



# Odorox<sup>®</sup> Boss XL3<sup>™</sup> Hydroxyl Generator Unit

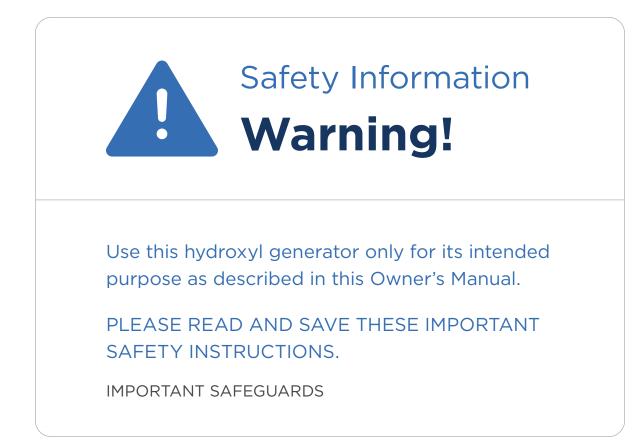
**Owner's Manual** 





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When using this system, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- Read all instructions before using this hydroxyl generator.
- To avoid fire or shock hazard, plug the equipment directly into a grounded AC electrical outlet.
- Remove all packaging material before use.
- Keep the cord out of heavy traffic areas. To avoid fire hazard, NEVER put the cord under rugs, near heat registers, radiators, stoves, or heaters.
- To protect against electrical hazards, DO NOT immerse in water or other liquids. DO NOT use near water.
- WARNING!: Always unplug the generator before moving it, cleaning, or whenever the generator is not in use. Be sure to pull by the plug and not the cord.
- NEVER drop or insert any object into any openings.
- DO NOT operate any generator with a damaged cord or plug, if motor fan fails to rotate, after the generator malfunctions, or if it has been dropped or damaged in any manner. Return generator to manufacturer or authorized repair facility for examination, electrical or mechanical adjustment, or repair.
- Use generator only for intended use as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons. The use of attachments not recommended may cause hazards.
- INDOOR USE ONLY!

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## Safety Information

- NEVER block the air openings, grills/outlets or place on a soft surface such as a bed or sofa, as this could cause the unit to tip over, blocking the Air Intake Opening/Grill.
- Keep unit away from heated surfaces and open flames.
- CAUTION!: for general ventilating use only. DO NOT use to exhaust hazardous or explosive materials and vapors.
- DO NOT attempt to repair or adjust any electrical or mechanical components on this unit. Doing so will void your warranty. The inside of the unit contains no user serviceable parts. All servicing should be performed by authorized personnel only.
- DO NOT plug the cord in with wet hands: electric shock could result.
- NEVER use detergents, gasoline, furniture polish, paint thinner or other household solvents to clean any part of the generator.
- DO NOT under any circumstances cut or remove the third (Ground) prong from power cord. For personal safety, this generator must be properly grounded.

## Safe Handling and Disposing of Mercury

Mercury is used in the Boss XL3<sup>™</sup> device in order to generate the plasma needed to produce UV-C radiation. This is similar to the use of mercury in many types of commercial, fluorescent light fixtures. As long as the glass or quartz outer bulb is intact, mercury is contained within the fixture and poses no health hazard. In the event that an optic breaks, less than 25 mg of mercury could be released. This is much less than what is present in a commercial thermometer. Liquid metallic mercury is hazardous due to its potential to release mercury vapor. In humans, approximately 80% of inhaled mercury vapor is absorbed via the respiratory tract, where it enters the circulatory system and is distributed throughout the body. Short term exposure to 25 mg of spilled mercury does not pose a health hazard, **provided that the source of the mercury is removed promptly**. Chronic exposure by inhalation, even at low concentrations in the range 0.7-42 µg/m3, can cause effects such as tremors, impaired cognitive skills, and sleep disturbance in workers. The OHSA limit for occupational exposure of elemental mercury is 0.1 mg/m3. Mercury is also used in most fluorescent light fixtures.

In the event that the device optic light does not function, the optics should be checked to ensure that they are intact. If the optic is cracked, but not broken, it should be replaced. Cracked optics should be double sealed in plastic bags and disposed of according to local, approved procedures. In the event that the optic breaks and the mercury is spilled, clean-up should be done immediately according to the following procedure published by the Environment Protection Agency.

- Evacuate the room for at least 15 minutes.
- DO NOT attempt to clean up the spill with a vacuum cleaner, mop or broom.
- Dispose of clothing, fabric etc. that has come in contact with mercury; DO NOT wash.
- Only the individual to clean up the spill should re-occupy the space.
- Close the doors to the area of the spill and turn off the HVAC system; open exterior windows and direct room air out of the window with fans or use an exhaust fan if the area is equipped with one that vents directly outdoors.
- Cover shoes with disposable foot covers or wear shoes that will be disposed of.
- Remove jewelry as mercury will amalgamate with metals and ruin them.
- Use a commercial mercury spill clean-up kit to remove the spilled mercury. (See list of suppliers on the next page).
- Identify items in the spill area that can be cleaned and those that cannot. Non-porous surfaces (finished wood, plastic or concrete) can be cleaned following this guidance. Porous surfaces or fabric-covered items (upholstery,

carpeting, stuffed animals, pillows, backpacks, unfinished wood, cork, cardboard) are difficult to clean because mercury beads may be trapped in these materials. If you decide you cannot clean these items, place them in plastic trash bags or cover or wrap them in a double layer of plastic and carefully seal with tape. Place the wrapped items in a secure place, preferably outdoors and out of the reach of children and pets. You should consult with a trained professional about how to decontaminate or dispose of these items safely.

 Wear gloves to carefully pick up the larger pieces of broken glass and what remains of the broken device and place them on a paper towel. Gently fold the paper towel around these pieces so you can pick the bundle up and place it in a zipper-type plastic bag. Use index cards or stiff cardboard to push smaller pieces of glass and mercury beads together into a pile. Shine a flashlight at an angle to locate beads of mercury. The beads will reflect light from the flashlight. Check for mercury in cracks or in hard-to-reach areas where beads may be hidden or trapped. Check a wide area beyond the spill.

- Use the eyedropper to collect mercury beads and place them in the plastic bag. Hold the eyedropper at an angle to draw the mercury into the tip. Keep the eyedropper at an angle to stop the mercury from rolling back out until you can put the mercury into the plastic bag. Wrap tape (sticky side out) around your gloved fingers and carefully use it to pick up any remaining glass or beads. Check again with the flashlight to be sure that no beads of mercury remain.
- At this point, mercury beads may still be trapped in cracks or crevices on irregular surfaces. **Sprinkle sulfur powder over the contaminated area** and rub it gently all over the surface and into the cracks with a paper towel. Sulfur powder binds with mercury. Use a paper towel dampened with water followed by wiping with another damp paper towel to clean up the sulfur and mercury. Place the used paper towels in a zipper-type plastic bag.
- Put all the items that were used to pick up the mercury, including index cards or cardboard, eyedropper, contaminated tape, paper towels, and zipper-type bags into the trash bag. Carefully remove rubber gloves by grabbing them at the wrist and pulling them inside out as they come off. Place the used gloves in the trash bag.
- Carefully seal the trash bag that contains the mercury-contaminated waste and put it in a secure place, preferably outdoors and out of reach of children and pets until it can be disposed of safely.
- If possible, open a window and use a fan to ventilate the area to the outdoors for 24-48 hours before resuming normal use. If possible, heat the area (for example, with a space heater) while still ventilating to the outdoors. Avoid blowing the exhaust back indoors or into other nearby residences.
- Clothes or shoes that did not come in direct contact with liquid mercury should be removed and put into the trash bag that was left outside the contaminated area at the beginning of the cleanup. Close the trash bag and take it outdoors. Carefully remove the shoes and or clothing from the trash bag and air them out thoroughly outdoors for 24 to 48 hours. After the outdoor

airing, items that are washable can then be laundered.

• Dispose of contaminated items properly! Mercury-contaminated items should not be placed in the regular household trash. Contact your town or county officials for information about hazardous waste disposal in your community.

Mercury Spill Kit Suppliers	
Crackle Scientific	800-334-7725
Lab Safety Supply	800-356-0783
Cole-Parmer	800-323-4340
For schools and businesses only:	
Fisher Scientific	800-766-7000
Mallinckrodt/Baker	800-582-2537
Sigma Aldrich	800-325-3010
VWR Scientific	800-932-5000
For schools only:	
Fisher Scientific	800-452-1261

## **Package Contents**

1) One ODOROX<sup>®</sup> Boss XL3<sup>™</sup> Hydroxyl Generator

2) One Washable Filter

- 3) One Set of Keys
- 4) One Owners Manual



Note: Air mover not included

# **Operating Guidelines**

The Boss XL3<sup>™</sup> unit is designed for large areas that require strong hydroxyl output to sanitize and deodorize. It can be used in large commercial open spaces and is ideal to treat large areas affected by fire and smoke, flood, nicotine, grey/black water, decomposition, mold, sewage and chemical spills or off-gassing. This unit is designed for use with an existing air mover (air mover is not included).

The table below summarizes the minimum treatment area in the absence of ventilation, and the treatment area range under typical operating conditions: 3 air changes per hour, 90% recirculated air, and 9 foot (2.7 m) ceilings. If the treated space contains a high contaminate or odor load, the effective treatment area will be smaller than the range listed below. These guidelines should be adhered to for optimal performance and safety.

Minimum Area (no circ)	2,006 ft² [186 m²]
Treatment Range (ft <sup>2</sup> )	1,700 - 3,250
Treatment Range (m²)	158-302

# **Operating Instructions**

Note: The ODOROX<sup>®</sup> Boss XL3<sup>™</sup> Unit requires an external air mover to function (not supplied with Boss XL3<sup>™</sup> Unit). The air mover must be operating on high speed and situated as seen in the picture on page 4 before the Boss XL3<sup>™</sup> Unit will function.

#### **POWER ON**

The red "Power On" LED will turn on when the Boss XL3<sup>™</sup> Unit is plugged into a proper power source. With the red "Power On" LED turned on, the Boss XL3<sup>™</sup> Unit can be powered on by turning the "Generator" switch to the "Low" or "High" position (refer to Note above). The green "Generator On" LED will indicate when the Boss XL3<sup>™</sup> Unit has either two or three ODOROX<sup>®</sup> hydroxyl generating optics functioning.

#### **POWER OFF**

The main power for the Boss XL3<sup>™</sup> Unit can be switched off by turning the "Generator" switch to the "Off" position.

#### GENERATOR

The Boss XL3<sup>™</sup> Unit is equipped with three hydroxyl generating optics. With the "Generator" switch in the "Low" position, two optics will be functioning. With the "Generator" switch in the "High" position, three optics will be functioning.

#### HOUR METER

The Boss XL3<sup>™</sup> Unit is equipped with a meter that monitors the hour usage of the unit. This is beneficial for monitoring the life of the optics, length of treatment time, maintenance and cleaning cycles.

## **Care Instructions**

▲ <u>Caution:</u> DISCONNECT the unit from an electrical power source before performing any maintenance or cleaning on the unit.

#### SYSTEM CASE CLEANING

#### EXTERIOR

The exterior of the ODOROX<sup>®</sup> product can be cleaned with mild dishwashing detergent and a clean cloth, and then rinsed with clean water. DO NOT use any all-purpose cleaners with harsh detergents or abrasives, as these may damage the decals and the exterior finish. Care should also be taken to avoid spraying or otherwise directing detergent or water into or around electrical components.

#### INTERIOR

The interior of the ODOROX® product can be cleaned in the same manner as the exterior.

#### **OPTIC CLEANING**

Cleaning of the optics is recommended to maintain peak processing efficiency. Fingerprints, smudges, dirt, dust particles, etc. will interfere with the hydroxyl production and should be avoided.

Note: Remove the optics from the optic chamber prior to cleaning to avoid any damage to the optics during the cleaning process (refer to the Optic Replacement Instructions and Safety Information for proper removal).

To clean the optics, use a solution of 10% Isopropyl Alcohol and 90% filtered/distilled water on a clean lint-free cloth and wipe gently. **DO NOT use any type of commercial glass cleaner.** Using another lint-free cloth, gently wipe the optic until completely dry. Allow the optic to dry completely before operating the system.

# **Optic Replacement Instructions**

▲ <u>Warning</u>: DISCONNECT the unit from the electrical power source before performing any maintenance or cleaning on the Boss XL3<sup>™</sup> Unit.

▲ <u>Caution</u>: Optics contain Mercury. Read and follow the Safety Information on pages 2 and 3 of this manual when handling the optics in the Boss XL3<sup>™</sup> unit.

STEP 1: Turn Main Power switch to the "Off" position

STEP 2: Unplug power cord from the electrical receptacle

STEP 3: Using the supplied key, unlock and remove both end panels

**STEP 4:** Remove optics following these instructions:

#### CAUTION!: Use clean powde-free latex gloves and eye protection when handling the optics in this unit

- With a firm grip on the upper porcelain end of the optic, use your other hand to grip the optic connector
- Gently 'wiggle' connector while pulling from the optic base
- Gently pull optic from three lamp supports (DO NOT put any pressure on the side of the optic without support)

**STEP 5:** Install new optic following these instructions:

- Remove new optic from packaging and gently insert into the three optic clips
- With a firm grip on the upper porcelain end of the optic, use your other hand to grip the optic connector
- Gently connect the optic connector to the optic
- Note: Optic connector is keyed with the optic base and will connect in one direction only
  - Ensure optic connector and optic base are firmly pressed together
- STEP 6: Re-install end panels and lock with the supplied key
- **STEP 7:** Plug power cord back into the electrical receptacle
- STEP 8: Test unit for proper operation

# **Troubleshooting Guide**

Problem	Possible Cause	Solution
Red "Power On" LED will not light up	Boss XL3™ Unit is not plugged into an energized electrical receptacle.	Ensure circuit breaker is "On" and the electrical receptacle has proper power available.
	Red LED has failed.	Contact local distributor for service.
	"Generator" switch is not turned on.	Turn on "Generator" switch to "Low" or "High" position.
	Auxiliary air mover not connected to Boss XL3™ Unit and turned on as shown in manual.	Position Boss XL3™ Unit and auxiliary air mover as shown in manual and turn on air mover.
	Auxiliary air mover not turned on high speed.	Turn auxiliary air mover on to high speed.
Green "Generator On" LED will not light up	Auxiliary air mover not rated for high enough static pressure (low amperage unit).	Try the setup using an alternate auxiliary air mover.
	Negative pressure tubing is kinked or not in the correct position to activate the pressure switch.	Ensure that the negative pressure tubing (clear 1/4 inch) is pulled through into the 7 inch discharge nozzle of the Boss XL3™ Unit and that it is not kinked.
	Green LED has failed.	Contact local distributor for service.
	Internal component failure.	Contact local distributor for service.
	Rated life of optic has been met.	Contact local distributor for replacement optic service.
Optic not functioning Reduced Hydroxyl Production	Optic has been damaged.	Contact local distributor for replacement optic service.
	Internal component failure.	Contact local distributor for service.
	Dirty internal component.	Ensure internal components are cleaned as per the instructions in this manual.
	Rated life of optic/s has been met.	Contact local distributor for replacement optic service.

## **Specifications**

Dimensions (LxWxD):	20.25" [514.35mm] x 11.12" [282.44mm] x 20.25" [514.35mm]
Weight:	25.00lbs [11.34kg]
Voltage:	<b>Model BXL03TAA -</b> 120VAC, 60Hz <b>Model BXI03TAA -</b> 210-240VAC, 50/60Hz
Power:	160W (Nominal) / 195W (Max)
Control:	Selector Switch
Meter:	1/10 Quartz Hour Meter
Mobility:	Handle/Rubber Feet
Noise Level:	N/A (refer to air mover specifications)
Optics:	3
Fan:	N/A (refer to air mover specifications)
Certifications:	<b>Model BXL03TAA –</b> ETL US/Canada <b>Model BXi03TAA –</b> CE

### **Replacement Parts**

For replacement parts, warranty service, or any questions regarding the operation and maintenance of your ODOROX® product, please contact your local ODOROX® distributor. To find a distributor in your area, please visit:

www.pyureco.com/contact or www.odorox.com/contact		
PYURE Part #	Quantity	Part Description
OPT-XX-078	3	OPTIC, 'B' Hydroxyl U-Optic, Brown
XSA00EW02	3	OPTICS POWER CABLE - Boss/XL3
XSA00EA01	3	Ballast Assembly (BXL03TAA)
XSA00EA06	3	Ballast Assembly w/Broadband (International) (BXi03TAA)
EPC-IL-021	1	LIGHT MODULE, Protected LED, 110-120VAC, XB4, Green (Model BXL03TAA)
EPC-IL-596	1	LIGHT MODULE, Protected LED, 195-264VAC, XB4, Green (Model BXi03TAA)
XSA00EA04	1	Hour Meter Assembly
EPC-IL-148	1	LED MODULE, 110-120VAC, RED (BXL03MA00)
EPC-IL-597	1	LED MODULE, 210-240VAC, RED (BXA03MA00, BXE03MA00)

## **Limited Warranty**

The PYURE Company, Incorporated warrants that this ODOROX® product (excluding spare parts and consumables) shall be free from defects in workmanship or materials for a period of two (2) years from the delivery thereof to the customer.

#### PLEASE KEEP THIS PART FOR YOUR RECORDS

Serial #:	
Model #:	
Date of Purchase:	
Vendor Name:	

#### The PYURE Company

2055 High Ridge Road Boynton Beach, FL 33426

(561) 735-3701 | www.pyureco.com

Complete below and reverse side. Tear along perforation and mail to The PYURE Company within 60 days of purchase. You may also visit www.pyureco.com and register your warranty on-line.

From:

Place Stamp Here

#### The PYURE Company

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Purchaser's Name:		
Address:		
City:	State/Prov:	
ZIP/Postal Code:		
Purchaser's Type of E	Business:	
Primary Use for Machine:		
Model Type:	Serial #:	
Vendor's Name:		
Vendor's Address:		

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**Need Support?** 

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+1 (877) 735-3701 sales@pyureco.com

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