



# OWNER'S MANUAL

## BSG ICEZONE

### Automated Ice Machine Sanitation System

ICEZONE inhibits the growth of mold, slime, and other contamination in ice machines, extending the life of the ice maker and lowering maintenance costs. ICEZONE delivers cleaner and healthier ice.



### IMPORTANT!

- Only qualified technicians should install this product
- Install in accordance with relevant building codes
- Read instructions carefully including safety warnings

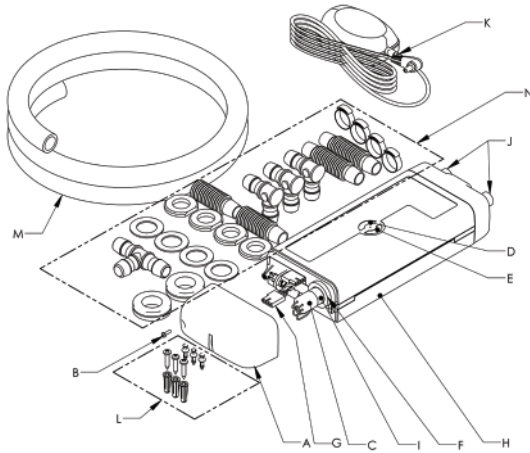


### WARNING!

Protect eyes from UV light, turn off unit or disconnect before servicing



## ICEZONE components



- |                               |                           |                                   |
|-------------------------------|---------------------------|-----------------------------------|
| <b>A</b> Service Cover        | <b>F</b> Lamp Seal        | <b>K</b> 12V DC 25W Power Adapter |
| <b>B</b> Service Cover Screw  | <b>J</b> Power Connection | <b>L</b> Mounting Screws/ Rivets  |
| <b>C</b> Lamp Connector       | <b>H</b> Main Body        | <b>M</b> PlasmaProtect® Tubing    |
| <b>D</b> Status Indicator     | <b>I</b> UV-Lamp          | <b>N</b> PlasmaProtect® Fittings  |
| <b>E</b> Lamp Life Reset Port | <b>J</b> Plasma Ports     |                                   |

## Specifications

**Dimensions:** 11.93 in (L) x 4.25 in (W) x 2.05 in (H)

**Electrical:** Input: 100-240 V, 50/60 Hz  
Output: 12 V, 0.8 A (transformer rated to 2.0 A)  
Includes 8 ft cord and plug (2.5 m)

**Ambient Air:** Operating temperature range: 40° F to 104° F (5° C to 40° C)  
0-90% non-condensing humidity

**Water Supply:** No requirements (ICEZONE is not integrated into the water system)

**Certifications:** NSF (standard 169), UL (standards 507, 935), CE, RoHS  
WEEE, FCC part 15



RoHS



# ICEZONE installation instructions

## How ICEZONE works

ICEZONE creates a UV-plasma environment that inhibits the growth of contamination by reducing microbial load in the air and on surfaces in the treated area.



## Tools needed for installation

- 8 Foot Ladder
- Knife or Hose Cutter
- Power Drill
- Phillips Head Screwdriver

## Prior to installation

- For best results, clean and sanitize the ice machine and all attached ice bins and dispensers thoroughly before installing ICEZONE
- Only a maintenance mechanic or appropriately qualified person may install the appliance
- Turn power off to the ice machine
- Do not connect ICEZONE to water supply under any circumstances
- Verify the availability of a wall plug within 8 ft. of the ICEZONE installation

There are many different types of ice machines so there is no single “right” ICEZONE installation. However to achieve maximum effectiveness, the placement of the ICEZONE is very important.

Below are a couple typical examples of ICEZONE installations.

## Typical ICEZONE installations



Ice and Water Dispenser



Ice Machine Cuber Mounted on Ice Bin



Ice Machine Cuber Mounted on Beverage Dispenser

## General installation guidelines

BSG provides ice machine specific instructions for many styles of ice machines. Please download these instructions from the ICEZONE installation page on BSG's website: [www.bsg-uv.com/products/chill-ice/icezone/](http://www.bsg-uv.com/products/chill-ice/icezone/)

The following steps outline general guidelines for ICEZONE installation on cuber style ice machines.

### Step 1: Identify installation location

To determine the best location for your ice machine, start by looking for areas of mold growth and choose a position for ICEZONE that will provide maximum treatment to that area.

It is recommended that the ICEZONE be mounted on top of the ice machine. To avoid condensation, do not mount ICEZONE with the supply and return ports pointing up.



**Flat mount** ✓  
Ports horizontal



**Side mount** ✓  
Ports horizontal



**Side mount** ✓  
Ports down

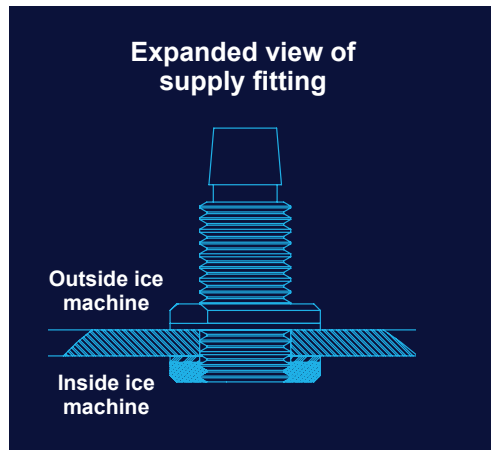


**Side mount** ✗  
Ports up

### Step 2: Drill supply and return ports

Mark the location for the supply and return ports on the ice machine according to these steps:

- Supply and return fittings and tubing should be installed above the ice levels
- Supply should be positioned to target areas that are vulnerable to slime build-up with UV-plasma
- Supply and distribution lines should be positioned as far apart as possible to maximize distribution of UV-plasma
- UV-plasma is heavier than air, so install the supply line relatively high, and the return line relatively low



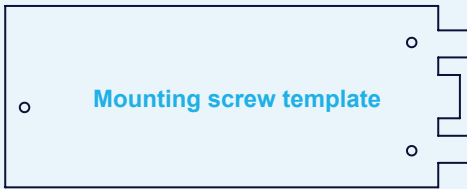
Remove top panel or cover to be drilled. Drill the 1" (25mm) holes for the bulkhead fittings. Clean the drilling debris from the holes in the ice machine. Install the fittings for the supply and return ports.

### Step 3: Mount ICEZONE

Mark the location on the ice machine for the 5/32" (4mm) holes for the ICEZONE plastic mounting rivets. These holes should be located above/near the mechanical area of the ice machine and not the ice making area (food zone).

Drill the three (3) 5/32" (4mm) holes to mount the ICEZONE. Attach ICEZONE to the ice machine with mounting screws.

A scaled diagram of the ICEZONE mounting screw template is provided below:



### Step 4: Connect fittings and tubing

Arrange the tubing and fittings on the ice machine to connect to the ICEZONE output and return ports. Attach the internal return tube and ensure it does not come in contact with the ice curtain through its range of motion.

Note: Hot water can be used to make the food-grade tubing more pliable to bend or receive fittings, as needed.

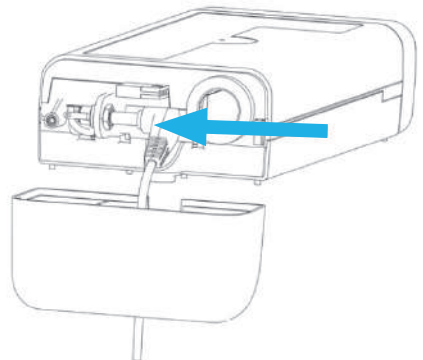
### Step 5: Connect power and plug in ICEZONE

Insert the power-supply cord through the service cover slot and into the DC power socket.

Place the service cover over the end of the ICEZONE and install the cover screw.

Plug the ICEZONE power adapter in to the wall and observe that status light on top of the ICEZONE. The status light should show a blue circle indicating normal operation.

**The ICEZONE is now operating and keeping your ice machine clean!**



## Lamp replacement

### UV replacement lamp part numbers

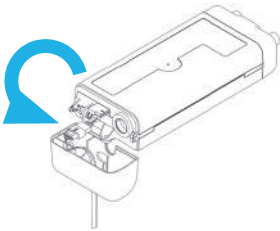
- ICEZONE 10: 10-08025
- ICEZONE 20: 10-08050
- ICEZONE 30: 10-08100

### UV replacement lamp instructions

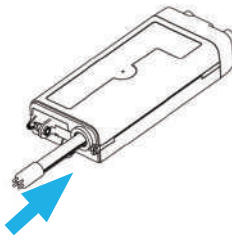
The UV lamp in ICEZONE needs to be replaced every year. UV lamps continue to emit visible light but lose effectiveness over time.

**Note: Avoid touching the lamp surface with fingers.**

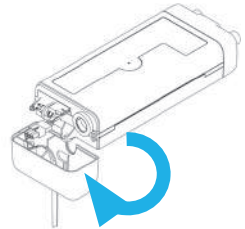
#### 1 Remove Service Cover



#### 2 Remove/Replace Lamp



#### 3 Replace Service Cover



**Note: Use of non-BSG-supplied replacement UV lamps voids the warranty.**

**Caution: UV lamps contain small amounts of mercury. Dispose of lamps in accordance with local environmental regulations. For more information visit <http://lamprecycle.org>**



#### Important!

Reset the lamp life counter by holding down the reset tool in the reset hole at the center of the LED Indicator Status ring. If the reset tool is not available, a paperclip can be substituted.



Lamp reset tool

## ICEZONE LED indicator status

**Steady blue**  
Operation normal



**Steady red**  
Replace lamp



**Flashing red**  
Service required



**Flashing blue/red**  
Lamp ID incorrect



## Troubleshooting

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.

## Ozone hazard

ICEZONE generates ozone from oxygen found in the ambient air. Occupational Safety and Health Administration (OSHA) limits for ozone are as follows:

- Long term exposure limit: 0.10 ppm for 8 hours
- Mid term exposure limit: 0.20 ppm for 2 hours
- Short term exposure limit: 0.30 ppm for 15 minutes

ICEZONE is designed to produce ozone below the above listed limits when installed, used and maintained as instructed. Ozone is approved by the US FDA for food service use and is categorized as “generally regarded as safe” (GRAS).

## Warranty

Item	Coverage	Period	Action
ICEZONE	Parts	3 years	Repair or replacement at BSG's discretion
UV Lamp	Parts	1 Year (Pro-rated)	Balance of lamp warranty coverage period credited towards purchase of replacement lamp
Installation	None	None	None
Shipping	None	None	None

See warranty card in box for more details about applicable warranty terms and conditions.

## Sizing

	Ice and water dispenser	Daily ice production (in lbs)		
Ice machine cleaning interval*		< 400	> 400 to < 1000	≥ 1000
180 days	IZ-10	IZ-10	IZ-20	IZ-30
120 days	IZ-10	IZ-10	IZ-20	IZ-30
90 days	IZ-10	IZ-20	IZ-20	IZ-30
60 days	IZ-10	IZ-20	IZ-30	IZ-30
≤ 30 days	IZ-10	IZ-20	IZ-30	IZ-30

\*Ice Machine Cleaning Interval: The time from the last ice machine cleaning and sanitation to the appearance of visible organic growth. Note that this is not the same as the frequency that the ice machine is being cleaned, but rather the frequency that the ice machine should be cleaned.

For service or warranty questions contact BSG Customer Service department at [customerservice@bsg-uv.com](mailto:customerservice@bsg-uv.com)

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