

# **Automatic Ice Maker**

DI75 / DI130 INSTRUCTION MANUAL

THE UNIT MUST BE STANDING UPRIGHT 24 HOURS PRIOR TO BEING PLUGGED IN.





DI75 DI130

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**Duura** reserves the right to make changes in specifications and design without prior notice.

## SAVE THESE INSTRUCTIONS

#### **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 cause death to you and others. All safety messages will follow the Safety Alert Symbol and either the words "DANGER", "WARNING" OR "CAUTION".



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



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



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 SAFEGUARDS**



Before the ice maker is used, it must be properly positioned and installed as described in this manual, read the manual carefully. DUURA 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:



- Plug into a grounded 3-prong outlet; do not remove grounding prong, do not use an adapter, and do not use an extension cord.
- 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 clean ice maker parts with flammable fluids. These fumes can create a fire hazard or explosion. And 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 unit is disconnected and the water line is shut off. (EXCEPTION: ice maker is in cleaning mode).
- Replace all panels before operating after servicing or maintenance.
- 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 referred to a qualified technician.

# **♠** WARNING

- When you disassemble the front cover, do not use too much force, as the wire
- Use two or more people to move and install ice maker. Failure to do so can result in back or other injury.
- Never install or operate the unit behind closed doors. 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 55°F (13°C) and below 90°F (32°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, water and drain connections in accordance with state and local codes. A standard electrical supply (220-240VAC, 50Hz, 15A), properly grounded in accordance with the National Electrical Code and local codes and ordinances is required.
- Do not kink or pinch the power supply cord between the ice maker and cabinet.
- The fuse (or circuit breaker) size is rated at 15 amperes.
- It is important for the ice maker to be leveled in order to work properly. Otherwise water may not flow properly through the evaporator (ice mold). The ice production will be less than normal. You may need to make several adjustments to level it.
- All installations must be in accordance with local plumbing code requirements.
- Make certain that pipes are not pinched, kinked or damaged during installation.
- Check for leaks after water line is connected.
- Never allow children to operate, play with or crawl inside the ice maker.
- 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.
- 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.
- Never turn the water supply tap off when the ice maker is working.
- 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. They are sharp and can be easily damaged.
- 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.
- 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.

#### **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 plugs into 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. Immediately repair or replace 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.



To reduce the risk of fire, electric shock or injury when using your ice maker, follows 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 two or more people to move and install ice maker.

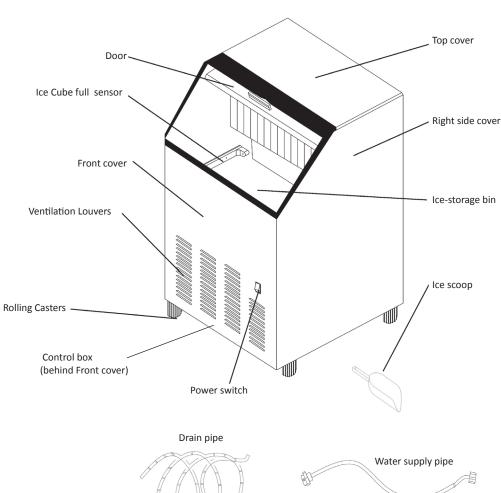
# SAVE THESE INSTRUCTIONS

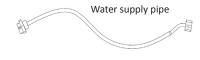
## **TECHNICAL INFORMATION**

Model: **DI75** DI130 **Rated Power:** 220-240VAC~50Hz 220-240VAC~50Hz Ice-making rated current **4.4A 4.4A** Refrigerant R134a/6.35oz R134a/8.47oz **High /Low Side Pressure** 320psi/120psi 320psi/120psi Width x Depth x Height 17"x22"x34" 22.1"x21.3"x32.5" Ice storage capacity 24 lbs maximum 35 lbs maximum **Ice-making capacity** 75 lbs/day\* 130 lbs/day\* **Unit weight** 93 lbs 110 lbs Bullet Type of ice **Bullet** 

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

## COMPONENT LOCATIONS





<sup>\*</sup>The actual quantity of ice produced per day can vary with room and water conditions.

## **ICE MAKER INSTALLATION**

#### Unpacking



#### **Excessive Weight Hazard**

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

#### **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.

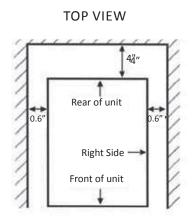
- To remove any remaining tape or glue, rub the area briskly with your thumb. Tape or glue residue can also be easily removed by rubbing a small amount of liquid dish soap over the adhesive with your fingers. Wipe with warm water and dry.
- Do not use sharp instruments, rubbing alcohol, flammable fluids,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

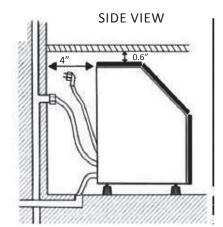
#### **Cleaning Before Use**

After you remove all of the packaging materials, clean the inside of your ice maker before using it. See the "Interior Cleaning" in the Cleaning and Maintenance section.

## **Location Requirements**

**Installation Clearances:** 





- This ice maker should be properly installed by qualified personnel.
- To ensure proper ventilation for your ice maker, the front of the unit must be completely unobstructed. Allow at least 4" (101mm) clearance at rear, and 0.6" (15mm) at top and sides for proper air circulation. The installation should allow the ice maker to be pulled forward for servicing if necessary.
- When installing the ice maker under a counter, follow the recommended spacing dimensions shown. Place electrical and water supplies and drain fixtures in the recommended locations as shown.
- Choose a well ventilated area with temperatures above 55°F (13°C) and below 90°F (32°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 high heat sources.
- Installation of the ice maker requires a cold water supply inlet of ¼" (6.35mm) soft copper tubing with a shut-off valve and a gravity-drain system.
  - (NOTE: Runoff water can also be drained into a sink via a pump not included when a gravity drain is not available.)
- The ice maker requires a continuous water supply with a minimum pressure of 15 psig and a static pressure not to exceed 80 psig (0.1Mpa and 0.55Mpa). The temperature of the water feeding into the ice maker should be between 41°F (5°C) and 77°F (25°C) for proper operation.



Normal operating ambient temperature should be between 55°F (13°C) to 90°F (32°C). Normal operating water temperature should be between 41°F (5°C) and 77°F (25°C). Operation of the ice maker for extended periods outside of these normal temperature ranges may affect production capacity. The plug must be accessible after installation.

- It is strongly recommended that a water filter be used. A water filter, if it is of the proper type, can remove taste and odors as well as particles. Some water is very hard, and softened water may result in white, mushy cubes that stick together. Deionized water is not recommended.
- The ice maker must be installed with all electrical, water and drain connections in accordance with all state and local codes.
- The unit should be located on a firm and level surface. It is important for the ice maker to be leveled in order to work properly. If needed, you can adjust the height of the ice maker by revolving the casters. See the "Leveling the Ice Maker" section.

## **ELECTRICAL REQUIREMENTS**





**Electrical Shock Hazzard** 

Plug into a grounded 3-prong outlet. Never remove the ground 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.

A standard electrical supply (220-240VAC, 50Hz, 15A), properly grounded in accordance with the National Electrical Code and local codes and ordinances, is required.

IMPORTANT: Do not kink or pinch the power supply cord between the icemaker and wall or cabinet. It is important to make sure you have the proper electrical connection:

Before you move your ice maker into its final location, it is important to make sure you have the proper electrical connection. The ice maker should always be plugged into its own dedicated 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 15 amperes.

#### **Recommended Grounding Method**

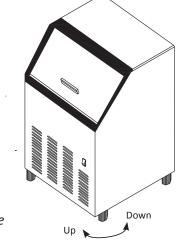
For your personal safety, this appliance must be grounded. This appliance is equipped with a power supply cord having a 3-prong grounding plug. To minimize possible shock hazard, the cord must be plugged into a mating 3-pronged and grounding-type wall receptacle, grounded in accordance with the National 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.

## **Leveling The Ice Maker**

It is important for the ice maker to be leveled in order to work properly. It can be raised or lowered by rotating the plastic sheaths around each of the 4 rolling casters on the bottom of the machine. If you find that the surface is not level, rotate the casters until the ice maker becomes level. You may need to make several adjustments to level it. We recommend using a carpenter's level to check the machine.

You will find that the casters make it easy for one person to move the machine. This is useful for cleaning and sanitizing the surface on which the ice maker is installed because it allows you to move the unit and have easy access to the surface to be cleaned.

IMPORTANT: Once you are ready to install it in a cabinet or directly on the floor, you must adjust the feet to level the ice maker and lock the rollers. If the floor is level, just revolve the two front feet to touch the floor. (See illustration.)



#### Water Supply and drain connections

The water supply and drain should be ready at the point of installation. A wall outlet directly behind the ice maker will make under-counter installation easier.

**IMPORTANT**:

All installations must be in accordance with local plumbing code requirements.

Professional installation is recommended. Make certain the pipes are not pinched, kinked or damaged during installation. Check for leaks after connection.

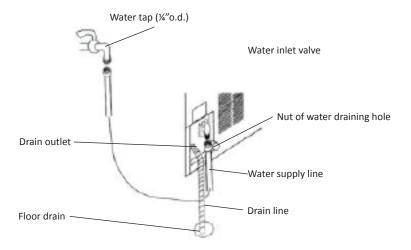
#### **Tools Required**

½" (13mm) open-end wrench, Phillips screwdriver

## **Connecting The Water Line**

- 1. Turn off main water supply. Turn on the nearest faucet long enough to clear line of water.
- 2. Find a ½" (13mm) to ¾" (19mm) vertical cold water pipe near the installation location. The distance should be less than 9 feet.(2.7M). The water supply hose provided with the ice maker is about 9 feet (2.7M) long.
- 3. A shut-off valve must be installed to the main water supply. If the water pipe has a plain piece of copper tubing, attach a ¼" (6.35mm) O.D. compression union to the tubing and remove the nut.
- 4. Connect the nuts of the water supply hose to the tap, and connect the other end with the water inlet. Tighten firmly by hand, then one-half turn with wrench.
- 5. Turn on the main water supply and tap. Check for water supply connection leaks. Tighten every connection (including connection at the water inlet) or nuts that leak.

NOTE: When you connect the water supply hose and the drain hose, pay attention to the indications of "Water inlet" and "Drain outlet" on the machine. Connection to the water line may vary according to installation requirements.



#### **DRAIN**

You must connect the drain line before using the ice maker. Follow the steps outlined below.

### **Connecting The Drain Line**

A gravity drain system is used in this type ice maker.

NOTE: If there is a drain line near the ice maker, the best choice to drain water to the drain line, is through the drain water pipe provided with ice maker.

- 1. Find the floor drain near the ice maker. The distance should be less than 5 feet (1.5M) since the length of the long drain line provided with the ice maker is about 5 feet (1.5M)..
- 2. Find the drain outlet on the back of ice maker. Connect one end of the long drain line to the drain outlet of the machine, the other end to the floor drain.

NOTE: Never allow the drain hose to hang or loop higher than the floor of the ice storage bin.

- 3 All horizontal runs of drain lines must have a fall of ¼" per foot (6.35mm per 30.5cm). An air gap will likely be required between the ice maker drain hose and the drain/waste receptacle. A stand pipe with a trap below it would be acceptable for the drain/waste receptacle. A floor drain is also acceptable.
- 4. Pour 1 gallon of water into the ice storage bin to check for leaks at all drain connections and at the nut of the drain water hole. Tighten any connections or nuts that leak.

IMPORTANT: This ice maker is not a freezer. Hot temperatures will cause a high rate of melting in the ice storage bin. Ice will drain over time. A drain is required.

## **INSTALLATION TYPES**

This ice maker has been designed for Mobile (free-standing) installation. However, it can also be Enclosed (under a cabinet) or Built-in (sealed to the floor). In every case, there must be adequate air space around the unit for ventilation.

#### **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, proper electrical, a drain and you've leveled the machine.

You must follow the stated instructions for:

- a. Electrical requirements
- b. Water supply and drain connections
- c. Leveling the icemaker.

#### **Enclosed Installation**

An enclosed installation will allow you to install the ice maker under a cabinet, or in a kitchen cabinet provided the required clearance space around the ice maker is respected. This installation has the same requirements as a mobile installation. The unit should be placed in the cabinet by sliding it in the cabinet's opening and leveled properly.

IMPORTANT: For the Mobile and Enclosed installations you must use flexible water and drain connections to the water supply and drain. This will allow the moving of the ice maker for cleaning.

Use the water hose and drain hose supplied with the unit for these connections

#### **Built-in installation**

If this method of installation is chosen, it will still be necessary to allow adequate ventilation space around the unit. The following additional items must be observed.

- 1. Place ice maker in front of installation location. Remove the feet and place the unit flat on the floor or on a platform depending on your installation requirements.
- 2. The water supply line must be plumbed before connecting to the ice maker.
- 3. Turn on main water supply and tap. Check for water supply connection leaks. Tighten any connections (including connections at the valve) or nuts that leak.
- 4. Pour 1 gallon (3.79L) of water into the ice storage bin to check leaks at all drain connections and the nut of the drain water hole. Tighten any connections or nuts that leak.
- 5. If the electrical outlet for the ice maker is behind the cabinet, plug in the ice maker.
- 6. Push the ice maker into position.
- 7. Seal all around the cabinet to the floor with an approved caulking compound.

NOTE: Be sure the drain hose is connected and fed into the drain line before the ice maker is moved into its final position.

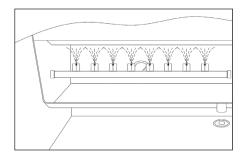
#### **OPERATION**

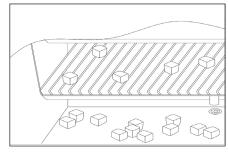
#### **Final Check List Prior To Operation**

- 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?
- 3. Have the installation instructions been followed, including connecting the machine to water, drain and electricity?
- 4. Has the machine been leveled? Feet locked?
- 5. Is the ice maker in a site where the ambient temperature is between 55°F (13°C) and 90°F (32°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 15 psig with a static pressure not to exceed 80 psig (0.1Mpa and 0.55Mpa)?
- 7. Is there a clearance of at least 4" (102 mm) at the rear, and 0.6" (15 mm) at top and sides for proper air circulation?
- 8. Has the power supply voltage been checked or tested against the nameplate rating? And has proper grounding been installed in the ice maker?
- 9. Is the ice maker plugged in?
- 10. Have you turned on the main water supply and tap?
- 11. Have you checked for leaks at all water supply connections?

### **Operating Method**

- 1. Switch on the Power switch on the front panel. The light will be on. The ice maker will start working automatically and feeding water.
- 2. After the first feeding of the water, the machine will automatically go to the ice making stage, and the sound of water spraying will be heard.
- 3. Ice will be harvested to the ice storage bin. When the storage bin is filled with ice cubes, the ice maker will automatically stop working. The machine will restart making ice once the storage bin is less than full.





- 4. Excess water will flow through the drain outlet at the back of the machine and empty into the floor drain.
- 5. The unit will start making ice again after the ice cubes are removed. Then the bin-full probe swings back to operating position.

#### NOTE:

- 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 evaporator when unit is running!
- Except to take ice from the unit, keep the door closed to reduce melting and insure proper ice formation.

#### **How The Machine Makes Ice**

Set the ON/OFF button to the ON position. The machine will automatically go to the ice making stage.

There are two distinct cycles: ice freeze and harvest.

- 1. The freeze cycle happens when water flows to the evaporator surface.
- 2. The harvest cycle is when the ice is released and water enters the machine.

20 Minutes: A complete cycle takes about 20 minutes, but it depends on temperature and operating conditions.

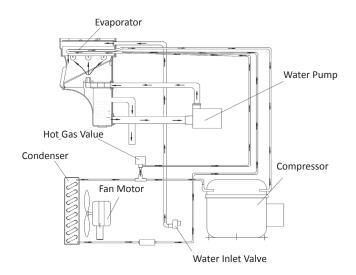
**Freeze:** During the freeze cycle the compressor is pumping refrigerant, the fan motor is blowing air, and the water pump is circulating water. When the evaporator surface gets to the setting temperature, the ice maker stops the freezing cycle and begins the harvest.

**Harvest:** During the harvest cycle the compressor is still operating, but the water pump has stopped. Two other components have been energized: the hot gas valve and water inlet valve. These two valves open and warm up the freezing surface, so the cubes fall into the bin. The freeze cycle will restart when all the cubes have been harvested.

#### **How The Machine Uses The Water**

The ice maker begins with a fixed charge of water that is contained in the water bin. As the water flows to the freezing evaporator surface, the portion of water that does not contain mineral impurities freezes and sticks to the ice cube molds. The water containing impurities falls back into the water bin. Gradually, during the freezing portion of the ice-making cycle, the water in the water bin will become highly concentrated with mineral impurities.

During the harvest cycle, the fresh water flows into the machine to dilute the bin water, and to rinse the concentrated minerals down the drain.



#### **Normal Sounds**

Your new ice maker may make sounds that are not familiar to you. Most of the new sounds are normal. Hard surfaces like the floor, walls and cabinets can make the sounds louder than they actually are. The following list describes the sounds that might be new to you and what may be causing them.

- You will hear a swooshing sound when the water valve opens to fill the water bin for each cycle.
- Rattling noises may come from the flow of the refrigerant or the water line. Items stored on top of the ice maker can also make noises.
- The high efficiency compressor may make a pulsating or high-pitched sound.
- Water running from the water bin to the evaporator plate may make a splashing sound.
- Water running from the evaporator to the water bin may make a splashing sound.
- As each cycle ends, you may hear a gurgling sound due to the refrigerant flowing in your icemaker.
- 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.
- When you first start the ice maker, you may hear water running continuously. The ice maker is programmed to run a rinse cycle before it begins to make ice.

## **Preparing The Ice Maker For Long Storage**

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

- 1. Shut off the water supply at the main water source.
- 2. Disconnect the water supply line from the water inlet.
- 3. Disconnect the drain pipe to the drain line or floor drain.
- 4. Allow the ice maker to run for an hour or more until all remaining ice cubes have been ejected from the ice maker assembly.
- 5. Shut off the electric supply at main electrical power source.
- 6. Screw off the nut of the water drain hole at the back of the machine, drain out water residue completely (do not loosen or screw off the nut at other times), then tighten the nut after finishing.
- 7. Drop the door open to allow for circulation and prevent mold and mildew.
- 8. Leave water supply line and power cord disconnected until ready to reuse.

#### **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 the unit is used outdoors, or there are other special considerations.

#### What shouldn't be done

Never keep anything in the ice storage bin that is not 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 4 things to keep clean:

- 1. The exterior
- 2. The condenser
- 3. The interior
- 4. The ice-making system



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: Ice maker system's cleaning).

#### **Exterior Cleaning**

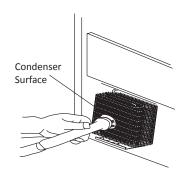
The door and cabinet may be cleaned with a mild detergent and warm water solution such as 1 oz (29ml) of dishwashing liquid mixed with 2 gallons (7.5L) of warm water. Do not use solvent-based or abrasive cleaners. Use a soft sponge and rinse with clean water. Wipe with a soft clean towel to prevent water spotting.

Stainless steel models can discolor when exposed to chlorine gas and should be cleaned. Clean stainless steel models with a mild detergent and warm water solution and a damp cloth. Never use abrasive cleaning agents.

NOTE: Stainless steel models exposed to chlorine gas and moisture, such as in areas with spas or swimming pools, may have some discoloration of stainless steel. Discoloration from chlorine gas is normal.

## **Condenser Cleaning**

A dirty or clogged condenser prevents proper airflow, reduces ice making capacity, and causes higher than recommended operating temperatures that may lead to component failure. Have the condenser cleaned at least once every three months.



- 1. Unplug the ice maker or disconnect power.
- 2. Remove the screws at the bottom of the front cover.
- 3. Grasp the lower edge of the front cover at the right and left sides, raise it a little and then pull down.

NOTE: Do not use too much force, as the wire leads connected to the power switch can be inadvertently disconnected.

- 4. Locate the condenser surface.
- 5. Remove dirt and lint from the condenser fins and the unit compartment with a brush attachment on a vacuum cleaner.
- 6. Reassemble the front cover.
- 7. Plug in the icemaker or reconnect power.



DO NOT touch the condenser fins. The condenser fins are sharp and can be easily damaged.

## **Interior Cleaning**

The ice storage bin should be sanitized occasionally. Clean the bin 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 bin after the ice making system has been cleaned, and the storage bin is empty.

- 1. Disconnect power to the unit.
- 2. Open the door and with a clean cloth, wipe down the interior with a sanitizing solution made of 1 oz (29.5ml) of household bleach or chlorine and 2 gallons (7.5L) of hot water 95°F (35°C) to 115°F (46°C).
- 3. Rinse thoroughly with clear water. The waste water will be drained off through the drainpipe.
- 4. Reconnect power to the unit.

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

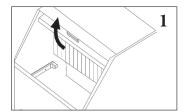


DO NOT use solent cleaning agents or abrasives on the interior.

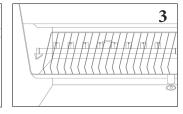
These cleaners may transmit taste to the ice cubes, or damage or dscolor the interior.

IMPORTANT NOTE: The sprinkler should only be cleaned when you find that some of the ice cubes are improperly shaped during ice making. Cleaning the ice making system should follow cleaning of the sprinkler.

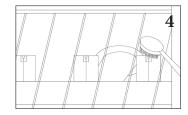
- 1. Disconnect power to the unit and open the door.
- 2. Take out the row of flake covers by snapping one end up and pulling forward.
- 3. Find the sprinkler and the slideway.

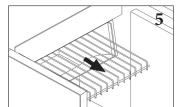


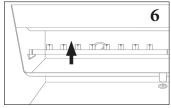




- 4. Find which water sector is not sprayed well. If the reason is the slideway break in the water sector, just adjust the position of slideway to have all the water sectors free forward to the ice mold. If the water sectors are free, but a sector is not sprayed well, using a new tooth-brush, clean the gap of the nozzle several times. The water sector should be OK.
- 5. Another cleaning method: remove the slideway from the water bin.
- 6. Find the sprinkler arm and raise it. Disconnect it from any water tube.



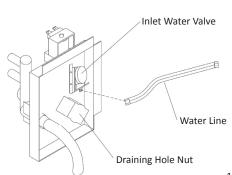




- 7. A de-scaling solution can be prepared in a plastic basin with Nu-Calgon Nickel-Safe Ice Machine Cleaner. Mix 4 oz (118ml) of the ice machine cleaner per 1 gallon (3.7L) of warm water.
- 8. Remove the sprinkler arm from the interior. Thoroughly clean the sprinkler arm by soaking it in the basin filled 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 under a stream of tap water.
- 9. Wipe down the interior of the water bin with the de-scaling solution and warm water. Rinse thoroughly with clear water.
- 10. Properly reassemble the sprinkler arm, slideway and the flake covers.
- 11. Next, follow the Icemaker System Cleaning procedures below.

## **Ice-Making System Cleaning**

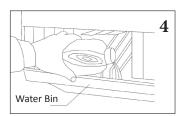
Minerals that are removed from water during the freezing cycle will eventually form a hard scaly deposit in the water system. Cleaning the system regularly helps remove the mineral scale buildup. How often you need to clean the system depends upon how hard your water is. With hard water of 15 to 20 grains/gal. (4 to 5 grains/liter), you may need to clean the system as often as every 3 to 6 months.

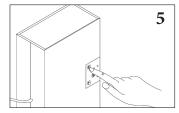


- 1. Turn off power to the ice maker. Keep the ice maker connected to the water supply and drainpipe.
- 2. Open the door and scoop out all of the ice cubes. Either discard them or save them in an ice chest or cooler.
- 3. Remove the screws in the front cover, push forward to remove the front cover. Locate the control box.

Note: Do not use too much force, as the wire leads connected to the power switch can be inadvertently disconnected. Use care in the area of the control box. Do not expose it to moisture.

- 4. Turn on the power to the ice maker. Pour 8 oz. of Nickel-Safe Ice Maker Cleaning Solution into the water bin. Add 8 oz. of tap water. After about 5 minutes, press down the "clean" button on the Control Box. (See figure below and the following section.) The machine will run the Automatic Clean Mode.
- 5. Allow 30 minutes for proper cleaning. After cleaning, shut off the power switch, and unscrew the nut of the water-draining hole. Drain off the waste water to a container, and then screw the nut on tightly when the waste water is fully drained off.





- 6. The dirty water must be drained out completely. Repeat steps 2 and 3 in the Interior Cleaning section.
- 7. Repeat steps 4 and 6 above 3 times (without Ice Maker Cleaning Solution) to rinse the ice making system completely.

Note: The use of the Ice Maker Cleaner Solution in the water bin during the rinse is not needed.

- 8. Reassemble the front cover.
- 9. Turn on the power again. The machine will return to the regular ice making mode. Discard the first batch of ice.



The ice machine cleaner contains acids.

DO NOT use or mix with any other solvent-based cleaner products.

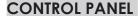
Use rubber gloves to protect hands.

Carefully read the material safety instructions on the container of the ice machine cleaner.

DISCARD the first batch of ice produced after cleaning.

## Sanitizing the Ice-Making System

- 1. Turn off power to the ice maker.
- 2. Remove all ice cubes from the storage bin.
- 3. Prepare a sanitizing solution made of 1oz (29ml) of household bleach and 2 gallons (7.5L) of hot water 95°F (35°C) to 115°F (46°C). Remove the flake covers and slideway from the water bin and wipe the entire bin inside and out, covering the entire surface of the walls.
- 4. Fill a spray bottle with the sanitizing solution and spray all corners and edges, making sure to cover all surfaces with the solution. Soak the flake cover and slideway in the solution and put back in place after drying.
- 5. Keep the ice maker connected to the water supply. Turn on the power to the ice maker. Within 5 minutes, press the CLEAN button. The machine will run the Automatic Clean mode.
- 6. Allow 30 minutes for proper cleaning. After cleaning, shut off the power switch, and unscrew the nut of the water-draining hole. Drain off the waste water to some container, and then screw the nut on tightly when the waste water is fully drained off.
- 7. The dirty water must be drained out completely. Perform steps 2 and 3 in the Interior Cleaning section.
- 8. Repeat steps 5 to 7 above three times with fresh water to rinse the ice-making system completely.
- 9. Reassemble the front cover.
- 10. Turn on the power again. The machine will return to the regular ice making mode. Discard the first batch of ice.



(behind front cover)

### **Descriptions of LEDs and buttons:**

1. Red LED: Ice Full indicator light.

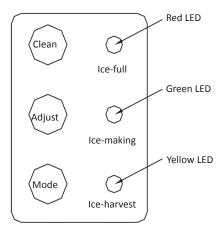
When this LED is lit, the ice storage bin is full of ice or there is something between the two arms of the ice-full sensor in the ice storage bin. The unit will stop working. When ice cubes are taken out of the ice storage bin, clearing the sensor, the red LED will keep flashing for 3 minutes. Then the unit will restart and return to the ice making mode.

2. Green LED: Ice Making indicator light.

When this LED is lit, the unit is working in the Ice Making mode controlled by a temperature probe on the evaporator. When the green LED is flashing, the unit is working in the Ice Making mode controlled by a fixed timer.

3. Yellow LED: Ice Harvest indicator light.

When this LED is lit, the unit is working in the Ice Harvest mode controlled by a temperature probe on the evaporator. When the yellow LED is flashing, the unit is working in the Ice Harvest mode controlled by a fixed timer.



- 4. **Clean button:** When this button is pressed, the unit enters the Cleaning mode. The green and yellow LEDs flash together. To stop the Cleaning mode, just press the button again.
- 5. **Mode button:** Mainly for service. When this button is pressed, unit can change from Ice Making mode to Ice Harvest mode, or from Ice Harvest mode to Ice Making mode. You can judge the mode from the status of the green and yellow LEDs.
- 6. **Adjust button:** Mainly for service. When this is pressed over 3 seconds, the unit will enter the Ice Size Adjustment mode. The mode can be judged from the status of the green LED.

### Ice Size Adjustment Guide:

- 1.) Press and hold the "Adjust" button for at least 3 seconds. The unit will enter the Ice Size Adjustment mode. The "ICE Making" LED (green) will be blinking continuously during the ice size adjustment. Release the button when the LED blinks continuously to adjust the ice size.
- 2.) While in the Ice Size Adjustment mode, press the "Clean" button or the "Mode" button for the desired ice size.

#### **Smaller ice setting:**

By pressing the "Clean" button, you can decrease the size of the ice cubes. The "ICE FULL" LED (red) will flash as you lower the ice size and will finally be blinking at the setting of smallest ice size.

## Larger ice setting:

By pressing the "Mode" button, you can increase the size of the ice cubes. The "ICE HARVEST" LED (yellow) will flash as the larger size is set and will blink when the setting of largest ice size has been reached.

After 10 seconds without any operation, the unit will automatically memorize the current state and return to the previous mode.

#### NOTE:

- During the ice size adjustment, the "ICE FULL", "ICE MAKING" and "ICE HARVEST" LEDS blinking all at once indicate that the unit is in the regular (middle) setting of the ice size.
- When the machine is in the cleaning stage or ice full stage, the ice size is not available for adjusting.

NOTE: Avoid letting water contact the control box.

## MAJOR FUNCTIONS

- 1. Complete automatic operating procedure.
- 2. When the ice storage bin is full of ice cubes, the machine stops working automatically and starts again after the cubes are removed.
- 3. The different colors of the LED display indicate various work modes.
- 4. Ice cube size is adjustable.
- 5. A sensitive probe and accurate timer enhance the performance of the ice maker.
- 6. Manual clean mode to start or stop the ice making system cleaning.
- 7. Built-in compressor protection system.

## **TROUBLE SHOOTING**

## **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 on the following pages. The problem could be something very simple which can be solved without a service call.

Problem	Possible Cause	Probable Correction	
	The ice maker is unplugged.	Plug the ice maker in.	
	The fuse is blown.	Replace fuseif it happens again, call for service to check for a short circuit in the ice maker.	
The machine	The ice maker power switch is OFF.	Turn the ice maker power switch ON.	
doesn't operate.	The voltage of the power supply is low.	Add manostat pump.	
	Ice cube full sensor is damaged.	Replace the Ice cube full sensor.	
	The ice storage bin is full of ice.	Remove some ice; make sure the ice-full sensor is free of ice.	
	The water supply tap is turned off.	Turn on the water supply tap.	
The water doesn't feed in after the machine starts.	Water supply pressure is lower.	Adjust the water supply pressure within the range of stated range.	
	Water inlet valve is damaged.	Replace the water inlet valve.	
	The water supply pipe is not properly connected.	Reconnect the water supply pipe.	
	The bin should fill up and the machine shut off in 9-14 hours. If not, the condenser may be dirty.	Clean the condenser.	
	The bin drain may be partially restricted.	Clean out the drain, check the installation.	
Machine makes ice, but the bin does not fill up with ice.	The airflow to the ice maker may be obstructed.	Check the installation.	
	Hot gas valve performance is poor, leading to low ice production.	Replace the hot gas valve.	
	The sprinkler is partially clogged, leading to low ice production.	Clean the sprinkler, see the user's manual "interior cleaning"	
	Spraying of the small nozzle is blocked by the ice slideway.	Adjust the location of the ice slideway.	
	The water quality is too poor. The water line blocks,lead to sprinkler pressure of spray isn't enough.	Using a filter apparatus installed in front of the water inlet valve.	
	The ambient temperature and water temperature are high, or machine is near some heat source.	Check the installation.	
Water is leaking from of the unit.	A few water drops fall 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 leaking.	Tighten fitting. See "Connecting the Water Line".	
	Nut of the water drain hole leaking.	Tighten the nut.	
	Drainpipe connection leaking.	Tighten fitting. See "Connecting the Drain".	

Problem	Possible Cause	Probable Correction	
The body of the ice	The grounding line isn't in the socket.	Use the socket that meets required electrical standard.	
maker is electrified.	The lines are creepage.	Adjust, reconnect /replace lines	
Scales occur frequently inside the machine.	The hardness of the water is too high.	Use a water-softening device installed in front of the water inlet valve.	
The ice cubes are incomplete when being dumped.	The sprinkler is blocked.	Clean it; see "Interior Cleaning".	
	The sprinkler pressure of spray isn't enough.	Check.the water quality. The water line may be blocked.	
Noise during operation.	The feet are not leveled and locked	Level and lock the feet. See "Leveling the Ice Maker".	
	Certain sounds are normal.	See "Normal Sounds".	
The downcomer doesn't leak.	The water line blocks	Clean it, see user and care manual "ice making system cleaning"	
Harvesting ice is difficult.	The water supply tap is turn off.	Turn on the water supply tap.	
	The ambient temperature and water temperature is too low	Adjust the temperature.	
The ice maker stops suddenly while making ice.	The electricity is off.	Reconnect the power supply line.	
	The room temperature is out of the stated range.	Cut off the electricity; let the ice maker stop working till the temperature returns within the stated range.	
	The fuse is brown.	Replace fuse.	
	The voltage of the power supply is low.	Add manostat pump.	
	The ventilation louvers are covered.	Remove the obstruction.	
Cubes are too big.	The ambient temperature and water temperature is too low.	Adjust the temperature.	





DI75 DI130

## **NOTES**

## **NOTES**



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