# USER GUIDE & SERVICE MANUAL



Model: UACP115-IS01A

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#### WELCOME TO U-LINE

Congratulations on your U-Line purchase! Our products are focused on functionality, style, and inspired innovations — paying close attention to even the smallest details. Applications include residential, outdoor, ADA height compliant, marine, and commercial. Product categories include Beverage Centers, Wine Refrigerators, Ice Machines, Refrigerators, Freezers, and Dispensers. Our advanced refrigeration systems, large and flexible capacities, and clean integrated look are what makes our products Built-In to Stand Out<sup>®</sup>. Since 2014, U-Line has been part of the Middleby family of brands.

#### U-Line — RIGHT PRODUCT. RIGHT PLACE. RIGHT TEMPERATURE.®

#### **PRODUCT INFORMATION**

Looking for additional information on your product? User Guides, Spec Sheets, CAD Drawings, and Product Warranty information are available digitally on u-line.com.

#### **PROPERTY DAMAGE / INJURY CONCERNS**

In the unlikely event property damage or personal injury is suspected related to a U-Line product, please take the following steps:

- 1. U-Line Customer Care must be contacted immediately at +1.414.354.0300.
- 2. Service or repairs performed on the unit without prior written approval from U-Line is not permitted. If the unit has been altered or repaired in the field without prior written approval from U-Line, claims will not be eligible.

#### **GENERAL INQUIRIES**

U-Line Corporation 8900 N. 55th Street Milwaukee, Wisconsin 53223 USA Monday - Friday 8:00 am to 4:30 pm CST T: +1.414.354.0300 Email: sales@u-line.com u-line.com

#### SERVICE & PARTS ASSISTANCE

Monday - Friday 8:00 am to 4:30 pm CST T: +1.414.354.0300 Service Email: onlineservice@u-line.com Parts Email: onlineparts@u-line.com

#### CONNECT WITH US AT MIDDLEBY REFRIGERATION

## Safety and Warning

#### NOTICE

Please read all instructions before installing, operating, or servicing the appliance.

Use this appliance for its intended purpose only and follow these general precautions with those listed throughout this guide:

#### SAFETY ALERT DEFINITIONS

Throughout this guide are safety items labeled with a Danger, Warning, or Caution based on the risk type:

### **DANGER**

Danger means that failure to follow this safety statement will result in severe personal injury or death.

### **WARNING**

Warning means that failure to follow this safety statement could result in serious personal injury or death.

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

### **DANGER**

This unit contains R600a (Isobutane) which is a flammable hydrocarbon. It is safe for regular use. Do not use sharp objects to expedite defrosting. Do not service without consulting the "R600a specifications" section included in the User Guide. Do not damage the refrigerant circuit.

### **WARNING**

Service must be done by factory authorized service personnel. Any parts shall be replaced with like components. Failure to comply could increase the risk of possible ignition due to incorrect parts or improper service.

#### **CALIFORNIA PROPOSITION 65**

This product contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

www.P65warnings.CA.gov



This equipment is to be installed with adequate backflow protection to comply with applicable federal, state and local codes.

## Disposal and Recycling

### A DANGER

RISK OF CHILD ENTRAPMENT. Before you throw away your old refrigerator or freezer, take off the doors and leave shelves in place so children may not easily climb inside.

If the unit is being removed from service for disposal, check and obey all federal, state, and local regulations regarding the disposal and recycling of refrigeration appliances, and follow these steps completely:

- 1. Remove all consumable contents from the unit.
- 2. Unplug the electrical cord from its socket.
- 3. Remove the door(s)/drawer(s).

## **Environmental Requirements**

This model is intended for indoor/interior applications only and is not to be used in installations that are open/ exposed to natural elements.

This unit is designed to operate between 50°F (10°C) and 100°F (38°C). Higher ambient temperatures may reduce the unit's ability to reach low temperatures and/or reduce ice production on applicable models.

For best performance, keep the unit out of direct sunlight and away from heat generating equipment.

In climates where high humidity and dew points are present, condensation may appear on outside surfaces. This is considered normal. The condensation will evaporate when the humidity drops.

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Damages caused by ambient temperatures of 40°F (4°C) or below are not covered by the warranty.

# USER GUIDE

### Electrical

### **WARNING**

SHOCK HAZARD — Electrical Grounding Required. Never attempt to repair or perform maintenance on the unit until the electricity has been disconnected.

Never remove the round grounding prong from the plug and never use a two-prong grounding adapter.

Altering, cutting or removing power cord, removing power plug, or direct wiring can cause serious injury, fire, loss of property and/or life, and will void the warranty.

Never use an extension cord to connect power to the unit.

Always keep your working area dry.

#### NOTICE

Electrical installation must observe all state and local codes. This unit requires connection to a grounded (three-prong), polarized receptacle that has been placed by a qualified electrician.

The unit requires a grounded and polarized 115 VAC, 60 Hz, 15A power supply (normal household current). An individual, properly grounded branch circuit or circuit breaker is recommended. A GFCI (ground fault circuit interrupter) is usually not required for fixed location appliances and is not recommended for your unit because it could be prone to nuisance tripping. However, be sure to consult your local codes.

See CUTOUT & PRODUCT DIMENSIONS for recommended receptacle location.

## **Cutout & Product Dimensions**

#### PREPARE SITE

Your U-Line product has been designed for either freestanding or built-in installation. When built-in, your unit does not require additional air space for top, sides, or rear. However, the front grille must NOT be obstructed, and clearance is required for an electrical connection in the rear.

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Unit can NOT be installed behind a closed cabinet door.

If you would like to align the face of the unit with other adjacent cabinet doors, you may need to alter the wall just behind the drain connection on the unit to accommodate the drain.

#### **CUTOUT DIMENSIONS**



#### **PRODUCT DIMENSIONS**

#### REAR





FRONT

TOP

SIDE

# Side-by-Side Installation

#### **OTHER SITE REQUIREMENTS**

#### Side-by-Side Installation

Units must operate from separate, properly grounded electrical receptacles placed according to each unit's electrical specifications requirements.

Cutout width for a side-by-side installation is the total of the widths listed under Cutout Dimensions in each unit's Installation Guide. Each door can be opened individually (one at a time) without interference.



However, to ensure unobstructed door swing (opening both doors at the same time), 1/4'' (6.4 mm) of space needs to be maintained between the units.



#### Hinge-by-Hinge Installation (Mullion)

When installing two units hinge-by-hinge, 13/16" (22 mm) is required for integrated models. Additional space may be needed for any knobs, pulls or handles installed.



Stainless steel models which include the standard stainless handle will require 4-9/16'' (116 mm) to allow both doors to open to 90° at the same time.



### Water Hookup

#### WATER SUPPLY

### **A** CAUTION

Observe and follow all local building codes when installing this appliance.

This ice machine must be connected to a potable cold water supply line. delivering water pressure between a minimum of 20 psi and a maximum of 120 psi.

Use <sup>1</sup>/<sub>4</sub>" copper tubing for your water supply which is available at any local hardware or plumbing supply store. Route the <sup>1</sup>/<sub>4</sub>" copper tubing to suit your installation being sure not to kink the tubing. Purchase enough copper tubing length to allow a coil to be formed behind the unit for a "service loop" which will allow the appliance to be pulled out from the installation for servicing or cleaning. (See Figure 11). Connect the copper tubing to the "top side" of a cold water pipe to prevent the ice-maker from plugging with sediment.

A shutoff valve is recommended on the water supply line to ease servicing the appliance. NOTE: A SELF-PIERCING TYPE VALVE IS NOT RECOMMENDED as they are prone to clogging with sediment which will create pressure drop reducing the water supply to the unit.

Connect the copper tubing water supply to the water value inlet with a  $1\!/\!4''$  compression nut fitting.

IMPORTANT: Secure the water supply line to the back of the cabinet with the screw and strain relief clamp provided in the corner of the back panel.

Make certain all connections are watertight after installation. Form the tubing so that it will not vibrate against the cabinet body or kink when your appliance is moved in and out of position.

This ice machine is designed to make clear ice from the majority of water sources on a daily basis. If your results are unsatisfactory, your water may need to be filtered or treated. A water specialist can recommend proper water treatment.

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#### To prevent water leaks:

- The water line fitting is to be used with copper tubing only. Do not use with plastic tubing.
- Do not use any thread sealers on this water line fitting.



#### NOTE:

Reverse osmosis (RO) water, softened water, and de-ionized water are not recommended as they can adversely affect the quality and quantity of the ice.

# USER GUIDE

### Drain

#### DRAIN CONNECTION

# **A** CAUTION

The floor drain must be large enough to accommodate drainage from all attached drains. Follow these guidelines when installing drain lines to prevent water from flowing back into the ice maker storage bin and/or potentially flowing onto the floor, which may result in personal injury or property damage

#### NOTICE

Drain can NOT be located directly below the unit. Unit has a solid base that will not allow the unit to drain below itself.

There is a possibility that hose connections may have loosened during shipment.

Verify all connections and fittings are free from leaks.

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This equipment is to be installed with adequate backflow protection to comply with applicable federal, state and local codes

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Failure to connect water supply or drain line connections properly can result in personal injury and property damage. Gravity drain connections must be routed downward from the rest of the unit at the rate of 1/4" per foot (1 cm per 50 cm).





#### NOTICE

The maximum lift for the drain pump is 10 feet. This must be done as close to the rear of the unit as possible.

# General Installation

#### LEVELING INFORMATION

 Use a level to confirm the unit is level. Level should be placed along top edge and side edge as shown.



2. If the unit is not level, adjust the legs on the corners of the unit as necessary.



3. Confirm the unit is level after each adjustment and repeat the previous steps as needed.

#### **INSTALLATION TIP**

If the room floor is higher than the floor in the cutout opening, adjust the rear legs to achieve a total unit rear height of 1/8" (3 mm) less than opening's rear height. Shorten the unit height in the front by adjusting the front legs. This allows the unit to be gently tipped into the opening. Readjust the front legs to level the unit after it is correctly positioned in the opening.

#### INSTALLATION

- 1. Plug in the power/electrical cord.
- Gently push the unit into position. Be careful not to entangle the cord or water and drain lines, if applicable.
- Re-check the leveling, from front to back and side to side. Make any necessary adjustments. The unit's top surface should be approximately <sup>1</sup>/8" (3 mm) below the countertop.
- 4. Remove interior packing material and wipe out the inside of the unit with a clean, water-dampened cloth.



### Integrated Panel Dimensions



Integrated Door Panel for 15" (381mm) wide unit

#### NOTE

Panel thickness may be 5/8" or 3/4". Center the unit in the 15" opening. If the hinge side of the unit is pressed against the adjacent cabinet, use a 5/8" thick panel.

Maximum panel weight is 15 lbs.

# Integrated Panel Installation

Cut and prepare panels according to the information provided in the Integrated Panel Dimensions section.

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It is important to use the factory provided grille that came with the product to assure proper air flow is maintained through the condenser. The use of a custom grille is not recommended and will void the warranty.

#### **REMOVE DOOR**

See Door Adjustments section.

#### ASSEMBLE THE PANEL TO THE DOOR

 With the door laying on a flat surface and starting at the corner of the door, remove the magnetic door gasket from the interior side of the door. Set the gasket aside on a flat surface.



2. Align the panel to the door. Make sure the sides and top are flush.



3. With bar clamps or "C" clamps, secure the panel to the door



4. At each of the 10 holes in the gasket extrusion channel, drill pilot holes into the wood panel. Use the drill size from the chart in the table below being careful not to drill through the front surface of the panel.

Material Type	#10 Wood Screw	
Hardwood	<sup>1</sup> /8" (3.2mm) Diameter Pilot Hole	
Softwood	7/64" (2.8mm) Diameter Pilot Hole	

- 5. Fasten the panel to the door with the 10 screws provided in the literature pack.
- Remove the clamps and replace the gasket in the gasket extrusion channel. Some force may be required to seat the gasket into the channel. Be sure the gasket corners are seated correctly.

#### **INSTALL THE DOOR**

See Door Adjustments section.

### Grille Installation

#### **REMOVING AND INSTALLING GRILLE**



Disconnect electric power to the unit before removing the grille.

When using the unit, the grille must be installed.



Do NOT touch the condenser fins. The condenser fins are SHARP and can be easily damaged.

#### **Removing the grille**

- 1. Disconnect power to the unit.
- 2. Remove the two screws.
- 3. Remove grille from unit.

#### Installing the grille

- 1. Align cabinet and grille holes and secure, but do not over tighten grille screws.
- 2. Reconnect power to the unit.



### Door Swing



Units have a zero clearance for the door to open 90°, when installed adjacent to cabinets.

Stainless Steel and black and white models require 2-1/8" (54 mm) door clearance to accommodate the handle if installed next to a wall.

Integrated models require 1/4" (6 mm) clearance if installed next to a wall. Allow for additional space for any knobs or pulls installed on the integrated panel/frame.

## Door Adjustments

#### **REVERSING THE DOOR**

Location of the unit may make it desirable to mount the door on the opposite side of the cabinet.

The hinge hardware will be removed and reinstalled on the opposite side of the cabinet.

#### TO REVERSE THE DOOR

Note: When reversing the door, the top hinge becomes the bottom hinge on the opposite side of the unit - likewise, the bottom hinge becomes the top on the other side.

#### **REMOVE DOOR**

 Remove hinge pin from upper hinge using a 1/8" hex key tool, making sure to steady the door.



2. Let the door tilt forward and lift door from bottom hinge.

#### **REMOVE HINGES**

 Using a Phillips screwdriver, remove the 6 screws from both the upper and lower hinges and save for later steps.



2. With a Phillips screwdriver, remove the bushing screw and hing pin from the bottom hinge.



- 3. Remove the cam closer from the lower hinge bracket and save.
- 4. Using a 5/32" hex key, remove the upper and lower hinge brackets from the door, saving all components.
- 5. Remove black plugs from opposite side of door, flip the upper hinge bracket and reattach the hinge bushing and screw into place on the opposite side of door

(where plugs were removed.)

Hinge Pir 6. Reattach Bushing the upper Upper Hinge and lower hinges and hinge Lower Hinge Plate brackets Cam Closer to the and screw opposite sides.





7. Using a Phillips screwdriver, remove the toe kick from the door and attach it to the opposite side.



8. Reinstall the door.



## First Use

Initial startup requires no adjustments. See CONTROL OPERATION section for more details.

#### NOTICE

Discard the ice produced during the first two or three hours of operation to avoid possible dirt or scale that may dislodge from the water line.

When plugged in, the unit will begin operating under the factory default settings. If the unit was turned off during installation, simply press 0 and the unit will immediately switch on. To turn the unit off, press 0 and release.

## **Control Operation**



### **Control Function Guide**

Function	Command	Notes
ON/OFF	Press 🖑 and release.	Unit will immediately turn ON or OFF.
Enable Sabbath Mode	Press $\frac{1}{2}$ and hold for 5 seconds and release.	The <sup>o</sup> F / <sup>o</sup> C symbol will flash briefly after 5 seconds. Interior light and display will go dark and remain so until user resets mode - unit continues to operate.
Disable Sabbath Mode	Press <sup>≞</sup> ⊖ <sup>4</sup> and release.	Display and interior light return to normal operation.
Silent Mode (ice production suspended for 3 hours)	Hold $\bigtriangleup$ and $\textcircled{0}$ .	Display will count down the hours: ∃H, 2H, IH
Clean Mode	See "Cleaning" section	
Showroom Mode	Hold 🍟 and 🖒 for 5 seconds.	The <sup>o</sup> F / <sup>o</sup> C symbol will flash. Display will be lit and interior light will function. <b>Unit will not cool.</b> Repeat command to return to normal operation.

This unit is Star-K certified. See <u>www.star-k.org</u> for more details.

#### **Door Alert Notification**

When the door is left open for more than 30 minutes:

- A tone will sound for several seconds every minute
- dr will appear in display
- Close door to silence alert and reset

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### ICE

Your ice machine is unique in how it forms ice with fractional freezing to form a slab of ice that is clear and has less dissolved solids than the water from which it is produced. This is accomplished by running water over the cold evaporator plate which gradually freezes the water to produce the ice slab. Pure water freezes first, leaving the dissolved solids in the residual reservoir water.



When the ice slab reaches the correct thickness, the ice sheet is released and slides onto the grid cutter. There, the ice slab is cut into cubes by the grid cutter's heated wires. The water containing the dissolved minerals is drained after each freezing cycle. Fresh water enters the machine for the next ice making cycle.



The ice machine will keep producing ice until the ice machine's bin is full, resuming automatically as needed. The ice bin is not refrigerated, and some melting will occur by design to preserve the ice quality and clarity. Allow your ice machine to run for 24-48 hours to accumulate ice.

The bin level sensor is located in the ice bin, it senses when the ice supply is low or full and starts or stops the icemaking process accordingly.





#### ICE PRODUCTION

In normal mode, the ice machine will produce up to 39 pounds (17.7 kg) of clear ice in a 24-hour period when installed in a 72° F ambient with a 55° F water supply. In "ECO" mode, the ice machine will produce up to 29 pounds (13.2 kg) of clear ice in a 24-hour period.

#### Note:

"Initial" ice production and ice accumulated in the storage bin will vary significantly. This is normal. During the first 24-hours of operation the unit will produce up to 39 lbs of ice at the above ambient and water temperatures, but when starting with an empty ice storage bin, ice accumulation may only be 18 lbs. By design, the ice storage bin is maintained at a temperature slightly above freezing to allow the stored ice to slowly melt, to preserve the ice quality and clarity and assure a constant supply of fresh ice. As ice is accumulated in the bin, the ice production rate will over come the ice melt and the storage bin will fill to capacity.

#### **NEW SOUNDS**

The ice machine will make sounds that are different than your household refrigerator. The ice production process creates noises such as ice falling onto hard surfaces, water cascading across the evaporator, and valves opening and closing. Below are some of the sounds you may hear: **Buzzing** - water valve opens to fill water reservoir.

**Rattling** - water flowing through water line.

**Splashing** - water flowing over evaporator plate and into reservoir.

A "Thud" - ice slab sliding down onto the grid cutter.
Clicks - ice cubes falling into the ice storage bin.
Gurgling - refrigerant flowing in the ice machine.
Air - the condenser fan.

# Airflow and Product Loading

#### NOTICE

The unit requires proper airflow to perform at its highest efficiency. Do not block the front grille at any time, or the unit will not perform as expected. Do not install the unit behind a door.





## Cleaning

Homes with poor water quality or high clear ice usage might require more frequent cleaning.

To clean your ice machine you will need to purchase a "nickel safe" ice maker cleaner.

# **A** CAUTION

Use only U-Line-approved ice machine cleaner and follow all label warnings and directions. Incorrect chemical usage, and any damage that may result, is not covered by warranty.

Available to order online: www.u-line.com Part # 80-55667-00

A "CLEAN" reminder will occur every 6 months to remind you that it may be time to clean your appliance. Over time mineral build up on the cold evaporator plate can occur which can adversely affect the quality of your ice. This build-up is dependent on your water source and usage. Normal ice production will continue while the "CLEAN" reminder is displayed. When reset, the "CLEAN" reminder will reset and not occur for another 6 months. If you choose to clean the appliance at this time, see the options menu section below.

#### Clean mode:

To ensure maximum performance and ice quality, it is recommended to clean your ice machine once every six months. This simple cleaning routine will also ensure water and energy use continues at optimum efficiency.

#### **To Clean Your Ice Machine:**

- 1. Turn the ice machine off by pressing and holding the "ON/OFF" icon for 3 seconds.
- 2. Remove all ice from the ice maker including from the evaporator and grid cutter.

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Forcing ice through the grid cutter will break the grid cutter wires.



- Drain the water from the water reservoir by removing the black plug from the bottom of the fresh water reservoir.
- 4. After the water is drained, replace the plug in the bottom of the reservoir.
- Add cleaning solution to the evaporator plate refer to your cleaning solution instructions to determine the proper amount of solution to add based on 2 quarts (1.9 liters) of water.
- 6. Turn the ice machine on
- 7. Turn on clean mode by holding ( for 5 seconds.
- 8. Your ice maker will fill with water and circulate over the evaporator for two 15-minute cycles then will resume normal production.
- 9. Remove the first 2-3 new batches of ice from your ice maker before using.





Lift splash shield up to access evaporator plate. Pour the cleaning solution slowly on the evaporator plate so it flows down into the fresh water reservoir.



Replace the splash shield if removed.

After the cleaning cycle is completed, verify that all build-up has been removed. If not, repeat the clean cycle procedure.

Evaporator plate Pour cleaning solution slowly onto the front edge of evaporator plate behind the grid cutter.

#### CABINET

The painted cabinet can be washed with a mild soap and water and thoroughly rinsed with clear water. NEVER use abrasive scouring cleaners.

#### EXTERIOR

Routine cleaning of the stainless steel surfaces will serve to greatly extend the life of your product by removing contaminants. This is especially important in coastal areas which can expose the stainless to severe contaminants such as halide salts (sodium chloride).

It is strongly recommended to periodically inspect and thoroughly clean crevices, weld points, under gaskets, rivets, bolt heads, and any locations where small amounts of liquid could collect, become stagnant, and concentrate contaminants. Additionally, any mounting hardware that is showing signs of corrosion should be replaced.

#### INTERIOR

Wash interior compartment with mild soap and water. Do NOT use an abrasive cleaner, solvent, polish cleaner, undiluted detergent or chlorine based cleaners.

### Cleaning Condenser

#### **INTERVAL - EVERY SIX MONTHS**

To maintain operational efficiency, keep the front grille free of dust and lint, and clean the condenser when necessary. Depending on environmental conditions, more or less frequent cleaning may be necessary.

**WARNING** 

Disconnect electric power to the unit before cleaning the condenser.



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

#### NOTICE

DO NOT use any type of cleaner on the condenser unit.

- 1. Remove the grille. (See GRILLE INSTALLATION).
- 2. Clean the condenser coil using a soft brush with a "combing" action or vacuum cleaner. Do not touch the condenser coil.
- 3. Install the grille.



### Extended Non-Use

If the ice machine is moved, not used for an extended period of time, or will be in an area that will be near freezing temperatures, it is necessary to remove any remaining water in the ice-making system.



This ice machine must have all water drained and removed to prevent ice machine damage as well as possible water damage to the surrounding area in freezing conditions. These damages are not covered under warranty.

## **CAUTION**

Do not use any type of anti-freeze or other solution as a substitution for properly draining the ice machine.

### **WARNING**

Risk of electrical shock or personal injury could occur due to moving components, if machine compartment access cover is removed before unplugging the ice machine.

#### **CLEAN THE ICE MACHINE**

Cleaning the ice machine will help prevent mold and mildew growth as well as sanitize the ice machine for storage or when it is put back into service. (SEE CLEANING SECTION OF THIS GUIDE)

#### WINTERIZATION

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If the unit will be exposed to temperatures of 40°F (5°C) or less, these steps must be followed. Draining and Removing Water from the Ice-Making System

- 1. Turn off the water supply to the ice machine.
- 2. Disconnect the water supply fitting at the inlet of the water valve.
- Change the electronic control to the "CLEAN" position for approximately one (1) minute. This will energize and open the water valve and remove most of the water from the water valve and the water valve's outlet water line to the reservoir.



- 4. Change the electronic control to the "OFF" position. This will energize and open the drain valve to drain the reservoir and the ice machine drain system.
- 5. Unplug the ice machine from the electrical outlet.
- 6. Remove the access cover from the rear of the ice machine.



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 Disconnect the water valve's outlet water line to the reservoir and drain the remaining water left in the water line trap area.



#### To disconnect the water

**outlet line:** Push up on the white collar and pull the plastic water line from the bottom of the water valve.

#### To reconnect the water

**outlet line:** Simply insert the plastic tubing into the white collar and push until it stops (about <sup>1</sup>/<sub>2</sub>", 12 mm, of water line will enter the valve).



water line

- 8. Reconnect the water valve outlet water line.
- 9. Reinstall the ice machine's access cover.
- 10. Clean and dry the ice machine's storage bin.
- 11. Prop the door open for air circulation to prevent mold and mildew.
- 12. Leave the water supply line disconnected or reconnect the supply line and leave it shut off. Do NOT turn the water on and allow water to enter back into the water valve.
- 13. Install the winterization plug in the water drain hole inside the ice bin.



- 14. Remove the top clamp from the vent tube, for easy access to the air hose.
- 15. Apply air pressure (approximately 10 psi) to the end of he vent tube which will purge the remainder of the water from the drain pump and the drain line.
- 16. Reinstall the vent tube and clamp to the back of the ice machine and remove the winterization plug from the ice bin and save it for future use.



#### **Drain Pump Removal**

- 1. Unplug the ice machine from the electrical supply and remove the rear access cover from the ice machine.
- 2. Remove the front panel and the toe grille from the front of the ice machine.
- 3. Remove the front and rear drain pump brackets.
- 4. Unscrew the 3 hose clamps and remove the 3 hoses from the front of the drain pump.
- 5. Unscrew the leveling leg in the back corner until the end of the threaded portion is flush with the threaded nut insert in the base.



#### To Restart the Ice Machine

- 6. Reconnect or turn on the water supply line.
- 7. Reconnect drain tubing if removed.
- 8. Plug in the power cord to a wall outlet and turn the ice machine on.
- 9. Check the water inlet, drain lines, and fittings for any water leaks.
- 10. Check drain pump (if equipped) operation by pouring approximately two (2) quarts of water into the ice storage bin. The drain pump should activate and discharge water. Check for water leaks at all hose connections.

### Troubleshooting

#### **BEFORE CALLING FOR SERVICE**

### **WARNING**

#### **ELECTROCUTION HAZARD**

- Never attempt to repair or perform maintenance on the appliance until the main electrical power has been disconnected. Turning the appliance control "OFF" does not remove electrical power from the unit's wiring.
- Replace all parts and panels before operating.

If the appliance appears to be malfunctioning, read through this manual first. If the problem persists, check the troubleshooting guide below. Locate the problem in the guide and refer to the cause and its remedy before calling for service. The problem may be something very simple that can be solved without a service call. However, it may be required to contact your dealer or a qualified service technician.

#### ICE MACHINE OPERATION

#### Ice machine does not operate:

• Is the ice machine's power cord plugged in? Plug the power cord into a grounded 3 prong outlet.

Is the electronic control showing the "ICE" position?

Check the control to be sure it is in the "ICE" position

- Is a fuse blown or a circuit breaker been tripped? Replace a blown fuse or reset a tripped circuit breaker.
- Is the temperature of the room cooler than it normally is?

The minimum room temperature is 55°F (13°C). The bin thermistor may be sensing the room temperature and shut off before the bin is full of ice. If the room temperature remains low the ice machine may not restart.

• Is there a drain pump in the ice machine?

The drain pump is designed to temporarily shut the unit off when large quantities of water create a high-limit condition. Wait a few minutes as the drain pump will continue to operate to dispose of the excess water. If there is still water in the ice bin check the drain pump vent line and drain line for obstructions or kinking.

#### The ice machine is noisy:

Many sounds of an ice machine are different than your household refrigerator. This subject is discussed on page 11, but check the following:

• Do you hear water being circulated in the ice machine?

This is a normal sound as water is added once every ice making cycle.

#### • Is there a "whooshing" sound?

Make sure water is getting to the ice machine. Also check to make sure the drain plug is fully seated in the water reservoir.

• Is there an ice slab caught between the evaporator plate and the grid cutter?

First check to see if the ice machine is level. If the ice machine is level run a cleaning cycle.

# ICE PRODUCTION

#### Little or no ice production from the ice machine:

• Is the electronic control set to the "ICE" position? Check the control to be sure it is in the "ICE" position

• Is water getting to the ice machine?

Make sure nothing is restricting the water supply such as a closed water valve or a blown fuse or tripped circuit breaker, or a kinked supply line, or low water pressure.

- Has the ice machine just been started? A typical ice production cycle can take up to 1<sup>1</sup>/<sub>2</sub> hours. Initial start up cycles can take longer. Check the ice machine after 24 hours for ice accumulation in the bin.
- Is the reservoir drain plug in place? Check that the reservoir drain plug is properly seated.
- Is the water distributor tube restricted?

Run a cleaning cycle to clean the ice machine. Also check any filters to make sure they are not restricted.

• Is the condenser fan air flow restricted? Make sure the grille in the front of the ice machine is open for proper air circulation.

• Is the room and/or water temperature to warm? Move the ice machine to an area where the ambient temperature is below 90°F (32°C) for built-in ice machines or below 100°F (38°C) for freestanding ice machines. The ice machine should not be placed next to a heat source such as an oven. Check the cold water connection.

• Is there scale build up in the ice machine? If there is scale build up on the evaporator, the ice machine needs to be cleaned. See "Cleaning the Ice machine".

#### **ICE QUALITY**

#### Odor, grey color, or off taste in the ice:

 Is there mineral scale build up on the evaporator plate?

The ice machine needs cleaning. See "Cleaning the Ice Machine".

- Is there a high mineral content in the water?
- The water may need to be filtered.
- Are food items being stored in the ice bin? Remove food from the ice bin.
- Unpleasant Odors may require the use of a charcoal filter on the water supply line.

#### **Clumps of ice:**

• Are there clumps of ice in the bin?

If the ice isn't used on a regular basis it will melt and form into clumps. Break up the ice clumps with the ice scoop.

#### Ice cubes are too big or too small:

Is there low ice consumption?

Ice is slowly melting in the ice bin which will affect the size of the cubes. This is normal. When the ice bin needs to be replenished, cubes will return to the regular size.

• Is the ice slab releasing?

Clean the evaporator. See "Cleaning the Ice Machine"

#### • Is the distributor tube restricted?

Check the water line to the ice machine to make sure there are no restrictions or kinks in the line. Check all filters to make sure they are not restricted. Check that the water flows evenly out of the distributor tube, if not, clean the ice machine. See "Cleaning the Ice Machine".

#### **PLUMBING PROBLEMS**

• Is the drain hose aligned over the drain?

Move the ice machine to align the drain.

• Is the ice machine draining properly?

Check that there are no kinks or restrictions in the drain lines; this can cause water to back up in the ice bin. Check that foreign material is not blocking the ice bin drain located at the right rear corner of the ice bin. Check the drain pump discharge and vent line or any restrictions or kinks. Check that the drain pump is level.

#### NOTE:

If there are plumbing issues outside of the ice machine, they cannot be repaired by the service technician. A qualified plumber will have to be called.

#### TROUBLESHOOTING THE DRAIN PUMP

#### NOTE:

If the drain pump reservoir (not the ice machine bin) reaches overfill condition, the power to the ice machine will be shut off.

# If the ice machine is not working, check the following:

- Make sure there is power at the receptacle.
- Make sure the ice machine is turned on.
- Make sure the ice bin is not full.

#### Then check the drain pump: The pump does not run:

- Make sure the pump is plugged in and there is power to the receptacle.
- Check the inlet to the drain pump for debris and clean as needed. Remove clamps and inlet tube from drain pump to check for and remove debris.
- Make certain the vent line is free of kinks/sharp bends or restrictions.
- Make certain there is enough water to activate the drain pump. It will take at least one (1) quart (.95 liters)of water to activate the drain pump.

#### The pump runs, but no water is pumped out:

- Check that the vent is clear and free of restrictions.
- Check the discharge line to make certain there are no restrictions.
- Make sure that the discharge tubing has not exceeded the maximum lift of eight (8) feet (2.44 meters) and the horizontal run is not greater than twenty (20) feet (6.1 meters).

# The pump runs and then quickly turns off repeatedly:

- Check to make certain the drain pump is level.
- Check that the vent is clear and free of restrictions.

#### The ice machine is running but not producing ice:

• Check to make sure water is not backing up in the ice bin.

# USER GUIDE

## Wire Diagram



### **Product Liability**

Field service technicians are authorized to make an initial assessment in the event of reported damages. If there are any questions about the process involved, the technician should call U-Line for further explanation.

While inspecting for defects or installation issues, photos should be taken to document any damages or issues found.

During the assessment, if the service technician is able to find the source of the damage and it can be resolved by replacement of a part, the servicer is authorized to replace the part in question. The part that caused the damage must be returned to U-Line in its entirety. The part must be clearly labeled with the serial number of the unit it was removed from, the date, and the servicer who removed the part.

If the service technician determines the damage is the result of installation issues (water connection/drain, etc.), the consumer would be notified and the issues shall be resolved at the direction of the consumer.

If damage is evident and the service technician is unable to find the source, U-Line must be contacted at +1.414.354.0300 for further direction.

8900 N. 55th Street • Milwaukee, WI 53223 T: +1.414.354.0300 • F: +1.414.354.5696 Website: <u>www.u-line.com</u>

> Right product. Right place. Right temperature Since 1962.

# USER GUIDE

# Parts



	DESCRIPTION	PART
1	ACCESS COVER, ADA CLR	<b>NUMBER</b> 80-54080-02
2	ACTUATOR-SWITCH-BLK	80-54351-07
3	CIRCULATION PUMP	80-54137-01
4	CLEAR ICE MACHINE CLEANER *	80-55667-00
5	COMPRESSOR ASSY, NUGGET 15"	80-55211-00
6	CONDENSER FAN BLADE	80-54066-01
7	CONDENSER FAN MOTOR	80-54138-01
8	DISPLAY ASSEMBLY	80-55660-04
9	DOOR ASSY-MPC-SS SOLID	80-54351-04
10	DOOR STOP-115 DEG-BLK	80-54351-06
11	DRAIN PUMP REPLACEMENT KIT *	80-54147-03
12	DRAIN VALVE	80-54139-01
13	DRIER	80-54055-01
14	EVAPORATOR W/DRIER-15CL	80-54349-01
15	GASKET, DOOR	80-54235-03
16	GRID CUTTER	80-54349-02
17	GRILLE-15" W/SWITCH-BLK	80-55609-04
18	HINGE KIT-BLK	80-55595-04
19	HOT GAS VALVE	80-54009-02
20	ICE DEFLECTOR-CLEAR	80-54080-01
21	ICE MACHINE ACCESS DOOR-BLK	80-54080-03
22	ICE SCOOP, CLR *	80-54080-00
23	INVERTER (FMX), DROP IN, 120V	80-55569-00
24	LED LIGHT STRIP AND COVER ASSY	80-54000-00
25	LEG LEVELERS (4)	80-54019-00
26	MAIN BOARD	80-55398-00
27	PACKAGING *	80-54238-01
28	POWER CORD *	80-55519-06
29	ROCKER SWITCH	80-54105-01
30	SERVICE COVER-BLACK	80-54344-02
31	THERMISTOR(1 PC)	80-54006-00
32	THERMISTOR, HI TEMP *	80-54006-01
33	TRANSFORMER	80-54134-01
34	WATER VALVE	80-54139-02

# **R-600A Specifications**

For R-600a refrigerant service tips and more videos, go to: <a href="http://www.u-line.com/videos">www.u-line.com/videos</a>.



# Flammability warnings for a pure-iso-butane refrigerant.







#### Gloves and Eye Protection must be used.



R-600a is considered non-toxic, but is flammable when mixed with air.

Keep a dry powder type fire extinguisher in the work area.



R-600a is heavier than air, do not allow any leakage/migration to low areas such as basements and stairs.

Never use a torch on a fully charged refrigeration system.

Never substitute U-Line OEM replacement parts or methods of construction.

**R-600a must be stored and transported in approved containers.** 

## **WARNING**

Only skilled and well trained service technicians permitted to service R-600a equipped products.

All tools and equipment must be approved for use with R-600a refrigerant.

Local, state and federal laws, standards must be observed along with proper certification and licensing.

Ventilation is required during servicing.

No conversions to R-600a from any other refrigerants. OEM R-600a equipped unit only.

Service area must be free of ignition sources.

No smoking is allowed in the service area.

All replacement electrical components must be OEM and installed properly (sealed and covered).

If the evaporator is cold prior to service, it must be thawed prior to service.

When using a vacuum pump, start pump before opening refrigeration system.

Vacuum pump and recovery equipment should be at least 10 feet from the work area.

It is recommended that a simple LPG gas detector is on site during service.

Ensure that all R-600a is removed from the system prior to brazing any part of the sealed system.

Only a clean, dry leak free system should be charged with R-600a.

#### **R-600A SPECIFICATIONS/LABELING**

R-600a equipped products are labeled (both the unit and the compressor).

R-600a is colorless and odorless.

R-600a is considered non-toxic, but is flammable when mixed with air.

Do not remove or alter any R-600a labeling on the product.

Use only a refrigerant grade R-600a from a properly labeled container.

#### **RECOVERING/RECLAIMING R-600A**

<u>(R-600a has been exempted from recovery/reclaiming</u> requirements by the US EPA)

Recovery/Reclaiming equipment must be approved for use with R-600a.

Ensure the evaporator is at room temperature prior to recovery/reclaiming R-600a.

Use a common piercing pliers or piercing valve to remove R-600a from the compressor process tube. (Note: Piercing devices must not be left on the system and must be replaced with a Schrader type valve.) Evacuate/reclaim via the piecing pliers to ensure the system is empty of R-600a before any system work is performed.



The recovery cylinder must be evacuated (no air inside) prior to accepting R-600a.

The recovery cylinder must not be filled more than 45% safe fill level and refrigerants must not be mixed.

The recovery cylinder must be clearly marked with R-600a and Flammable Warning labels.

Ensure proper ventilation during recovery/reclaiming of R-600a.

Start vacuum pump/recovery pump prior to piercing the compressor process tube.

Follow recovery/reclaim OEM instructions for the specific equipment used.

#### SYSTEM REPAIR

Ensure no residual R-600a refrigerant is left within the system prior to repair (simple venting is not sufficient).

Evacuate and charge with dry nitrogen for leak checks.

Repair leaks or replace system parts as required.

When re-brazing, the system must be purged with dry nitrogen and at least one access point open to the atmosphere.

When re-brazing, proper ventilation is required along with constant monitoring for the presence of R600a refrigerant.

The filter dryer must be replaced any time the sealed system is serviced.

No system should be open to the atmosphere for longer than 15 minutes to avoid moisture migration into the system components.

#### LEAK DETECTION

After removal of the R-600a, the unit can be charged with dry nitrogen or helium.

Electronic leak detection or soap solution can be used to check for nitrogen/helium leaks.



Never use a halide torch or lighted match to check the system for leaks at any time.

The high side of the refrigeration system (compressor discharge to outlet of drier) must be leak tested with the compressor running.

The low side of the refrigeration system (evaporator, compressor and suction line) must be leak tested with the compressor off (equalized pressure).

#### RECHARGING

No air is ever to be allowed inside the refrigeration system (R-600a refrigerant or dry nitrogen only).

Never use a torch on a fully charged refrigeration system.

Install a Schrader Type access port on the compressor process stub.



Evacuate the system to 100 microns prior to charging.

Weigh in the R-600a charge using a refrigerant scale. (run compressor an extra two minutes to clear the charging hoses).

Seal the Schrader Type access port, a proper cap and seal must be used to close the system.



#### SUMMARY

Safely handling R-600a requires proper procedures and training.

R-600a approved service tools must be used.

R-600a labeling must not be removed or altered.

Proper ventilation during service is required.

Never apply a torch to a charged R-600a refrigeration system.

Use OEM replacement service parts and do not alter the construction of the unit.

# System Diagnosis Guide

#### **REGRIGERATION SYSTEM DIAGNOSIS GUIDE**

System Condition	Suction Pressure	Suction Line	Compressor Discharge	Condenser	Capillary Tube	Evaporator	Wattage
Normal	Normal	Slightly below room temperature	Very hot	Very hot	Warm	Cold	Normal
Overcharge	Higher than normal	Very cold may frost heavily	Slightly warm to hot	Hot to warm	Cool	Cold	Higher than normal
Undercharge	Lower than normal	Warm- near room temperature	Hot	Warm	Warm	Extremely cold near inlet - Outlet below room temperature	Lower than normal
Partial Restriction	Somewhat lower than normal vacuum	Warm- near room temperature	Very hot	Top passes warm - Lower passes cool (near room temperature) due to liquid	Room temperature (cool) or colder	Extremely cold near inlet - Outlet below room temperature backing up	Lower than normal
Complete Restriction	In deep vacuum	Room temperature (cool)	Room temperature (cool)	Room temperature (cool)	Room temperature (cool)	No refrigeration	Lower than normal
No Gas	0 PSIG to 25"	Room temperature (cool)	Cool to hot	Room temperature (cool)	Room temperature (cool)	No refrigeration	Lower than normal



### **Compressor Specifications**



Electrocution can cause death or serious injury. Burns from hot or cold surfaces can cause serious injury. Take precautions when servicing this unit.

**Disconnect the power source.** 

Do not stand in standing water when working around electrical appliances.

Make sure the surfaces you touch are not hot or frozen.

Do not touch a bare circuit board unless you are wearing an anti-static wrist strap that is grounded to an electrical ground or grounded water pipe.

Handle circuit boards carefully and avoid touching components.

	FMXA9C
REFRIGERANT	R600A
VOLTAGE	115 VAC
FREQUENCY	60 Hz
START WINDING	5 Ohm at 77º F
RUN WINDING	7 Ohm at 77º F
RUN TO START	12 Ohm at 77° F
LRA	8.0 A
FLA	2.18 A
STARTING DEVICE	Run Cap 12VF 250V P2

\*All resistance readings are  $\pm \ 10\%$ 

### **Control Operation-Service**

#### **UI BUTTON LAYOUT**



#### 1. Hidden Button

- Access Service Menu
- No LED directly above. All LED's turn on with button

#### 2. Plus Button

- Increases temperature
- Navigates through service menu

#### 3. Minus Button

- Decreases temperature
- Navigates through service menu

#### 4. Light Button

- Activates light for 3 hours on select models
- Used to select items in service menu

#### 5. Power Button

• Turns unit on/off

#### 6. Clean Button

• Activates Clean Cycle

#### **CONTROL FUNCTION GUIDE**

FUNCTION	COMMAND	DISPLAY/OPTIONS
ON/OFF	Press 🕑 and release	Unit will immediately turn ON or OFF
Clean Mode	See "Cleaning" section	
Sabbath Mode	See "Sabbath Mode" section	

#### Showroom Mode

This mode is designed to show units in a display environment. When in this mode the only functions will be the control and cabinet lights. The compressor, fans, etc. will not operate. To enter/exit this mode hold the light key and the power key for 5 seconds. The display will flash once and beep and the degree symbol will begin to flash. When the degree symbol is flashing the unit will allow the use of the control for demonstrations. The unit can be left in this mode indefinitely.

#### Service Mode

This mode has options available for service diagnostics. To enter the mode hold the hidden key for 10 seconds. The display will show "O." When in this mode use the up and down arrows to select the desired option. The LIGHT key is the ENTER key and will initiate the function. If changing a setting, you must press the LIGHT key again to retain the changed setting. To exit the service mode scroll to option "O" and press the LIGHT key. After five minutes of not touching any keys the mode will also exit automatically.

#### SERVICE MODE GUIDE

(For adjustments, see Service Mode Guide)

- 0. Exit
- 1. Thermistor 1 temperature not including offsets.
- 2. Thermistor 2 temperature not including offsets.
- 3. Thermistor 3 temperature not including offsets.
- 4. Thermistor 4 temperature not including offsets.
- 5. Thermistor 1 offset. (+/- 10)
- 6. Thermistor 2 offset. (+/- 10)
- 7. Thermistor 3 offset. (+/- 10)
- 8. Thermistor 4 offset. (+/- 10)
- 9. Thermistor 2 set point
- 10. Thermistor 3 set point.
- 11. Thermistor 4 set point.
- 12. Defrost Interval (0 to 99 hr)
- 13. Defrost duration (0 to 99 min)
- 14. Error Log (See Appendix)
- 15. Clear error log (hold light key until cleared)
- 16. Thermistor 1 differential (+5)
- 17. Thermistor 3 differential (+5)
- 18. Evaporator fan on delay (0 to 99 sec)
- 19. Evaporator fan off delay (0 to 99 sec)
- 20. Individual component toggle
  - Option #0 Exit
  - Option #1 Relay 1
  - Option #2 Relay 2
  - Option #3 Relay 3
  - Option #4 Relay 4
  - Option #5 Relay 5
  - Option #6 Relay 6
  - Option #7 DC Output 1
  - Option #8 DC Output 2
  - Option #9 DC Output 3
  - Option #10 DC Output 4
  - Option #11 DC Output 5
  - Option #12 Serial output (Compressor)
- 21. Model number
- 22. Light All Segments
- 23. Activate Defrost/Harvest- press and hold for 3 seconds to activate defrost/harvest
- 24. Defaults- press and hold for 3 seconds to restore all values to factory defaults.
- 25. Main Software (Display only)
- 26. Live Log Period (frequency that data is output to diagnostics port)
- 27. Factory test mode (0=Off, 1=On)
- 28. Compressor RPM
- 29. Freeze time adjust (Model 54 only)
- 30. Harvest time adjust (Model 54 only)
- 31. Low temp alarm limit (Model 55 only)
- 32. High temp alarm limit (Model 55 only)

#### APPENDIX

# SERVICE MODE GUIDE

This shows the pure thermistor reading with no offsets taken into account.

#### 2. THERMISTOR 2

This shows the pure thermistor reading with no offsets taken into account.

- 3. Does not apply to this model.
- 4. Does not apply to this model.

#### 5. THERMISTOR 1 OFFSET

(DO NOT MAKE AN ADJUSTMENT TO THIS WITHOUT CONTACTING TECH LINE: +1 414.354.0300) This calibration is only to be used if actual temperature at thermistor #1 is off from set point. By adjusting the offset higher we can force the unit to drive the temperature down below the set point. (example: adjusting from 0 to +2 will drop the unit

temperature 2 degrees)

#### 6. THERMISTOR 2 OFFSET

(DO NOT MAKE AN ADJUSTMENT TO THIS WITHOUT CONTACTING TECH LINE: +1 414.354.0300)

- 7. Does not apply to this model.
- 8. Does not apply to this model.
- Does not apply to this model. This shows the thermistor reading with offsets taken into account.
- 10. Does not apply to this model.
- 11. Does not apply to this model.
- 12. Does not apply to this model.
- 13. Does not apply to this model.

#### 14. VIEW ERROR LOG

A list of errors in the order they occurred will scroll on the display. All errors are logged in memory. Only door error is displayed on the display and has an audible signal.

EO: Door 1 open.

- E1: Thermistor 1 open.
- E2: Thermistor 2 open.
- E3: Does not apply to this model.
- E4: Does not apply to this model.
- **E5:** Thermistor 1 shorted.
- E6: Thermistor 2 shorted.
- E7: Does not apply to this model.
- **E8:** Does not apply to this model.
- E9: Door open.
- E10: Door 2 open.

	E11 - E13 Do not apply to this model.
	P1: Pump Circuit open (Only if unit has drain pump.)
15:	CLEAR ERROR LOG
	To clear errors, press and <u>hold</u> (5 seconds) when
	CLR is flashing.
16:	THERMISTOR - 1 DIFFERENT
	This number should not be adjusted.
17.	Does not apply to this model.
18.	THIS NUMBER SHOULD NOT BE ADJUSTED
19.	THIS NUMBER SHOULD NOT BE ADJUSTED
20.	INDIVIDUAL COMPONENT TOGGLE SEE RELAY / OUTPUT CHART
21.	MODEL NUMBER INDICATOR
	Displays the two-digit model number of the specific unit. See Model list table.
22.	LIGHT ALL LED SEGMENTS
	This will illuminate all the LEDs on the display to ensure they work properly
23.	ACTIVATE DEFROST /HARVEST
	-Press and hold for 3 seconds to activate
24.	
	-Press and hold for 3 seconds to restore all values to
25	factory defaults
25.	MAIN SOFTWARE
26. 27.	Does not apply to this model FACTORY TEST MODEL - DO NOT USE
27.	COMPRESSOR RPM
20.	

29. - 32. Do not apply to this model.

#### **PROGRAM MODEL NUMBER**

Model #	
82	VCCC115-SS81A- CRAFT ICE

#### PROGRAMMING THE UNIT TO CORRECT MODEL NUMBER

- 1. Disconnect the unit from power source.
- 2. Push and hold the U-Line button.  $\bigcirc$
- 3. While still holding the U-Line button, plug the unit into the appropriate power source.
- When the flashing digits appear (3-5 seconds), use the up and down arrow buttons to select the appropriate model number from the chart below.
- 5. Press the light bulb button once.  $-\frac{1}{2}$
- 6. The display will blink, and then will appear as the programmed display.

Display #	Relay / Output
Option #0 Option #1 Option #2 Option #3 Option #4 Option #5 Option #6 Option #7 Option #8 Option #9 Option #10 Option #11 Option #12	Exit Relay 1 Relay 2 Relay 3 Relay 4 Relay 5 Relay 6 DC Output 1 DC Output 2 DC Output 3 DC Output 4 DC Output 5 Serial output (Compressor

### **Relay / Output Chart**

Relay 1	Compressor
Relay 2	-
Relay 3	Circulation Pump
Relay 4	Water Inlet
Relay 5	Hot Gas Valve
Relay 6	Cond Fan
DC1	Light 1
DC2	Light 2
DC3	-
DC4	-
DC5	Cond Fan

### Thermistor

Thermistors are used for various temperature readings. Thermistors provide reliable temperature readings using a resistance which varies based on surrounding temperatures. If a faulty thermistor is suspected, it may be tested using an accurate ohmmeter.

Thermistor connections must be kept clean. A thermistor connection that has become corroded can cause resistance values from the thermistor to change as they pass through a dirty connection to the board.

It is for that reason that we apply dielectric grease to all of our thermistor connections. Dielectric grease will help to keep thermistor connections clean and dry.

If you change a thermistor in the unit, please re-apply dielectric grease to the connection. If you encounter a dirty thermistor connection, you should replace the thermistor and the thermistor harness.

This unit has one thermistor located along the right hand sidewall of the ice bin. It is used to maintain the ice level in the bin.

Thermistor Resistance Data

Temp (F)	Temp (C)	Nominal Resistance (OHMS)*
-40	-40	169157
-31	-35	121795
-22	-30	88766
-13	-25	65333
-4	-20	48614
5	-15	36503
14	-10	27681
23	-5	2116
32	0	16330
41	5	12696
50	10	9951
59	15	7855
68	20	6246
77	25	5000
86	30	4029
95	35	3266
104	40	2665
113	45	2186
122	50	1803
131	55	1495
140	60	1247
149	65	1044
158	70	879
167	75	743
176	80	631

\* (+/- 5%)

## **U-Line Corporation (U-Line) Limited Warranty**

#### **One Year Limited Warranty**

For one year from the date of original purchase, this warranty covers all parts and labor to repair or replace any part of the product that proves to be defective in materials or workmanship. For products installed and used for normal residential use, material cosmetic defects are included in this warranty, with coverage limited to 60 days from the date of original purchase. All service provided by U-Line under the above warranty must be performed by a U-Line factory authorized servicer, unless otherwise specified by U-Line. Service provided during normal business hours.

#### **Two Year Limited Warranty (5 Class Product)**

For two years from the date of original purchase, this warranty covers all parts and labor to repair or replace any part of the product that proves to be defective in materials or workmanship. For products installed and used for normal residential use, material cosmetic defects are included in this warranty, with coverage limited to 60 days from the date of original purchase. All service provided by U-Line under the above warranty must be performed by a U-Line factory authorized servicer, unless otherwise specified by U-Line. Service provided during normal business hours.

#### **Available Second & Third Year Limited Warranty**

In addition to the standard one and two year warranties outlined above, U-Line offers a one year extension of the warranties from the date of purchase, free of charge. To take advantage of this extension, you must register your product with U-Line within 60 days from the date of purchase at u-line.com and provide proof of purchase. Nugget Ice Machine proof of purchase must include the purchase of an in-line water filter and filter head to qualify for this additional limited warranty.

#### **Five Year Sealed System Limited Warranty**

For five years from the date of original purchase, U-Line will repair or replace the following parts, labor not included, that prove to be defective in materials or workmanship: compressor, condenser, evaporator, drier, and all connecting tubing. All service provided by U-Line under the above warranty must be performed by a U-Line factory authorized servicer, unless otherwise specified by U-Line. Service provided during normal business hours.

#### Terms

These warranties apply only to products installed in any one of the fifty states of the United States, the District of Columbia, or the ten provinces of Canada. The warranties do not cover any parts or labor to correct any defect caused by negligence, accident or improper use, maintenance, installation, service, repair, acts of God, fire, flood or other natural disasters. The product must be installed, operated, and maintained in accordance with your product's User Guide.

The remedies described above for each warranty are the only ones that U-Line will provide, either under these warranties or under any warranty arising by operation of law. U-Line will not be responsible for any consequential or incidental damages arising from the breach of these warranties or any other warranty, whether express, implied, or statutory. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. These warranties give you specific legal rights, and you may also have other rights which vary from state to state.

Any warranty that may be implied in connection with your purchase or use of the product, including any warranty of *merchantability* or any warranty *fit for a particular purpose* is limited to the duration of these warranties, and only extends to five years in duration for the parts described in the section related to the five year limited warranty above. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

- The warranties only apply to the original purchaser and are non-transferable.
- The second, third, and five year warranties cover products installed and used for normal residential or designated marine use only.
- The warranties apply to units operated outside only if designed for outdoor use by model and serial number.
- U-Line Commercial products are covered by the one year and 5 year limited warranties and are not eligible for the second and third year limited warranties.
- Replacement water filters, light bulbs, and other consumable parts are not covered by these warranties.
- The start of U-Line's obligation is limited to four years after the shipment date from U-Line.
- In-home instruction on how to use your product is not covered by these warranties.
- Food, beverage, and medicine loss are not covered by these warranties.
- If the product is located in an area where U-Line factory authorized service is not available, you may be responsible for a trip charge or you may be required to bring the product to a U-Line factory authorized service location at your own cost and expense.
- Units purchased after use as floor displays, and/or certified reconditioned units, are covered by the limited one year warranty only and no coverage is provided for cosmetic defects.
- Signal issues related to Wi-Fi connectivity are not covered by these warranties.

For parts and service assistance, or to find U-Line factory authorized service near you, contact U-Line: 8900 N. 55<sup>th</sup> Street, Milwaukee, WI 53223 • u-line.com • onlineservice@u-line.com • +1.414.354.0300

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