storage bin feet, cleaning, water drainage, etc.

ICE MAKER SAFETY

Your safety and the safety of others are very important. We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.



This is the Safety Alert Symbol. This symbol alerts you to potential hazards that can injure or kill you and others. All safety messages will follow the Safety Alert Symbol and either the words "DANGER", "WARNING" OR "CAUTION".

⚠ DANGER ⚠

DANGER means that failure to heed this safety statement may result in death or severe personal injury.

⚠ WARNING

WARNING means that failure to heed this safety statement may result in extensive product damage, serious personal injury, or death.

CAUTION

CAUTION means that failure to heed this safety statement may result in minor or moderate personal injury, or property or equipment damage.

All safety messages will alert you to what the potential hazard is, tell you how to reduce the chance of injury, and let you know what can happen if the instructions are not followed.

IMPORTANT SAFETY INSTRUCTIONS

WARNING: To reduce the risk of fire, electric shock or injury, when using your ice maker, follow these basic precautions:

- Plug into grounded 3-prong outlet
- Do not remove grounding prong
- Do not use an adapter
- Do not use an extension cord
- Disconnect power before cleaning
- Disconnect power before servicing
- Replace all panels before operating
- Use 2 or more people to move and install ice maker

SAVE THESE INSTRUCTIONS

| Problem | Possible Cause | Probable Correction |
|--|--|---|
| Cubes are partially formed--are white at the bottom. | Not enough water in the water bin. | Check if the water supply pressure is below 20psig. |
| | | Check water supply--filter may be restricted. |
| | | Check for a water leak at the water tank. |
| The icemaker stops suddenly while making ice. | The electricity is off. | Reconnected the power supply line. |
| | The room temperature is out the state range. | Cut off the electricity; let the ice maker stop working till the temperature returns within the stated range. |
| The body of the ice maker is electrified | The earth line isn't in the socket. | Please use the socket meeting the standard. |
| Scales occur frequently inside the machine. | The hardness of the water quality is too high. | Using a water-soften apparatus installed in front of the water inlet. |
| The ice cubes are not completely formed when being dumped. | The sprinkler is blocked. | Clean the sprinkler, see "interior cleaning" |

Troubleshooting

Before Calling for Service

If the unit appears to be malfunctioning, read through the OPERATION section of this manual first. If the problem persists, check the Troubleshooting Guide below and on the following page. The problem may be something very simple that can be solved without a service call.

Troubleshooting Guide

| Problem | Possible Cause | Probable Correction |
|---|--|---|
| The machine doesn't operate | The ice maker is unplugged. | Plug the ice maker in. |
| | The fuse is blown. | Replace fuse--if it happen, call for service to check for a short circuit in the ice maker. |
| | The ice storage bin is full of ice. | Take away some ice, make the ice-full sensor is free of ice. |
| The water doesn't feed in after the ice maker starts. | The water supply tap is turn off. | Turn on the water supply tap. |
| | The water supply pipe is not proper connected. | Reconnect the water supply pipe. |
| Machine makes ice, but bin does not fill up with ice | The condenser may be dirty. | Clean the condenser. |
| | The air flow to the ice maker may be obstructed. | Check the installation. |
| | The ambient temperature and water temperature are high, or it is near with some heat resource. | Check the installation. |
| Water is leaking out the unit. | A few water drops to the floor when you open the door to take out ice from ice storage bin. | Normal condensation on the door or some water together with ice. Take care when you take out ice. |
| | Water supply connection leaks. | Tighten fitting. See Connecting the water line. |

IMPORTANT SAFEGUARDS



Before the ice maker is used, it must be properly positioned and installed as described in this manual, so read the manual carefully. we strongly recommends that you have a professional install your new machine. The warranty may be affected or voided by an incorrect installation. To reduce the risk of fire, electrical shock or injury when using the ice maker, follow basic precautions, including the following:



It is recommended that a separate circuit, serving only your ice maker, be provided. Use receptacles that cannot be turned off by a switch or pull chain.

- Do not connect or disconnect the electric plug when your hands are wet.
- Never unplug the ice maker by pulling on the power cord. Always grip the plug firmly and pull straight out from the outlet.
- Never clean ice maker parts with flammable fluids. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance. The fumes can create a fire hazard or explosion.
- Before proceeding with cleaning and maintenance operations, make sure the power line of the unit is disconnected and the water line is shut off. (EXCEPTION: When cleaning the machine's ice making and water systems, see pages 23 – 26.)
- Before operating, put all the enclosure panels back into their original place.
- Do not touch the evaporator with your hand when the machine is operating.
- Unplug the ice maker or disconnect power before cleaning or servicing. Failure to do so can result in electrical shock or death.
- Do not attempt to repair or replace any part of your ice maker unless it is specifically recommended in this manual. All other servicing should be done by a qualified technician.



- Use two or more people to move and install ice maker. Failure to do so can result in back or other injury.
- To ensure proper ventilation for your ice maker, the front of the unit must be completely unobstructed. Choose a well-ventilated area with temperatures above 50°F (10°C) and below 100°F (38°C). This unit **MUST** be installed in an area protected from the elements, such as wind, rain, water spray or drips.
- The ice maker should not be located next to ovens, grills or other sources of high heat.
- The ice maker must be installed with all electrical and water connections in accordance with state and local codes. A standard electrical supply, properly grounded in accordance with the National Electrical Code and local codes and ordinances, is required.
- Do not kink or pinch power supply cord or drain lines between ice maker and cabinet.
- The fuse (or circuit breaker) size should be 20 amperes.
- It is important for the ice maker to be leveled in order to work properly. You may need to make several adjustments to level it.
- All installations must be in accordance with local plumbing code requirements.
- Make certain that the hoses are not pinched or kinked or damaged during installation.
- Check for leaks after connection.
- Remove the packing materials and clean the ice maker before using.
- Turn on the water supply tap before switching on the ice maker. Never turn the water supply tap off when the ice maker is working.
- Except to take ice from the unit, keep the door closed in order to reduce ice melting and to promote proper ice formation.
- Although the unit has been tested at the factory, due to long-term transit and storage, the first batch of cubes must be discarded.
- Press the **STANDBY** button to switch off the unit. **DO NOT** unplug it when the unit is on.
- If the ice maker will not be used for a long time, before the next use it must be thoroughly cleaned. Follow carefully any instructions provided for cleaning or use of sanitizing solution. Do not leave any solution inside the ice maker after cleaning.
- **DO NOT** touch the condenser fins. The condenser fins are sharp and can be easily damaged.
- **DO NOT** use solvent-based cleaning agents or abrasives on the interior.

When this LED is on, the unit is working in the cleaning mode.

6. **Cleaning Recommended (White) LED:** Cleaning Recommended indicator light

When this LED is on green shows the water filter work well. When this LED is on yellow shows the water filter work well but approaching working bad. When this LED is on red shows the water filter should be replaced by a new one.

7. **ICE button**

While the unit is in Stand-by mode (all LEDs is on), you can press ICE button to start the Automatic Ice Making procedure. The green ice making indicator light will be on.

8. **CLEAN button**

While the unit is in Stand-by mode (all LEDs is on), you can press CLEAN button to start the Automatic Clean procedure. The green Clean Cycle indicator light will be on.

9. **STANDBY button**

While the unit is in ice-making or cleaning mode, you can press STANDBY button to enter the Stand-by mode:

- A- When the unit is in ice-making stage, and you press the STANDBY button, ice machine will enter the ice harvest mode directly (ice harvest indicator light will be on). After ice harvest is over, the unit will drain out the water in the water tank (standby indicator light will flash). Then the unit will be in the Stand-by mode, and the standby indicator light will be on.
- B- When the unit is in ice harvest stage, and you press the STANDBY button, after ice harvest is over, the unit will drain out the water in the water tank (standby indicator light will flash). Then the unit will be in the Stand-by mode, and the standby indicator light will be on.
- C- When the unit is in bin full, water enter water tank or cleaning stage, and you press the STANDBY button, ice machine will drain out the water in the water tank directly (standby indicator light will flash). Then the unit will be in the Stand-by mode, and the standby indicator light will be on.

IMPORTANT:

- The ice cube size is set well before the ice machine packaging in the factory, if it is not necessary, we do not recommend adjust the ice cube size often.

- on. If you want to restart the ice-making process after cleaning, press the ICE button directly more than 3 seconds and the ice machine will automatically go into the ice-making process.
6. If you want to interrupt the cleaning mode before it is finished, do not press the CLEAN button again. Instead, press the STANDBY button more than 3 seconds, this will stop the cleaning mode.
 7. If you want to adjustment the size of individual ice cubes, make sure ice machine is in Stand-by mode, you can press the STANDBY button more than 5 seconds to enter adjustment stage, then through press ICE button to increase the thickness of ice cubes, and press CLEAN button to decrease the thickness of ice cubes. When you press ICE or CLEAN button one time, the thickness of ice cubes will increase or decrease 5%, and the most you can press ICE or CLEAN button is 10 times.
When the adjustment is done, you should press STANDBY button to confirm the adjustment.
 8. If the machine is on but the *Ice Making*, *Ice Harvest* and *Bin Full* three indicator lights is blinking, which indicate that there is not enough water in the system. Firstly check if you turn on water supply tap or not, then check the pressure of water supply, etc.

Descriptions of LEDs and buttons:

1. **Standby (Red) LED:** Stand-by indicator light
When this LED is on, the ice machine is in Stand-by mode. The unit doesn't work, and the red LED will be on. When this LED is flashing shows that the drain pump is working. After the water in the water tank drain out, the unit will return to the Stand-by mode.
2. **Ice Making (Green) LED:** Ice Making indicator light
When this LED is on, the unit is working in the ice-making mode.
3. **Ice Harvest (Yellow) LED:** Ice Harvest indicator light
When this LED is on, the unit is working in the ice harvest mode controlled by the ice slide way.
4. **Bin Full (Red) LED:** Ice Full indicator light
When this LED is on, the ice storage bin is full of ice cubes or there is something obstructing the ice slide way. The unit will stop working. When ice cubes are removed from the ice storage bin, clearing the ice slide way, the unit will restart and return to the ice-making mode.
5. **Clean Cycle (Green) LED:** Clean Cycle indicator light

These cleaners may transmit taste to the ice cubes, or damage or discolor the interior.

- The ice machine cleaner contains acids. DO NOT use or mix with any other solvent-based cleaner products. Use rubber gloves to protect hands. Carefully read the material safety instructions on the container of the ice machine cleaner.
- Do not use this apparatus for other than its intended purpose.

SAVE THESE INSTRUCTIONS

Electrical Connection

Do not, under any circumstances, cut or remove the third (ground) prong from the power cord. For personal safety, this appliance must be properly grounded. The power cord of this appliance is equipped with a 3-prong grounding plug that mates with a standard 3-prong grounding wall outlet to minimize the possibility of electric shock hazard from the appliance. Have the wall outlet and circuit checked by a qualified electrician to make sure the outlet is properly grounded. When a standard 2-prong wall outlet is encountered, it is your responsibility and obligation to have it replaced with a properly grounded 3-prong wall outlet.

The ice maker should always be plugged into its own individual electrical outlet which has a voltage rating that matches the rating label on the appliance. This provides the best performance and also prevents overloading house wiring circuits which could cause a fire hazard from overheated wires. Never unplug your ice maker by pulling on the power cord. Always grip the plug firmly and pull straight out from the outlet. Repair or replace immediately all power cords that have become frayed or otherwise damaged. Do not use a cord that shows cracks or abrasion damage along its length or at either end. When moving the ice maker, be careful not to damage the power cord.

Extension Cord

Because of potential safety hazards under certain conditions, it is strongly recommended that you do not use an extension cord with this ice maker.

Technical Information

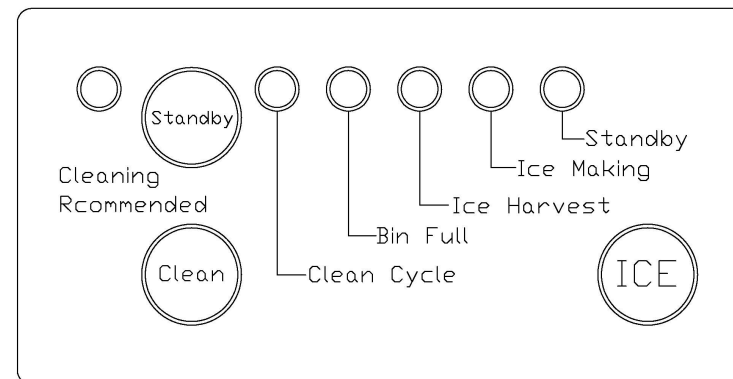
| Model | VPIM420 | VPIM1000 |
|---------------------------|---------------------------|---------------------------|
| Electrical input | 115VAC ~ 60Hz | 230VAC ~ 60Hz |
| Power consumption | 2.4kW • h /100 lbs of ice | 5.6kW • h /100 lbs of ice |
| Ice-making rated current | 13.8A | 13.6A |
| Ice-harvest rated current | 15.8A | 10.8A |
| Refrigerant | R404A, 30.3 oz. | R404A, 52.9 oz. |
| High Side Pressure | 340psig | 464psig |
| Low Side Pressure | 180psig | 180psig |
| Width x Depth x Height | 30" X 25" X 22 7/16" | 30" X 25" X 27 3/4" |
| Unit weight | 135 lbs | 227 lbs |
| Ice-making capability | 420lbs/day* | 1000lbs/day* |

*The actual quantity of ice produced per day can vary with room and water conditions.

The technical data and performance index listed above should be used for reference only. They are subject to change.

This product has been tested and certified to NSF standard 12 by INTERTEK.

Control Panel (located at top of right side panel)



The control panel includes three buttons and six indicator lights.

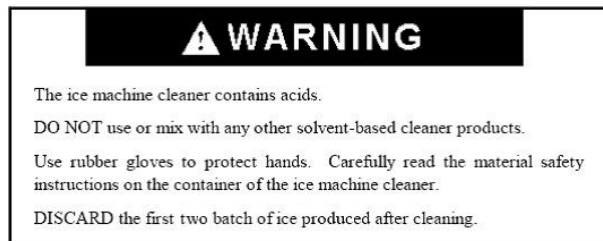
IMPORTANT:

- If you use a water filter and have already set the initial data of water filter, under any working status, the cleaning recommended indicator light will be on.
- If you do not use a water filter, you needn't set the initial data of water filter, and the cleaning recommended indicator light will be off under any working status.

Operation of the control panel:

1. When the unit is plugged in, the standby indicator light is on. Ice machine is in the Stand-by mode.
2. During the Stand-by mode, press the ICE button more than 3 seconds, all indicator lights are on (except cleaning recommended indicator light), water enter the water tank. Then ice machine will start to make ice automatically, the ice making indicator will be on.
3. During harvesting, the ice harvest indicator light is on and the ice making indicator is off. When the ice storage bin is full, the bin full indicator is on.
4. If the CLEAN button is pressed during the ice making mode, it will be ignored. The ice-making will continue.
5. When you want to clean the machine, make sure the ice machine is in Stand-by mode. Press the CLEAN button more than 3 seconds and the ice machine will start the cleaning mode, the clean cycle indicator will be on. After 60 minutes, the cleaning mode stops and the standby indicator light is

15. If you want to make ice cubes after cleaning, press the ICE button to start the ice –making cycle. When the ice machine start making ice, make sure the front door is reinstalled.
16. Discard the first two batches of ice.



Condenser Air Filter Cleaning

1. Remove the screws and pins holding the condenser air filter.
2. Remove the condenser air filter with a screwdriver.
3. Use a brush to wipe up and down the filter surface with a mild detergent solution such as 1 oz. of dishwashing liquid mixed with 2 gallons of warm water. Do not use solvent-based or abrasive cleaners. Rinse the filter with clean water several times.
4. Air-dry the filter, and then reinstall it.

Introduction

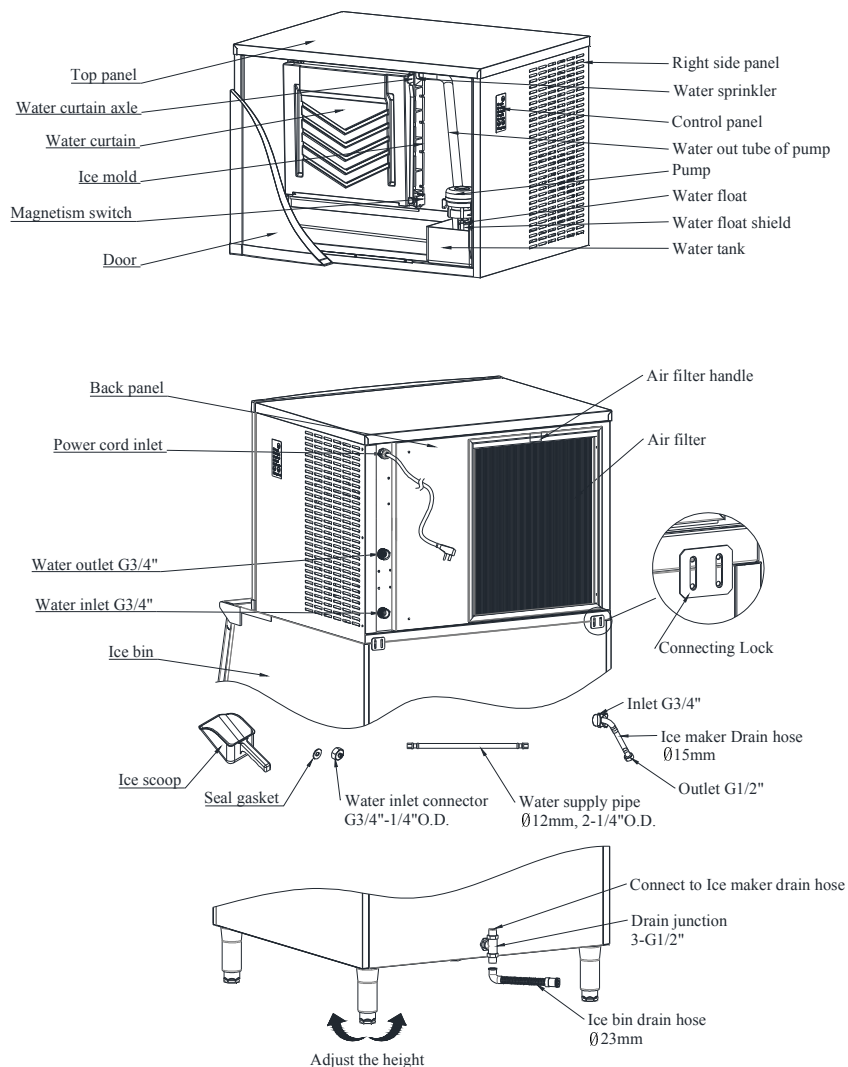
The model Refrigeration420 IM Series of Ice Cube Machine finds wide application in households, bars, restaurants, hotels, supermarkets, etc. These units produce crystal-clear, gourmet cube ice, and offer convenience for homeowners and hotel guests. An insulated ice storage bin is built into each ice cube machine.

This user's manual is intended as a resource for persons installing, using and servicing model IM-420. It contains valuable information on safety and maintenance. We strongly recommends that this manual be kept in a place where it can be accessed when needed.

The Ice Cube Machine is designed and manufactured according to the highest standards of safety and performance. It meets or exceeds the safety standard of UL563 and sanitation standard NSF12.

We assumes no liability or responsibility of any kind for products manufactured by us that have been altered in any way, including the use of any parts and/or other components not specifically approved by us. We reserves the right to make design changes and/or improvements at any time. Specifications and designs are subject to change without notice.

Component Locations



water tank.

5. Keep the ice maker connected to the water supply.
 6. Keep the ice maker is plugged in. Press the CLEAN button. The machine will run the Automatic Clean mode. The green clean cycle LED will be on.
 7. The first clean cycle will continue for about 30 minutes unless you press the STANDBY button (you can press the STANDBY button to stop the clean cycle any time during the clean cycle). After about 30 minutes, the drain pump work, the water in the water tank and the water line will be drain out.
 8. The water inlet valve work and the water enter the water tank. The second clean cycle begins. Repeat step 7 above two times to rinse the ice-making system completely.
- NOTE: Do not add Ice Maker Cleaner Solution to the water trough during the last two rinses.
9. After cleaning, the machine returns to Stand-by mode and red Standby LED is on. Others LEDs will be off (Except the Cleaning Recommended Indicator Light).
 10. Prepare a sanitizing solution made of 1 ounce of household bleach and 2 gallons of hot water (95° to 115°F). Wipe the entire bin inside and outside, including the entire body surface.

11. Fill a spray bottle with the sanitizing solution and spray all corners and edges, making sure to cover all surfaces with the solution.
12. Allow the solution to be in contact for at least 3 minutes, and dry it.
13. Repeat step 6 above to rinse the ice making system.

NOTE: Do not add Ice Maker Cleaner Solution to the water trough during rinsing stage.

14. After cleaning, the machine returns to Stand-by mode and red standby LED light. Others LEDs will be off (Except the cleaning recommended indicator light).

the sprinkler back to its original position. Be sure the holes straight down. If the sprinkler is badly blocked, clean it as follows:

1. Disconnect power to the unit and open the front door.
2. Shut off the water supply.
DO NOT use solvent-based cleaning agents or abrasives on the interior. These cleaners may transmit taste to the ice cubes, or discolor the interior, or badly damage.
3. Disconnect the water hose from the sprinkler.
4. Lift the one side up, and remove the sprinkler. Then disassemble two ends of the sprinkler.
5. A de-scaling solution can be prepared in a plastic basin with Nickel-Safe Ice Machine Cleaner. Mix 4 ounces of the ice machine cleaner per gallon of warm water.
6. Thoroughly clean the sprinkler parts by soaking them in the basin filled with the de-scaling solution until it is free of any deposit; use a soft brush to remove any thick or stubborn residue and to help the dissolving action. Rinse the sprinkler parts with clean water.
7. Reassemble the sprinkler.
8. Replace the sprinkler and water hose if in need.
9. Perform Ice-Making System Cleaning procedure as follows.

Ice-Making System Cleaning

Minerals that are removed from water during the freezing cycle will eventually form a hard, scaly deposit in the water system. Cleaning the system regularly helps remove the mineral scale buildup. How often you need to clean the system depends on how hard your water is or how effective your filtration may be. With hard water of 15 to 20 grains/ gallon (4 to 5 grains/liter), you may need to clean the system as often as every 3 months.

1. Press the STANDBY button to stop the unit work.
2. Remove all ice cubes from the storage bin.
3. Remove the front door of the ice maker.
4. Make sure the unit stop working. (the drain pump stop and standby LED is on green) Pour 8 oz. of Nickel-Safe Ice Maker Cleaner Solution into the

Ice Maker Installation

Unpacking

Remove packaging materials

IMPORTANT: Do not remove any permanent instruction labels or the data label on your ice maker.

Remove tape and glue from your ice maker before using,

- To remove any remaining tape or glue, rub the area briskly with your thumb. Tape or glue residue can also be easily removed by rubbing a small amount of liquid dish soap over the adhesive with your fingers. Wipe with warm water and dry.
- Do not use sharp instruments, rubbing alcohol, flammable fluids, or abrasive cleaners to remove tape or glue. These products can damage the surface of your ice maker.

Location Requirements

This ice maker should be installed by qualified personnel.

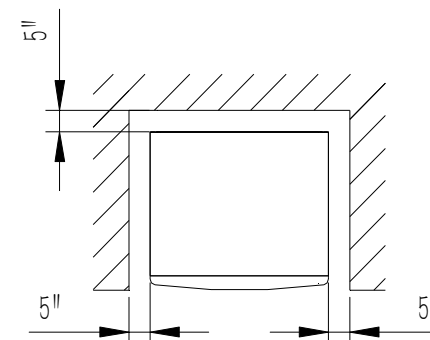
⚠ WARNING

Excessive Weight Hazard

Use two or more persons to move and install ice maker.
Failure to do so can result in back or other injury.

Installation clearance

Top view



Typical installation of ice storage bin

Connecting lock is attached to the upper rear edge of the ice storage bin. Close the lock by hand to connect the ice machine and ice storage bin.

- To ensure proper ventilation for your ice maker, you need keep the sides of the unit completely unobstructed.
- Choose a well-ventilated area with temperatures above 50°F (10°C) and below 100°F (38°C). This unit **MUST** be installed in an area protected from the elements, such as wind, rain, water spray or drips.
- The unit should not be located next to ovens, grills or other sources of high heat.
- Installation of the ice maker requires a cold water supply inlet of 1/4" (6,35 mm) soft copper tubing with a shut-off valve.
- The ice maker requires a continuous water supply with a minimum pressure of 15 psig and a static pressure not to exceed 80 psig. The temperature of the water feeding into the ice maker should be between 41°F (5°C) and 90°F (32°C) for proper operation.

WARNING

Normal operating ambient temperature should be between 50°F (10°C) and 100°F (38°C). Normal operating water temperature should be between 41°F (5°C) and 90°F (32°C). Operation of the ice maker for extended periods outside of these normal temperature ranges may affect production capacity.

- In general, it is always a good idea to filter the water. A water filter, if it is of the proper type, can remove taste and odors as well as particles.
- The ice maker must be installed with all electrical and water connections in accordance with state and local codes.
- The ice maker and bin should be located on a firm and level surface. It is important for the ice maker to be perfectly level for proper operation; otherwise water may not flow properly through the evaporator (ice mold). Ice production will be less than expected and operation will be noisy.

The feet of most bins can be rotated to adjust the height if necessary. Follow instructions accompanying the bin you purchase.

Interior Cleaning

Clean the water tank before the ice maker is used for the first time and reused after stopping for an extended period of time. It is usually convenient to sanitize the tank after the ice-making system has been cleaned and the ice storage bin is empty. The ice storage bin should be sanitized occasionally. Follow these steps to clean the tank and the bin:

1. Switch off the unit.

NOTE: If there is some rest water in the water tank, just plug in and through press the STANDBY followed by CLEAN button to drain out the water. When the ice machine is in the Stand-by mode, unplug unit.

2. Remove the front door of the ice maker before you remove the evaporator cover.
3. Using a sanitizing solution made of 1 ounce of household bleach or chlorine and 2 gallons of hot water (95° to 115°F), clean the water tank, evaporator cover, body surface and the ice bin with a clean cloth. To clean hard-to-reach corners, apply the sanitizing solution with a spray bottle.
4. Rinse thoroughly with clear water. This completes the interior cleaning of the ice maker and storage bin.
5. Reconnect power to the unit, and install the evaporator cover.
6. In Stand-by mode, press the CLEAN button, then press the STANDBY button to drain completely.
7. Perform Water Sprinkler Cleaning procedure as follows.

The ice scoop should be washed regularly. Wash it just like any other food container.

WARNING

DO NOT use solvent-based cleaning agents or abrasives on the interior. These cleaners may transmit taste to the ice cubes, or damage or discolor the interior.

Water Sprinkler Cleaning

When you find that the ice cubes are incompletely formed or the output of ice cubes is low, the water sprinkler may be blocked. Press the STANDBY button to power it off. Remove the front door of the ice maker. You will see the water sprinkler on the top of evaporator. Rotate the sprinkler so that the holes in it are facing up. Using a toothpick or similar tool, dredge the holes, then rotate

Cleaning and Maintenance

CAUTION

If the ice maker is left unused for a long time, before the next use it must be thoroughly cleaned. Follow carefully any instructions provided for cleaning or use of sanitizing solution. Do not leave any solution inside the ice maker after cleaning.

Periodic cleaning and proper maintenance will ensure efficiency, top performance, and long life. The maintenance intervals listed are based on normal conditions. You may want to shorten the intervals if you have pets or there are other special considerations.

What shouldn't be done?

Never keep anything in the ice storage bin other than ice: objects like wine and beer bottles are not only unsanitary, but the labels may slip off and plug up the drain.

What should be kept clean?

There are 5 things to keep clean:

1. The exterior
2. The interior
3. Water sprinkler
4. The ice-making system cleaning
5. Condenser Air Filter Cleaning

WARNING

Before proceeding with cleaning and maintenance operations, make sure the power line of the unit is disconnected and the water line is shut off. (EXCEPTION: Cleaning of ice-making system)

Exterior Cleaning

The exterior of the ice maker and bin may be cleaned with a soft cloth or sponge dampened with a mild detergent and warm water solution such as 1 oz of dishwashing liquid mixed with 2 gallons of warm water. Never use solvent-based or abrasive cleaning agents. Rinse with clean water. Wipe with a soft clean towel to prevent water spotting.

If the door panel is stainless steel, stainless steel can discolor when exposed to chlorine gas and moisture. Clean stainless steel with a mild detergent, warm water solution and a damp cloth. Never use an abrasive cleaning agent.

Electrical Requirements

⚠ DANGER ⚠



Electrical Shock Hazard

Plug into a grounded 3-prong outlet.
Never remove the grounding prong from the plug.
Never use an adapter.
Never use an extension cord.
Failure to follow these instructions can result in fire, electrical shock or death.

Before you move your ice maker into its final location, it is important to make sure you have the proper electrical connection. A standard electrical supply, properly grounded in accordance with the National Electrical Code and local codes and ordinances, is required. The ice maker should always be plugged into its own individual electrical outlet. It is recommended that a separate circuit, serving only your ice maker, be provided. Use receptacles that cannot be turned off by a switch or pull chain. The fuse (or circuit breaker) size should be 20 amperes.

Recommended grounding method

For your personal safety, this appliance must be grounded. It is equipped with a power supply cord having a 3-prong grounding plug. To minimize possible shock hazard, the cord must be plugged into a mating 3-pronged and grounding-type wall receptacle, grounded in accordance with the National Electrical Code and local codes and ordinances. If a mating wall receptacle is not available, it is the personal responsibility of the customer to have a properly grounded, 3-prong wall receptacle installed by a qualified electrician.

Connecting the power supply line

1. Feed a power supply cord (not included) and connect it with the two leads (black and white) at the back of the ice machine. The ground line should be connected also.
2. The other end of the power supply cord should be connected to an outlet that is in accordance with the local electrical code.

Water Supply

The water supply should be ready at the point of installation. The water supply pressure should be a minimum of 20 psig with a static pressure not more than 80 psig. (A wall outlet directly behind the ice maker will make installation easier.)

We strongly recommended the use of a water filter. A filter, if it is of the proper type, can remove taste and odors as well as particles and can prolong the life of the machine.

IMPORTANT:

1. All installations must be in accordance with local plumbing code requirements.
Professional installation is recommended.
2. Make certain that the hoses are not pinched or kinked or damaged during installation.
3. Check for leaks after connection.

Tools required: ½" and 1-3/16" open-end wrenches, Phillips screwdriver

Connecting the water line:

1. Turn off main water supply.
2. Get a water supply at most 80 inch from installation location. As the water pipe provided with the unit is about 80 inch long.
3. A shut-off valve should be installed to the main water supply. If the water pipe has a plain piece of copper tubing, attach a ¼" O.D. compression union to the tubing and remove the nut.
4. Take a ¾" to 1" O.D. fitting from the ice storage bin. Connect the fitting to water inlet. Tighten firmly by hand, then one-half turn with 1-3/16" open-end wrench. Then connect nuts of the water supply pipe to tap and the fitting. Tighten firmly by hand, then one-half turn with ½" open-end wrench.
5. Turn on main water supply and tap. Check for water supply connection leaks. Tighten every connection (including connections at the water inlet).

NOTE: If using a water filter, be sure to follow the filter manufacturer's directions.

Normal Sounds

Your new ice cube machine may make sounds that are unfamiliar to you. Most of the new sounds are normal. Hard surfaces like the floor and walls can amplify the sounds. The following describes the kinds of sounds that might be new to you and what may be causing them.

- Rattling noises may come from the flow of the refrigerant or the water line. Items stored on top of the ice cube machine can also make noises.
- The high-efficiency compressor may make a pulsating or high-pitched sound.
- Running water may make a splashing sound.
- You may hear air being forced over the condenser by the condenser fan.
- During the Harvest cycle, you may hear the sound of ice cubes falling into the ice storage bin.

Preparing the Ice Cube Machine for Long Storage

If the ice cube machine will not be used for a long time, or it is to be moved to another place, it will be necessary to drain the system of water.

1. Press the STANDBY button, the drain pump work, the water in the water tank and the water line will be drain out.
2. Shut off the water supply at the main water source.
3. Disconnect the water supply line from the water inlet.
4. Shut off the power supply at the main electrical power source.
5. Take out the ice storage bin to remove ice. (See page21-26), dry and replace the bin.
6. Leave the door open to allow for circulation and to prevent mold and mildew.
7. Leave the water supply line and power cord disconnected until ready to reuse.

IMPORTANT:

- Do not touch the power plug when your hands are wet. Never unplug the unit by pulling on the cord.

How the Machine Makes Ice

The machine is in Stand-by mode when plugged in. When the ICE button is pressed, it will automatically proceed to the ice-making stage.

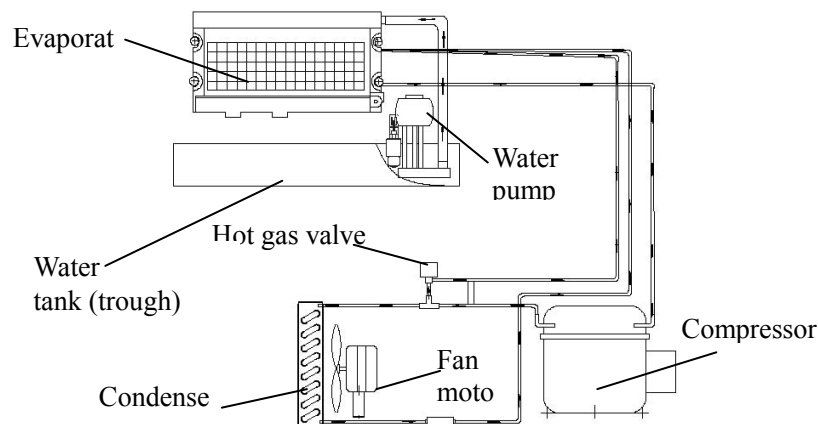
There are two distinct cycles: Freeze and Harvest. During the Freeze cycle, water flows to the evaporator surface. In the Harvest cycle, the ice is released. A complete cycle can take 15 to 40 minutes, depending on ambient temperature and operating conditions.

Freeze: During the Freeze cycle the compressor is pumping refrigerant, the fan motor is blowing air, and the water pump is circulating water. When the batch of ice has been fully formed, the ice maker stops the Freeze cycle and begins the Harvest cycle.

Harvest: During the Harvest cycle the compressor is still operating, but the water pump has stopped. The hot gas valve opens, diverting hot refrigerant gas into the evaporator. The gas warms the evaporator, causing the cubes to slide as a unit off the evaporator and into the storage bin. The Freeze cycle will restart when all the cubes drop into the bin.

How the machine uses water:

Each batch of ice is made of a fixed charge of water which enters to the water tank in several times during the ice-making stage. As the water flows to the freezing evaporator surface, the water will freeze and stick to the ice cube molds, and fresh water enters the water tank discontinuously as the water from the tank freezes continuously on the evaporator.



Installation Types

This ice maker has only been designed for mobile (free-standing) installation. There must be adequate air space around the unit for ventilation purposes. (See page 12.)

Mobile installation:

A mobile installation will allow you to install the ice maker free-standing in any place you desire provided you have access to a water supply. You must follow the stated instructions for

- a. Electrical requirements
- b. Water supply

Cleaning before use

After you remove all tape from the machine, clean the inside of your ice maker and ice storage bin before using them. See "Interior Cleaning" in the Cleaning and Maintenance section.

Operation

Final Check List before Operation

1. Have all packing materials and tape been removed from the interior and exterior of the ice maker?
2. Did you clean the ice storage bin? (See pages 21 - 26)
3. Have the installation instructions been followed, including connecting the machine to water and electricity?
4. Has the machine been leveled?
5. Is the ice cube machine in a site where the ambient temperature is between 50° F (10° C) and 100° F (38° C) and the water temperature between 41° F (5° C) and 90° F (32° C) all year round?
6. Has the water supply pressure been checked to ensure a minimum of 20 psig with a static pressure not to exceed 80 psig?
7. Is there a clearance of at least 6" at the rear and 6" at the sides for proper air ventilation?
8. Has the power supply voltage been checked or tested against the nameplate rating? And has proper grounding been installed for the ice cube machine?
9. Is the ice cube machine plugged in?
10. Have you turned on the main water supply and the tap?
11. Have you checked for leaks at all water supply connections?

Setting Initial Data of Water Filter

If you use a water filter, before usage the unit should be equipped with water filter as follows:

1. Plug in the unit, press the CLEAN button, the ice machine will run automatically in Clean mode. The green Clean Cycle LED will be on. Then press the CLEAN button more than 6 seconds, it begins to clean, and the Cleaning Recommended Indicator Light will be on. And under any working status after equipped with water filter, the Cleaning Recommended Indicator Light will be on.
2. Then press the STANDBY button to drain out the water, leave the ice machine in the Stand-by mode. If it proceeds to the ice-making stage, please press the ICE button to make ice.

NOTICE:

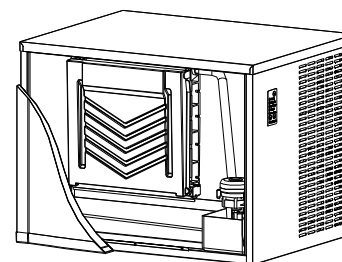
1. The cleaning recommended indicator light will change from green, yellow to red according to the consumed water quantity. In the beginning the Cleaning Recommended Indicator Light is green, followed by yellow. When the light goes red, it warns you that replacement of a new one will be necessary.
2. We recommend you replace water filter for every 6 months. If the validity of the water filter is earlier than remind lamp, just refers to the validity of the filter to replace it, and vice versa.

If you do not use a water filter, you needn't set the initial data of water filter, and the cleaning recommended indicator light will be off under any working status.

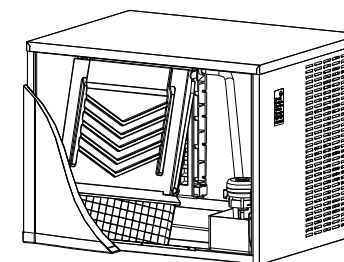
Operating Method

1. Turn on the water tap, then press the ICE button, all the indicator lights on the control panel blink (Except the cleaning recommended indicator light, the light according to using a water filter or not), the water enters the water tank.

2. After about 2 minutes, the ice maker will automatically proceed to the ice-making stage, and the sound of flowing water will be heard. Only the green ice making indicator light lights. (Except the cleaning recommended indicator light)
3. When the batch of ice has been fully formed, ice will automatically fall into the ice storage bin. The yellow ice harvest indicator light will be on, and other indicator lights will be off. (Except the cleaning recommended indicator light)
4. When the ice storage bin is full, the sheet of cubes will not fall completely and will hold the magnetism switch open. The machine is in the ice-full mode, and the red ice full indicator light is lit, and other lights will be off. (Except the cleaning recommended indicator light)
5. The unit starts making ice again automatically after ice cubes are removed. As ice is removed, the magnetism switch closed back to operating position.



Ice-making stage



Bin full stage

IMPORTANT:

- Although the unit has been tested and cleaned at the factory, due to long-term transit and storage, the first batch of cubes must be discarded.
- Never turn the water supply tap off when the ice maker is working.
- Never touch the evaporator when the machine is running.
- Except to take ice from the unit, keep the door closed to reduce melting and insure proper ice formation.