

BSG ICEZONE INSTALLATION & MAINTENANCE

for Follett Ice Bins

BSG ICEZONE BIN MODELS: SG1650





STRICTLY CONFIDENTIAL - ABSOLUTELY NO REPRODUCTION IS PERMITTED

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Table of contents

Specifications	3
Before installation	4
Requirements	4
Selecting the installation area	4
Safety instructions	4
Installation instructions	6
Troubleshooting installation problems	9
Maintenance instructions	10
Bulb replacement instructions	10
Certifications	11

Included parts list:

Item	QTY	Description
1	1	IZ-20
2	20ft	FDA approved 5/8" ID x ¾ OD tubing
3	4	FDA approved elbow 5/8" fitting
4	2	90 Elbow 5/8" Hose ¾NPT
5	2	Bulkhead fittings
6	2	Bulkhead fitting gasket
7	1	12VDC 2.1A Wall Adapter
8	2	Clamp ¾" handy clamp
9	3	#8 x 30mm sheet metal screw
10	3	Plastic wall anchors
11	1	Instruction manual







Specifications

The ICEZONE is encased in an engineered plastic housing with dimensions of 303mm X 108mm X 52mm. For accessibility to the bulb connectors, the unit should be installed in an area with access to allow removal of the service cover. The lamp will require 200mm (8in.) clear space beyond the end of the service cover for removal.

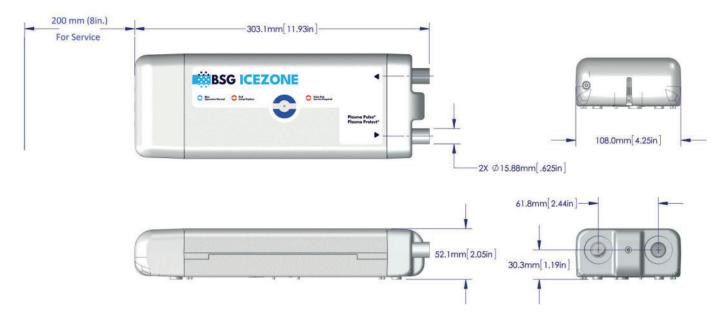


Figure 7 - External envelope of the ICEZONE in mm [and inches]

Figure 8 - ICEZONE notice the arrows indicating return and supply tubes. Also depicted are the 12V DC male connector assembly and the ultraviolet light bulb connector. When installing ensure that there is sufficient clearance to access the bulb connector, which will be required should the bulb need to be replaced.



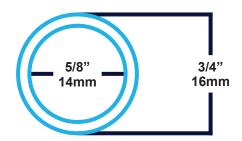
Figure 8 - ICEZONE notice the arrows indicating return and supply tubes. Also depicted are the 12V DC male connector assembly and the ultraviolet light bulb connector. When installing ensure that there is sufficient clearance to access the bulb connector, which will be required should the bulb need to be replaced.

The unit has two tubes extending from the front face: 1) the return intake; and 2) the supply outlet (see Figure 8).

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Figure 9 - The intake and outlet tubes (see Figure 8) have an internal diameter of 14mm and an external diameter of 16mm. Tubing used to direct and collect photoplasma throughout the ice maker should have a minimum inside diameter of 14mm to allow unrestricted airflow.



Before installation

Requirements

ICEZONE requires a 12VDC, 2.1A power supply for operation. This installation will use a wall adapter to convert the 115VAC to the 12VDC required for ICEZONE. Tubing, fittings, screws, rivets, brackets, clips and clamps required for installation must be NSF-grade materials and should be installed per NSF and UL specifications.

Power supply – power usage < 24 watts

Input voltage to power supply 88 – 264 VAC, 50-60Hz

Power source (shown at right) Dedicated power supply with 12VDC output. The ICEZONE must be powered 24

hours 7 days a week for proper performance.

Installation area 16cm X 11.5cm X 6.8 cm

Tubing 5/8"ID x 3/4"OD NSF approved

Fittings and clamps 5/8" NSF Approved

Replacement bulb IZ-05: 10-08010, IZ-10: 10-08025, IZ-20: 10-08050, IZ-30: 10-08100

Selecting the installation area

This device may not be installed in the ice production area or ice bin, as those areas are classified as food zones by the Food and Drug Administration (FDA). This device may be mounted outside the ice machine and attached to the machine or an adjacent wall. The adequacy of the installation area should be assessed based on the available size, the access to a suitable power source, the availability of a proper mounting location to secure the device with rivets or screws, and the ease of access to change the ultraviolet light bulb as required. The optimal installation location depends on the make and model of the ice machine. See the installation instructions below for the recommended position to install the ICEZONE on a Follett Ice Bin.

Safety instructions



WARNING: These procedures should only be performed by a qualified electrician according to national and local electrical codes if the installation requires works with the mains power. Mains supply power should be turned off during installation or when replacing components or checking connections. Never perform maintenance or cleaning while the equipment is energized.

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Inspect the device for damage that may have occurred during transportation. If the unit has been damaged, do not connect it to the power supply or try to use it otherwise.

In the event of damage, immediately contact BSG at info@bsg-uv.com.

The installation may not be carried out in such a way that it damages electronic components, ice maker components or wiring. Furthermore, installation must not require any modification to or re-positioning of ice maker components. Before installation or maintenance, disconnect the ice maker from the power supply.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children are not allowed to use or play with this appliance and should be supervised to ensure this.

Use only spare parts approved by BSG.



UV WARNING – Eye damage may result from directly viewing the light produced by the lamp in this apparatus. Always turn off lamp before opening cover.



WARNING – High voltage insideOpen Circuit Voltage and Voltage to Ground: 600V



Dispose of this device or any related parts in accordance with all international, federal, state, and local regulations.



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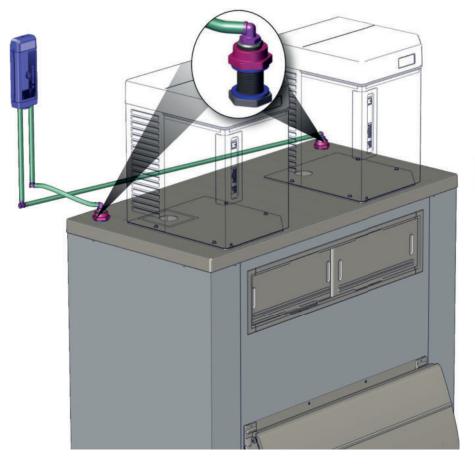


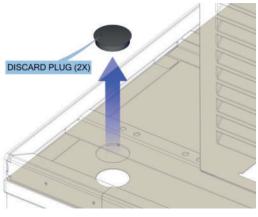


Installation instructions

- Before installation, clear the top surface of the bin to access locations for the required fittings. For sanitation the ice bin may need to be emptied or the ice covered to prevent installation debris from contaminating the ice.
- 2. Locate the position on the bin top where the ICEZONE will be attached (see below). A template is available to locate the drilling location for the fitting. See measurements and template on last page of this manual. Some bin tops may have factory provided holes. If so, remove the cap plugs and proceed without drilling.

For Follett Bins



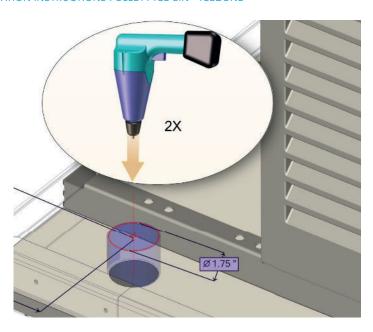


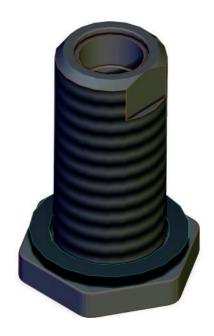
Locate the ICEZONE fittings as shown on the picture here.

3. After confirming the locations of the ICEZONE fittings on the bin top, drill a 1/4" pilot hole to ensure alignment of the upper and lower bin panel holes. Then using a 1-3/4" hole saw, drill through the bin cover and inner liner at each location. De-burr the holes as needed to ensure no material falls into the ice bin.

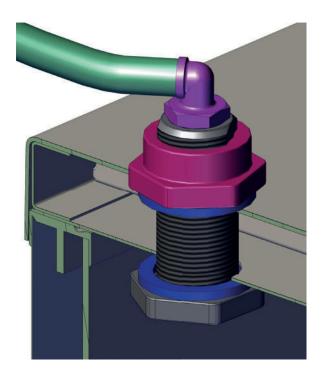
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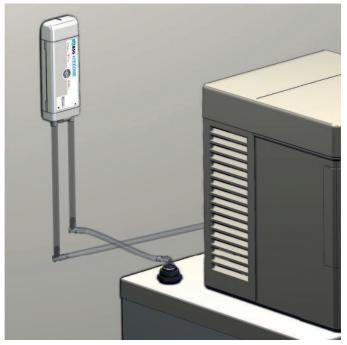






- 4. After removing the hole plugs or drilling the required holes, insert the bulkhead fitting with rubber gasket in place from the inside of the bin.
- 5. Assemble the 90 degree elbow with hose barb, bulkhead nipple, nut, washer as shown. Insert the fitting, and tubing as shown below.



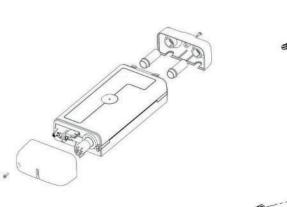


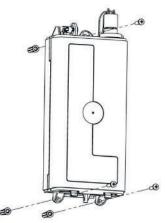
Locate the position on the wall where the ICEZONE will be mounted. Remove the covers from the ICEZONE housing to allow access to the mounting bosses. Use the included screws and wall anchors to attach the ICEZONE to the wall.

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7. Install the tubing as shown in the illustration below. The 14mm (5/8") tubing and fittings are used on the ICEZONE supply port. The horizontal tubes should be installed so they slope down towards the bin.

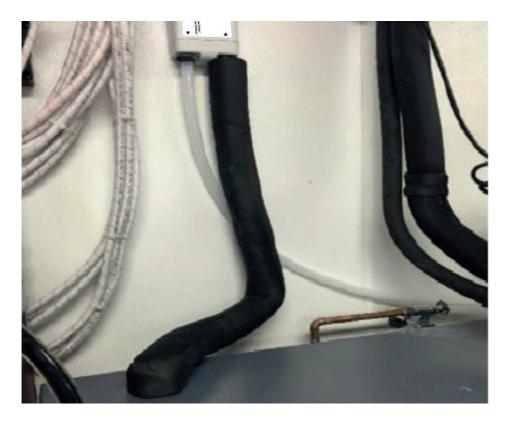






Installers Tip: The plastic hose may be easier to slide over the fittings if the hose is warmed in water prior to installation. Cut the hose to length and place in a 140F water bath prior to final assembly.

8. Apply ½" wall Armacell® or equivalent closed cell pipe insulation to the return tube on the ICEZONE unit and large bulkhead fitting. Secure the tube insulation with foam insulation tape (¼" thick x 2" width) as shown in the picture below. These materials are supplied by the ice machine installing contractor.



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- **9.** Test the installation by plugging the ICEZONE power supply into the wall outlet. The ICEZONE unit should have a quiet fan sound and a blue glow at the outlet port when operating properly.
- 10. Clean the installation debris from the top of the ice bin and remove any debris from inside the ice bin.
- 11. Plug the ICEZONE into the wall outlet and confirm the blue light is glowing on the top of the unit. Ensure the outlet used to power the ICEZONE is not turned off at any time. The ICEZONE is intended to run 24 hours / 7 days per week.

Troubleshooting installation instructions

Every ICEZONE unit has undergone a strict quality control inspection. However, should the unit malfunction or should you have any questions regarding the installation process please contact BSG international at info@bsg-uv.com.

In the event that the following instructions do not solve the problem, contact your supplier.

Trouble	Check
Flashing Red Light (Fan works)	Open the ICEZONE service cover and check that the lamp connectors are properly installed. Replace lamp.
Steady Red Light (Fan works)	Lamp time expired. Replace lamp to maintain effective ice machine cleaning. Reset lamp timer after installing new lamp.
Flashing Blue & Red Light (Fan works)	Replace lamp. Confirm lamp part number. Non-BSG lamp may be in use; replace with BSG lamp.
No Light (Fan does not work)	Make sure (1) power supply is plugged in, (2) power outlet is working properly, and (3) power cord is undamaged.
Weak Airflow	Clean lamp. Check for blocked hose or fittings.

Status indicator lights indicate:

Normal	ICEZONE is operating normally.
Lamp replace (red)	A steady red LED indicates the lamp has reached its useful life and should be replaced to maintain the performance of the ICEZONE.
Service (flashing)	A flashing red LED indicates the ICEZONE is not operating correctly and should be serviced immediately. Please return to BSG for service.

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Maintenance instructions

If the device is located in a dusty or smoke-filled area, it is recommended that the bulb and air filter be cleaned every three months, as this will significantly extend the life of the unit. At a minimum, the bulb must be changed every twelve months in order to ensure maximum functionality and efficiency.

Replacement parts

Lamp Part Number: BIOZONE 10-08050

Bulb replacement instructions

- 1. Disconnect the power supply to the ice machine and ICEZONE
- Access the device by removing the necessary covers and access panels on the ice machine, as instructed in ice machine owner's manual (not supplied)
- 3. Remove the ICEZONE Service Cover to access the lamp connector and lamp.
- 4. Disconnect the lampholder from the bulb by gripping the plastic lampholder body and pulling away from the bulb. Do not grip the lampholder by the connecting wires under any circumstances as this is a high voltage hazard. The 4 pins on the "pin-end" of the bulb will be exposed.
- 5. Pull the lamp from the "pin-end."
- 6. Ensure that the bulb has cooled down. When handling the bulb, avoid touching the glass element with exposed fingers as oil and residues from skin can adversely affect the performance of the bulb.
 - **a.** Cleaning the bulb: Clean the bulb with a soft cloth and an appropriate cleansing solvent compatible with quartz glass (such as rubbing alcohol). Cleansing wipes may also be used; Reinsert the bulb.
 - **b.** Changing the bulb: Insert a new bulb (see technical specifications in this manual for correct bulb type). Use only a new BSG bulb (using other bulb will void the warranty).
- **7.** Replace the bulb by inserting the "flat-end" into the appropriate end cap.
- 8. Reconnect the lampholder to the "pin-end" of the bulb.
- Replace the ICEZONE Service Cover.
- 10. Reconnect the power supply to the device.
- Replace any access panel removed on the ice machine.
- 12. Reconnect the power supply to the ice machine and ICEZONE.
- Dispose of any old bulbs in accordance with all regulations pertaining to hazardous waste disposal (these bulbs contain small traces of mercury)







Packaging

Packing materials can be recycled. In the interest of environmental protection, dispose of them properly.

The UV lamp

UV-lamps contain small traces of mercury. Old, defective or broken lamps must be disposed of in accordance with laws related to the disposal of hazardous wastes.



Certifications

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- a. This device may not cause harmful interference; and
- **b.** This device must accept any interference received, including interference that may cause undesired operation.







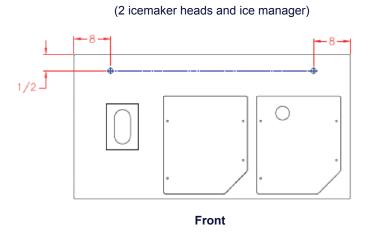


(2) HCD1650RBT

The health aspects associated with the use of this product and its ability to aid in disinfection of environment air have not been investigated by UL.

Hole locations for ICEZONE installation

HCD1650RMS and HCD1650RBT



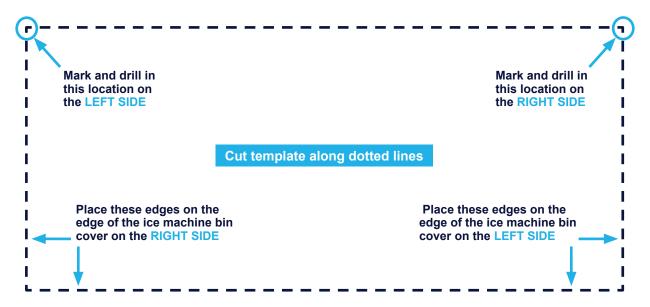
(2 icemaker heads)

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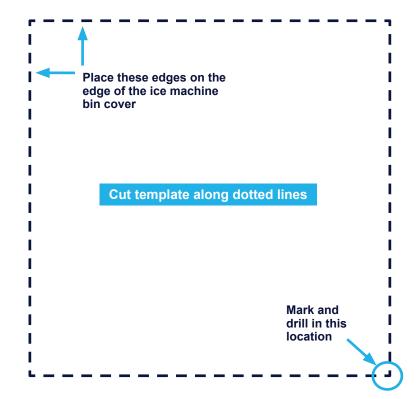
Front

For two ice maker heads and the ice manager please use this template:



LEFT SIDE is the installer's left while standing in the kitchen, facing the ice bin.

For two ice maker heads only please use this template:



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