



Harnessing Nature's Cleaner Power for Healthier Indoor Environments

# USER MANUAL

### INDUCT

ENGLISH | ESPAÑOL | DEUTSCH | FRANÇAISE

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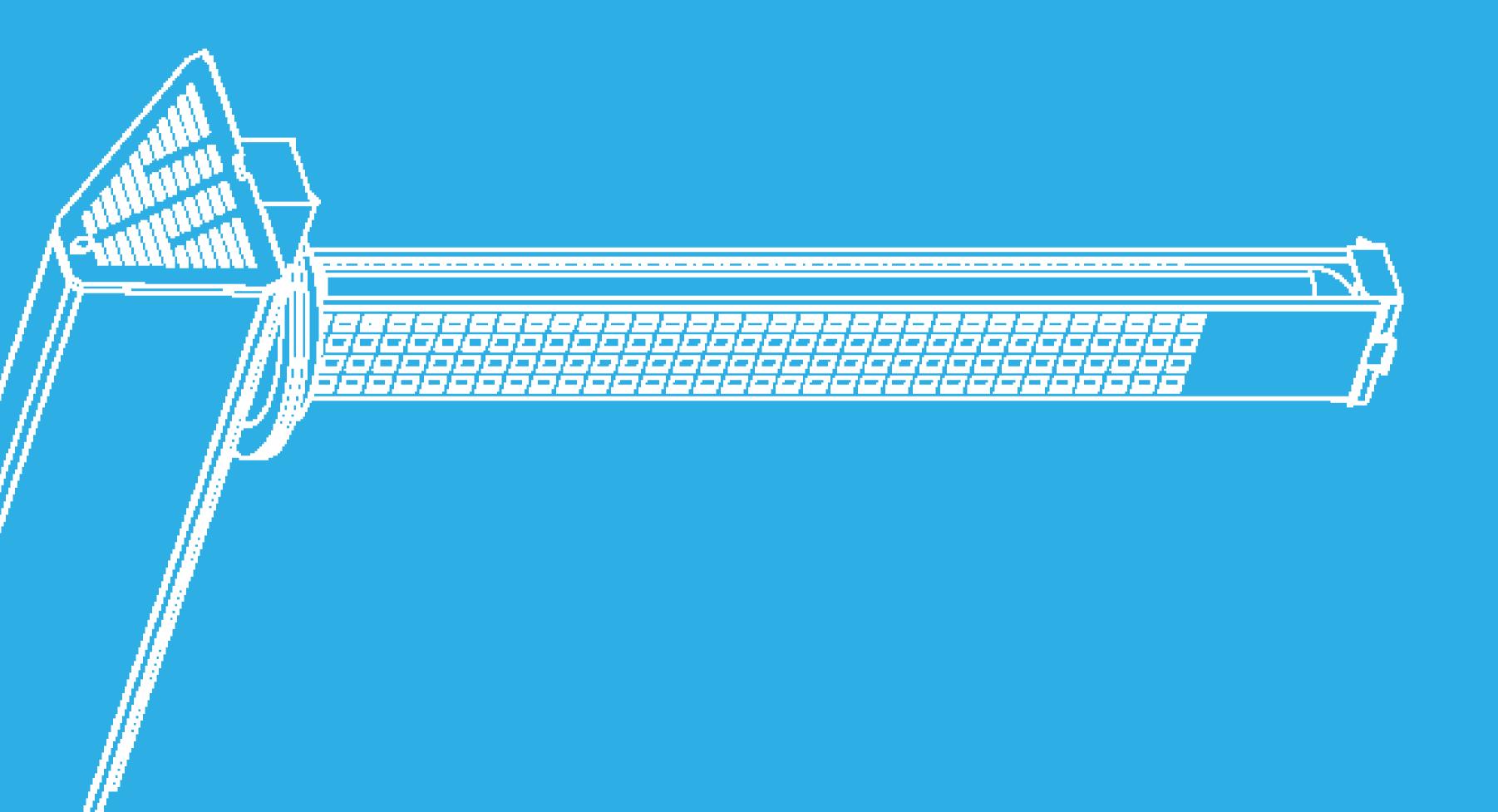
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## 01. INTRODUCTION



This user manual has been created to facilitate the safe and trouble-free operation of the Biozone Scientific Induct. The product is designed and manufactured in strict adherence to technical standards, incorporating cutting-edge technologies and quality components. Moreover, it is produced in complete compliance with the most rigorous quality standards.

To enhance the product's lifespan and ensure a safe and effective operation, you must follow the instructions outlined in this user manual and perform regular maintenance tasks. The technical data and specifications provided in this user manual are current, but it's important to note that the manufacturer retains the right to implement any necessary changes.



CAUTION: DO NOT USE THE DEVICE UNLESS YOU HAVE THOROUGHLY READ AND UNDERSTOOD THIS USER MANUAL.



PLEASE NOTE: The drawings in this manual are for illustration purposes only and may not perfectly match the actual product. The original operation manual is in English, and other languages are translated versions from the English original.

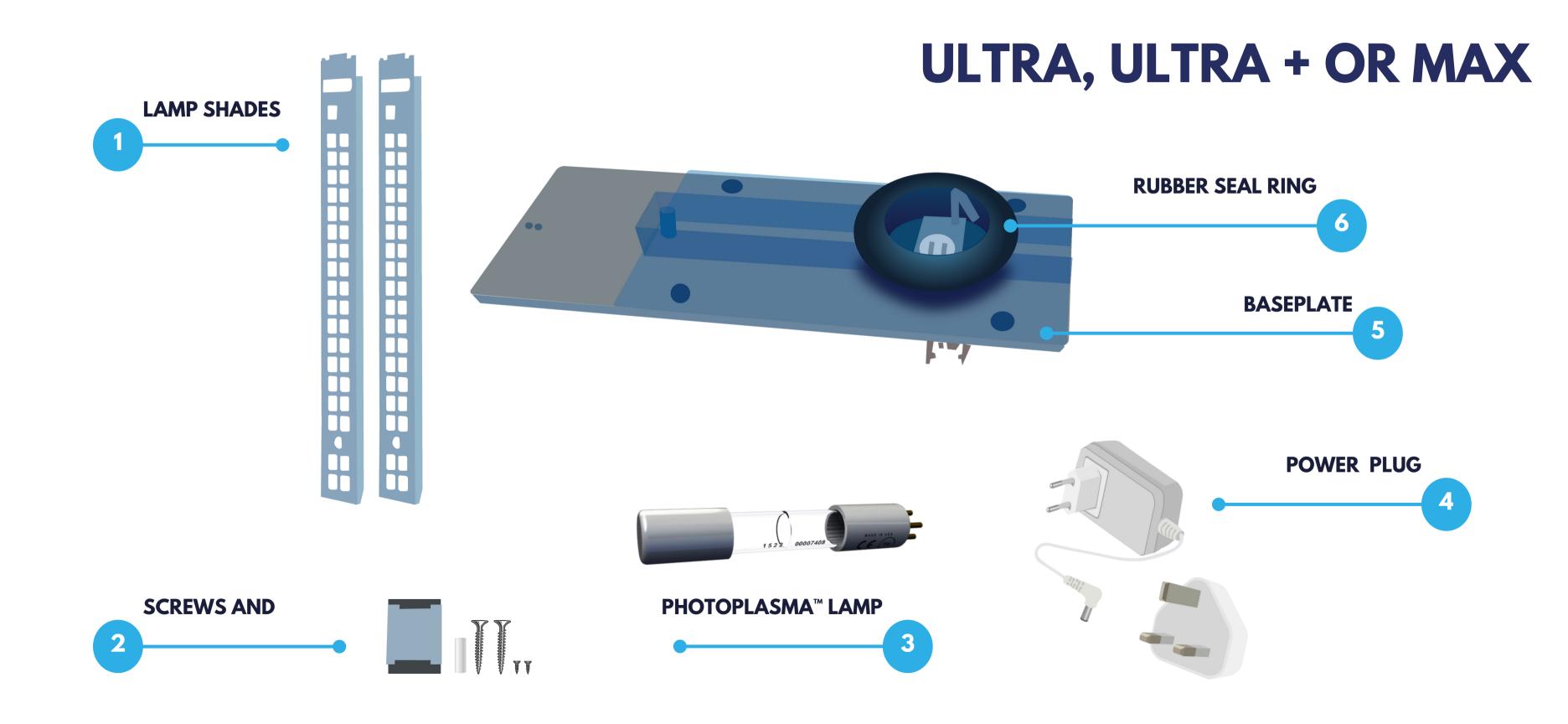
# 02. INCLUDED PARTS LIST



# LITE, STANDARD OR PRO **LAMP SHADES MAIN BODY POWER PLUG SCREWS AND PHOTOPLASMA™ LAMP**

# 02. INCLUDED PARTS LIST





### 03. DEVICE DESCRIPTION



The Biozone Scientific Induct has been specially designed for HVAC and Exhaust Emission systems, solving the problems of odor, airborne bacteria, and volatile organic compounds (VOCs).

The Biozone Scientific Induct is the result of the extensive research and sustained product developments. Biozone Scientific has more than a decade of experience in designing and manufacturing its products.

The Induct is highly effective and safe to use and fully complies with the criteria of the world's most respected certification bodies. Certificates issued to this effect are listed in section 09, Warranty and Certifications section of this manual.

Every Induct unit has undergone a strict quality/control regime. However, if the unit malfunctions, follow the instructions in the Troubleshooting section of this manual. If the problem persists, please contact your local distributor.

Biozone Scientific products are designed to be user-friendly with a high degree of functionality, ease of operation and simple installation. User feedback is important for the continuous development of our products. We value your opinion and greatly appreciate your feedback, which you can send to: info@bsg-uv.com



For more information, visit our home page at: www.biozonescientific.com and discover:

- Biozone Scientific solutions for other applications such as garbage rooms, icemachines etc.
- Contact information for importers and distributors

# 04. BIOZONE TECHNOLOGY - PHOTOPLASMATT



The Induct is an excellent tool designed to solve the problems of odor, airborne bacteria, and volatile organic compounds (VOCs).

When properly used, the Induct significantly reduces odour and other harmful microorganisms in the air and on surfaces. The Induct does not just mask odour with chemicals or perfumes; it actually destroys the odours leaving a cleaner, more pleasant environment.

Biozone Scientific's advanced Photoplasma™ technology is designed to sustainably enhance indoor environments. It goes beyond conventional cleaning methods by harnessing combination of negative ions, hydroxyl radicals, singlet oxygen, ultraviolet light and ozone.

The elements of Photoplasma™ quickly and actively break down the structure of contaminants by a chain of reactions. Eventually the contaminats are decomposed and converted to harmless molecules such as carbon dioxide and water vapour.

In essence, Biozone Scientific's Photoplasma™ advanced technology brings the holistic benefits of the outdoors, where nature's cleansing mechanisms thrive, directly into our indoor spaces. It ensures a sustainably enhanced, healthier, and more refreshing living environment.



### 05. INSTALLATION LOCATION



To ensure the safety of the user, people in the area, and/or animals; follow these instructions carefully and observe all warnings.



#### **BEFORE INSTALLATION**

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 inform the dispatcher or retailer. Check that the aforementioned components are included in the package (some are inside the device). In the event that something is missing, contact your supplier.

#### **INSTALLATION LOCATION**

The Induct device must be installed:

- in a place where it most effectively removes impurities from the air
- such that it does not blow directly in the face
- such that it is within easy reach of the power supply outlet

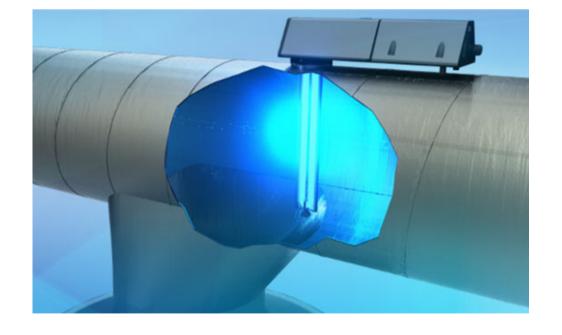
To gain maximum benefit from your Induct, install it close to a fan or the incoming air vent. In this way the Photoplasma™ will be mixed most effectively with the air in the room.

Determine if the HVAC system fan runs continuously or if the fan is switched on and off intermittently with a thermostat. For intermittent use, the Induct requires the use of a duct air flow switch (available from Biozone Scientific) to ensure that the Induct operates only while the fan is on.

The installation may not be carried out in such a way that it damages the HVAC system electronic components or wiring. Furthermore, installation must not require any modification to or re-positioning of HVAC air handler components.

#### **RECOMMENDED TOOLS**

- Hand Drill
- Phillips (+) Screw Driver
- 70mm hole saw





STEP 1

Using a 70mm hole saw, carefully drill a hole into the ventilation duct.



#### STEP 2

Unscrew and remove the end cap louver from the unit.





#### STEP 3

Slide the lamp shades under the plastic plate at the bottom of the Induct unit.

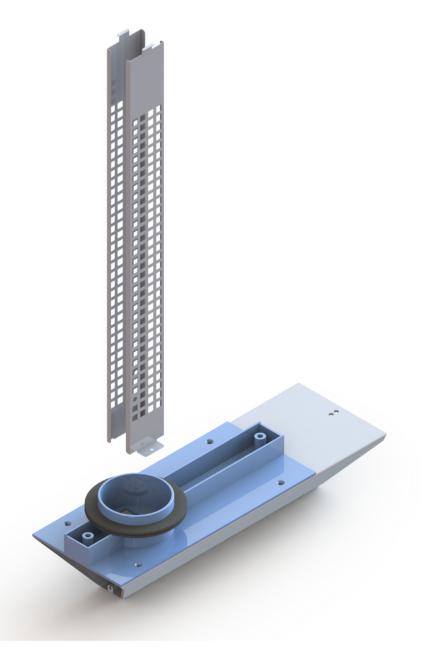
Secure them in place using the provided small screws.

#### STEP 4

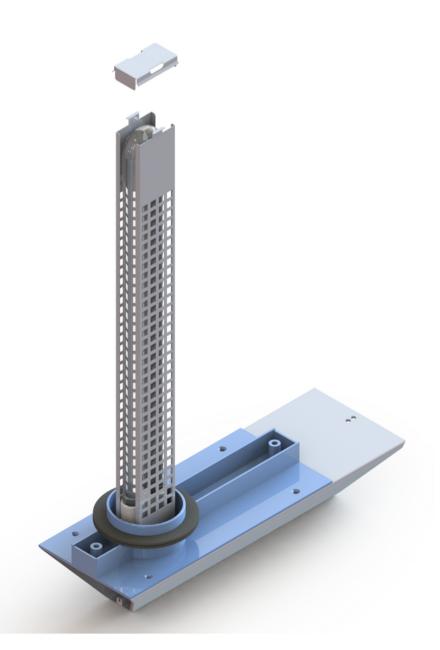
Insert the lamp into the socket on the Induct unit, ensuring the pins are correctly oriented.

#### STEP 5

Secure the lamp by placing the shade clip over the lamp shades.









#### STEP 6

Guide the optical fiber through the hole in the lamp shade, ensuring it makes contact with the lamp.

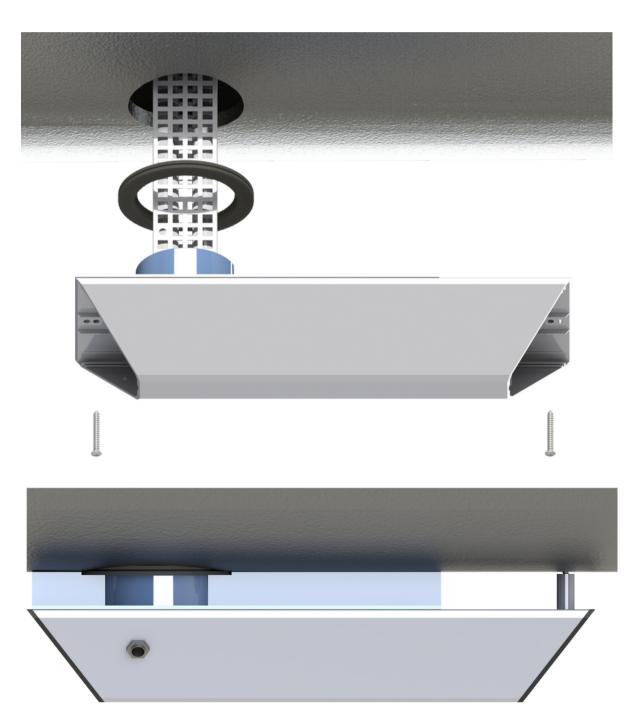


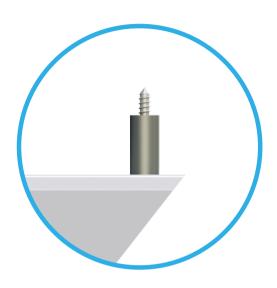
#### STEP 7

Carefully insert the Induct unit into the duct through the previously drilled hole.

Use the rubber seal to create a tight seal around the unit.

Fasten the Induct unit to the duct using the provided screws.





For Induct Ultra, Ultra+, or Max: Use the provided metal standoff with the second screw for secure installation.



#### STEP 8

Reattach both end cap louvers to the body of the Induct unit.

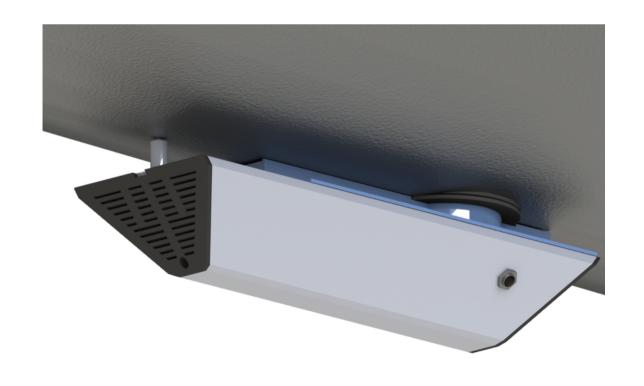
#### STEP 9

Connect the Induct unit to the power adapter.



Please note that Induct should be interlocked with HVAC system.
See page 10.





## 07. LAMP CLEANING AND REPLACEMENT





ATTENTION: Avoid touching the glass portion of the lamps with bare fingers. Use gloves or a cloth to handle the lamps. If the glass is touched, use isopropyl alcohol to wipe the glass surface clean.

- 1. Disconnect the power supply from the device.
- 2. Allow 10 minutes for the lamp to cool.
- 3. Remove end cap louver.
- 4. Unscrew unit from the duct.
- 5. Remove clip from end of lamp shades, pull out lamp.
- 6. Wipe the lamp with alcohol to clean the glass surface.
- 7. Place the cleaned Photoplasma™ lamp or new Photoplasma™ lamp into the lamp connector.
- 8. Reinstall clip.
- 9. Re-install the Induct to the duct.
- 10. Re-install end cap louver.



#### **IMPORTANT!**

Use only authentic Biozone Scientific replacement lamps.
Use of replacement lamps from other manufacturers will immediately void the system warranty and affect performance of the system.

Disposing of the lamps according to local hazardous waste disposal laws. The lamps are disposed of at the same facilities as household fluorescent bulbs or compact fluorescent lamp bulbs. The lamps contain mercury.

If the Induct unit is operating in a dirty environment, the lamp will need to be cleaned regularly.

A typical cleaning interval is 3 months.

#### **OZONE HAZARD**

Induct generates ozone as one of the components of Photoplasma™ 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

Induct 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).

# 08. TROUBLESHOOTING





ATTENTION: Servicing the Induct requires a qualified maintenance professional. Disconnect power before cleaning or servicing the Induct.

ISSUE	CHECK
Lamp not lit	<ul> <li>Open the Induct cover and check that the lamp is correctly inserted.</li> <li>Replace lamp.</li> </ul>
Lamp not lit	<ul> <li>Power supply plugged in.</li> <li>Optical fibre is in contact.</li> <li>Power outlet is working.</li> <li>Power cord is undamaged.</li> </ul>
Weak airflow	Vent end caps are clean.

If the Induct unit does not function after checking these items, please contact your supplier.

### 09. WARRANTY AND CERTIFICATIONS



#### **WARRANTY**

Biozone Scientific provides a standard 1-year warranty on its products. Warranty coverage starts from the date of purchase.

#### **WARRANTY CONDITIONS**

- The appliance is guaranteed against defects in material and workmanship under normal use and appropriate voltage for one year from the purchase date.
- Warranty does not apply to any appliance that has been tampered with, altered, subjected to misuse, abnormal voltage input, power interruption, electric shock, negligence, accident, force majeure, or if the serial number has been altered, effaced, or removed.
- Failures due to improper or unreasonable usage, maintenance, accident, improper packing, unauthorised tampering, alteration, or modification will not be covered under warranty as determined by Biozone Scientific.

- Any unsanctioned repairs of the interior or exterior finish of the casing, control plate, knobs, accessories, or consumable parts will void warranty.
- Replacement lamps are excluded from warranty coverage; Biozone Scientific lamps are covered by a 1year prorated warranty.
- Any repairs or replacements of defective parts by Biozone Scientific will be covered under warranty.
- Transportation or shipping costs to or from the repair facilities are not covered under warranty.
- Warranty is valid only when using Biozone Scientific replacement lamps and parts.
- Biozone Scientific engineers will determine whether the product will be repaired or replaced at their sole discretion.

## 09. WARRANTY AND CERTIFICATIONS



#### **WARRANTY**

Please note that this warranty supersedes any other written warranty, whether expressed or implied, written or oral, including a warranty of merchantability or fitness for a particular purpose. The manufacturer's maximum liability shall not exceed the actual purchase price paid for the product. Additionally, the warranty will be considered void if the label bearing the serial number has been removed or defaced.

#### **WARRANTY RETURN PROCESS**

- 1. Contact your supplier for specific return instructions and to receive your RMA (Return to Manufacturer Authorisation) number. Any return not labelled with an RMA number will be systematically refused.
- 2. Pack the product in its original box and in the same manner you received it or as similar as possible. Label the outside of the box with your RMA number.

- 3. Return the product with proof of purchase. Any return not including a proof a purchase will be systematically refused.
- 4. Label and ship the unit, freight prepaid to the address provided with your RMA number.

#### **CERTIFICATIONS**





# 10. FAQs



#### Q1. IS THERE A PREFERRED LOCATION TO INSTALL AN INDUCT UNIT?

A1: For optimal performance, it is recommended to install the Induct unit within the ventilation pipes of HVAC systems. Ideally, position it as far away from the outlet as feasible, with a preference for placement in the Return Air Duct (RAD). It is crucial to adhere to the installation instructions provided in this manual to ensure proper setup and functionality.

#### Q2. WHAT SIZE ROOM CAN THE INDUCT BE USED IN?

A2: The applicability of the Induct to various room sizes depends on several factors, including the Biozone Scientific Photoplasma™ output, airflow, number of odor sources, and other considerations. For assistance in determining the appropriate size for your specific needs, we recommend reaching out to your supplier for personalized guidance.

#### Q3. HOW DO I KNOW IF THE INDUCT UNIT IS WORKING CORRECTLY?

A3: To ensure the Induct unit is working, check if the blue indicator light is on. If not displayed, check whether the optical fiber is in contact with the lamp. Effective operation is indicated by a noticeable reduction or complete elimination of odors. In the uncommon scenario where the blue light is present but odors persist, we recommend reviewing the sizing guidelines for additional assistance. If you need further advice, kindly refer to the product documentation or contact your supplier for optimal performance troubleshooting.

#### Q4. WHY IS THE INDUCT PREFERRABLY PLACED IN THE RAD?

A4: Optimal placement of the inductor within the RAD is essential for enhanced air purification. The extended distance from the outlet allows for an increased reaction time of Photoplasma™, leading to more effective breakdown of contaminants in the air. Additionally, as indoor air circulates, a portion returns to the return air duct, where it blends with fresh outdoor air before reentering the room. This strategic placement ensures a longer interaction time with Photoplasma™, contributing to superior air purification results.

### 11. SAFETY GUIDELINES



#### **CONDITIONS OF USE**

#### **USAGE SAFETY**



CAUTION: Carefully read all safety warnings and instructions. Failing to adhere to these warnings and instructions may result in severe injury or, in extreme cases, even death.

In the following safety warnings and instructions, the terms "device" or "product" refer to the Induct.

#### **ELECTRICAL SAFETY**

- Ensure the plug fits the socket. Using original plugs with matching sockets reduces the risk of electric shock.
- Refrain locating device such that it is touching grounded elements such as pipes, heaters, boilers, and refrigerators. There is a higher risk of electric shock if the grounded device is exposed to rain, comes into direct contact with a wet surface, or operates in a moist environment. Water getting into the device drastically increases the risk of device damage and electric shock.
- Do not touch the device with wet or damp hands.
- Use the cable solely for its intended purpose. Never use it to transport the device or to forcibly extract the plug from a socket. Ensure the cable remains clear of heat sources, oil, sharp objects, or moving components.
- Compromised or tangled cables heighten the potential for electric shock.

- If you find yourself using the device in a damp environment as an unavoidable necessity, it is advisable to incorporate a residual current device (RCD). The use of an RCD significantly diminishes the risk of electric shock.
- Do not operate the device if the power cord exhibits damage or displays signs of wear. A deteriorated power cord should be replaced by a qualified electrician.
- To prevent the risk of electric shock, avoid submerging the cord, plug, or the
  device itself in water or any other liquids. Likewise, do not use the device on
  wet surfaces.
- Take precautions to shield the device from moisture, as exposure may lead to an elevated risk of electric shock.

#### **SAFETY IN THE WORKPLACE**

- Ensure that your workspace is clean and well-lit. A cluttered or poorly lit workspace can increase the risk of accidents. Exercise foresight, pay attention to ongoing activities, and apply common sense when operating the device.
- If you come across any damage or irregular operation, promptly turn off the device and report the issue to a supervisor without delay.
- If there are any uncertainties regarding the correct operation of the device, contact the manufacturer's support service for guidance.
- Only the manufacturer's authorised service point should undertake repairs on the device. Do not attempt any repairs on your own.
- In the event of a fire, use a powder or carbon dioxide (CO<sub>2</sub>) fire extinguisher designed for use on live electrical devices to extinguish it.

### 11. SAFETY GUIDELINES



- Please retain this manuals QR code for future reference. If you transfer the device to a third party, ensure the QR code is passed on along with it.
- · Keep the device out of reach of children and animals.

#### **PERSONAL SAFETY**

- Do not operate the device when tired, unwell, or under the influence of alcohol, narcotics, or medications that could significantly impair your ability to use the device safely.
- The device is not intended for use by individuals, including children, with limited cognitive and sensory capabilities, or by those lacking relevant experience and knowledge, unless they are under the supervision of someone responsible for their safety or have received proper instruction on device operation.
- Only physically fit individuals, who have received appropriate training, are familiar with this manual, and have been educated in occupational health and safety, should handle the device.
- While working with the device, exercise common sense and remain vigilant. Lapses in concentration during device operation can result in injury.
- The device is not a toy. Children must be supervised to prevent them from engaging in play with the device.
- Always unplug the Induct device before beginning an ice machine cleaning, sanitizing, or descaling cycle. Plug in the Induct device when the cycle is complete.
- If overly strong odor of ozone is detected, disconnect device from power, and verify proper operation of ventilation system. If there is proper ventilation, or if problem persists, please contact your local supplier.

#### **USE GUIDELINES**

The device is designed to filter the air and remove impurities. The user is liable for any damage resulting from unintended use of the device.

#### **SAFE DEVICE USE**

- Ensure the plug is disconnected from the socket before making any adjustments, replacing consumables, or setting the device aside. These precautions minimize the risk of unintentionally activating the device.
- When not in use, store the device in a secure location, away from children and individuals who are unfamiliar with the device and have not read the user manual. Inexperienced users can pose a safety risk when handling the device.
- Maintain the device in good condition. Before each use, inspect it for any general damage, with particular attention to cracked parts or elements, as well as any other issues that might affect safe operation. If damage is detected, send the device for repair before using it.
- Keep the device out of reach of children.
- Device repairs or maintenance should only be carried out by qualified individuals using original spare parts to ensure safe usage.
- To preserve the device's operational integrity, avoid removing factory-fitted guards and refrain from loosening any screws.
- When transporting and handling the device from the warehouse or storage to the destination of use, adhere to the occupational health and safety guidelines applicable in the country where the device will be used.

### 11. SAFETY GUIDELINES



#### **SAFE DEVICE USE**

- Do not move, adjust, or rotate the device while in operation.
- Regularly clean the device to prevent the buildup of stubborn grime.
- Avoid obstructing the air intake and outlet.
- The device is not a toy, and children should not perform cleaning and maintenance tasks without supervision from an adult.
- If any treated room has a suspected Photoplasma™ level higher than normal level, leave the room and wait 20 minutes.
- It is prohibited to modify the device's structure to alter its parameters or construction.
- · Keep the device away from sources of fire and heat.
- Do not overload the device.
- Avoid covering the ventilation openings.
- Individuals with impaired sense of smell should refrain from using the device.
- Before turning on the device, ensure there is sufficient open space around it.
- Under no circumstances should you directly inhale Photoplasma™ emitted from the device's outlet. Inhaling high concentrations of Photoplasma™ over a short period or low concentrations of Photoplasma™ over an extended duration may pose serious health risks or even be life-threatening.
- Do not use the equipment for therapeutic purposes.
- Do not looks at Photoplasma™ lamps when lit; UV light may damage eyes.
- · Avoid operating the device on a metal surface.

- If any room within which the product is installed has a suspected residual Photoplasma™ level higher than normal level, leave the room and wait 20 minutes.
- It is prohibited to modify the device's structure to alter its parameters or construction.
- Keep the device away from sources of fire and heat.
- Do not overload the device.
- · Avoid covering the ventilation openings.
- Individuals with impaired sense of smell should refrain from using the device.
- Under no circumstances should you directly inhale Photoplasma<sup>™</sup> emitted from the device's outlet holes. Inhaling high concentrations of Photoplasma<sup>™</sup> over a short period or low concentrations of Photoplasma<sup>™</sup> over an extended duration may pose serious health risks or even be life-threatening.
- Do not look at Photoplasma™ lamps when lit; UV light may damage eyes.
- If respiratory, eye, nose and throat irritation, shortness of breath, chest pain or coughing is experienced, seek fresh air immediately. Seek medical attention if necessary. Disconnect power from device and please contact your doctor.



ATTENTION! Despite the safe design of the device and its protective features, and despite the use of additional elements protecting the operator, there is still a minor risk of accident or injury when using the device. Stay alert and use common sense when using the device.