

ENVIROKLENZ AIR SYSTEM PLUS WITH UVC LIGHT USER MANUAL





Personal Environment Protection For Everyone

### **USER MANUAL**

EnviroKlenz® Air System Plus with UVC Light, 250 CFM, Air Cartridge & HEPA Filter

24301 Walden Center Drive, Suite 101 Bonita Springs, Florida 34134 U.S.A. Phone: 239-330-9650 Website: www.FnviroKlenz.com

### IMPORTANT SAFETY INSTRUCTIONS

### READ AND SAVE THESE INSTRUCTIONS

### ♦ A Fire and Electric Shock Hazard

Unit must be electrically grounded

- Insert 3-prong plug on power cord directly into matching grounded receptacle.
- Do not use with a three-prong/two-prong adapter.
- This appliance has a polarized plug (one blade is wider than the other).

To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way. If the plug does not fit fully in the outlet,

reserve the plug. If it still does not fit, contact a qualified electrician. Do not attempt to defeat this safety feature.

### Keep wiring and motor dry

- Never use a water hose or pressure washer to clean electrical components; water could enter the electrical compartment causing a shock hazard.
- Do not operate in standing water.
- If electrical components become wet, allow them to dry completely before using.

Unplug this appliance from the power supply before servicing

- Do not operate any fan with a damaged cord or plug. Discard fan or return to an authorized service facility for examination and/or repair.
- Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Do not route cord under furniture or appliances. Arrange cord away from traffic area and where it will not be tripped over.

# ▲ Injury to Persons Hazard

• If using the air system in a containment work area (such as a restoration work site), turn off all sources of power to open combustion appliances such as fireplaces, boilers, furnaces, water heaters and HVAC systems to avoid the risk of back drafting deadly carbon monoxide fumes from those appliances.

# \lambda Tipping Hazard

- Not recommended to stack units on top of each other.
- When stacking units, for storage or transportation in original packaging, beware of tipping.
- Falling equipment could cause bodily harm.

## Y Contamination Hazard

If unit is used in hazardous or potentially hazardous environments such as mold mitigation job sites:

- Wear NIOSH-approved protective gear when changing the HEPA filter as it may contain mold spores.
- Change The EnviroKlenz® Cartridge and HEPA filter after every remediation job.
- Dispose of used HEPA according to your local regulations.

# 

- WARNING Skin or eye damage may result from directly viewing the light produced by the lamp in this apparatus. Always disconnect power before relamping or servicing. Replace Lamp With Lamp TUV PL-S 9W, Manufactured by Philips Lighting
- You may contact EnviroKlenz® to order replacement lamps.





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# **ABOUT ENVIROKLENZ®**

### MISSION

#### **Personal Environment Protection For Everyone**

The creation of EnviroKlenz® was inspired by our Customers with multiple chemical sensitivities and environmental illnesses. We have been honored to be able to work closely with them and learn from their experiences and feedback. Through their recommendations, we introduced a product line that is both effective and safe for everyone—especially those with illnesses triggered by environmental exposures.

### **HOW IT WORKS**

The EnviroKlenz® Air System Plus is your solution to improving your indoor air quality by removing chemical odors, fragrances, VOCs, particulates, microorganisms, and other allergy triggers all at once. The System utilizes EnviroKlenz® Technology to adsorb and break down pathogens and chemical pollutants coming from a broad array of sources. The EnviroKlenz® Air Cartridge uses a patented blend of earth minerals that works to reduce and remove contaminants without releasing any harmful chemicals or byproducts back into your environment. The EnviroKlenz® Air System Plus also uses a medical-grade HEPA filter for additional particulate capture, as well as UVC lights for germicidal irradiation and interior sanitization.

# **INSIDE SYSTEM**

### 1. AIR INTAKE

Air is brought in through the 3 top vented sides with 4 different speed settings to choose from, ranging from 85-250 CFM.

### 2. ENVIROKLENZ® AIR CARTRIDGE

The EnviroKlenz® Air Cartridge uses patented natural technology to absorb and remove viruses, bacteria, VOCs and other chemicals without the use of masking agents or harmful chemicals. In most situations, this cartridge will need replacement after 6 months of use.

### 3. UVC LIGHTS

UVC lamps are located above (and radiating on) the collection side of the HEPA filter providing germicidal irradiation and interior sanitization of the system.

### 4. HEPA FILTER

The HEPA filter captures particulates larger than 0.3 microns at a 99.97% efficiency rate. In most situations, the HEPA filter will need replacement after 2 years of use.

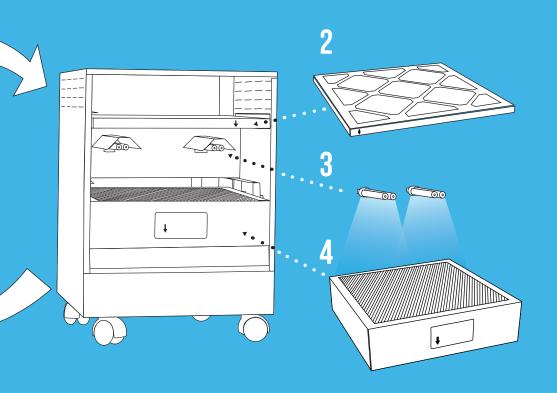
### 5. CLEAN AIR OUTTAKE

Filtered, clean air is directed out into the environment from the bottom vent. On average, the air will be exchanged 3-5 times per hour on the highest setting depending on the size of the room.

NOTE: Be sure to follow your country's electrical regulations.

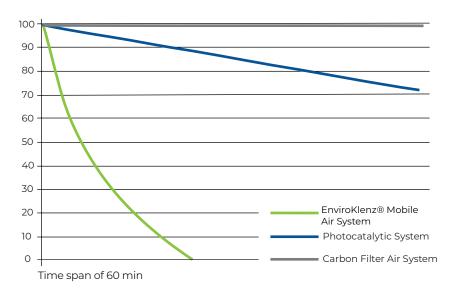






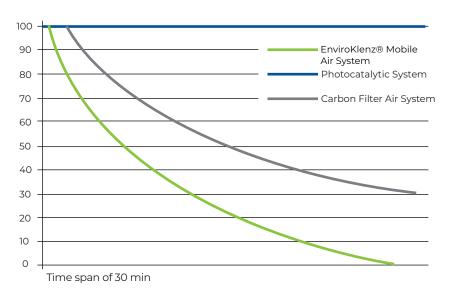
# LAB TESTING

### ACID GAS ( HYDROGEN SULFIDE )



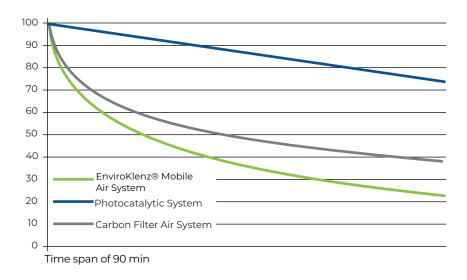
Hydrogen sulfide is an acidic gas that has a strong odor of sulfur or rotten eggs. It is a common pollutant that can come from sewage, organic decay, combustion, gases/fuels, and more. Hydrogen sulfide is similar to many acids, and EnviroKlenz® has similar results against other sulfur-containing compounds.

### NITROGEN COMPOUND ( AMMONIA )



Ammonia has a very potent odor and is considered to be hazardous. It is a pollutant that is commonly found in household cleaning products. EnviroKlenz® has similar results against related chemicals, including amines which are derivatives of ammonia and common air quality pollutants.

### FORMALDEHYDE ( COMMON INDOOR AIR POLLUTANT )



Formaldehyde can off-gas from varnishes and paints and is one of many compounds found in cigarette smoke. It is often found in manufactured products, synthetic materials, and building products such as pressed materials. EnviroKlenz® has similar results against a variety of volatile organic compounds (VOCs).

### **EFFICACY**

EnviroKlenz® has been tested and proven effective against a broad spectrum of hazardous chemicals and volatile organic chemicals (VOCs).

Partial List of Common Compounds That Can Be Successfully Removed/ Neutralized by The EnviroKlenz® Technology.

ACIDS	PHOSPHORUS/SULFUR COMPOUNDS	ORGANIC COMPOUNDS
Hydrochloric Acid	2-Chloroethyl Ethyl Sulfide	Acetaldehyde
Hydrofluoric Acid	Dimethyl Methyl Phosphonate	Formaldehyde
Nitric Acid	Paraxon	p-Cresol
Phosphoric Acid	Parathion	Diesel
Sulfuric Acid	Methyl Mercaptan	Denatured Ethanol
Muriatic Acid	Miscellaneous Pesticides	Acetone
CAUSTIC/ACIDIC GASSES	SOLVENTS	Ethylene Oxide
Anhydrous Ammonia	Acetonitrile	4-Vinylpyridine
Chlorine	Chloroacetyl Chloride	Methanol
Hydrogen Chloride	Acetyl Chloride	Toluene
Nitrogen Dioxide	OTHER	Adhesives
Sulfur Dioxide	Body Odors	Cleaning Chemicals
Hydrogen Sulfide	Perfumes/Fragrances	Scented Products

### TESTING LABS

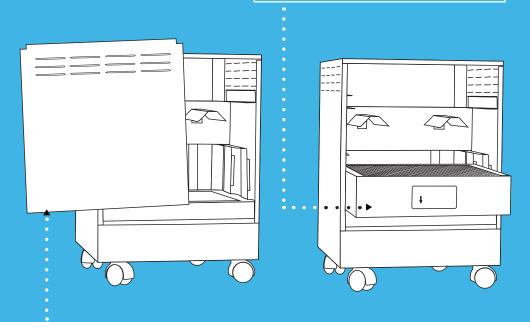
The EnviroKlenz® Technology has been extensively tested by leading laboratories around the world. This list includes, but is not limited to:

- Battelle Memorial Institute •
- Lloyds Registry
- · MPI Research, Inc.
- Nelson Laboratories

- U.S. Army Edgewood Chemical
- **Biological Center**
- U.S. Army Center for Health
  - Promotion and Preventive Medicine

# **SET-UP & ACCESSORY REPLACEMENT**

STEP 2: Slide in larger **HEPA Filter** with airflow arrow pointing down

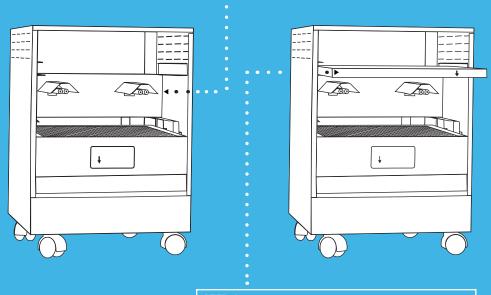


STEP 1: Make sure Air System is unplugged and slide up the back panel to insert filters.

STEP 3: Install the UVC light bulbs by

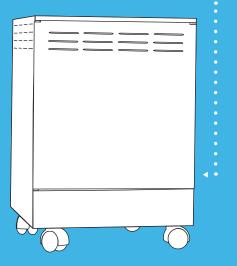
carefully pushing them into the light sockets inside the Air System.

\* Avoid touching the glass portion of the bulbs directly with your hands, as it may shorten the lifetime of the UVC

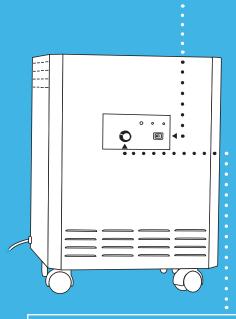


STEP 4: Slide in smaller EnviroKlenz® Air Cartridge above the UVC lights on the rails with airflow arrow facing down.

STEP 5: Slide down back panel. Make sure the bottom ledge is facing the inside of the unit. Plug electrical cord into a grounded outlet



STEP 6: Turn on the UVC Lights



STEP 7: Turn power control knob to desired fan speed and begin enjoying clean, allergen and chemical free air

# **BEST PRACTICES**

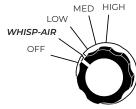
# DO'S

- To acclimate the system to your environment, please run the system on the whisp-air or low speed setting for the first 24-48 hours.
- Set up the air system in an area where it will provide good air circulation, but won't get in the way.
- To help maneuver air in the space, you may want to set up a few fans in areas that are somewhat distant from the air unit(s). Have the fan(s) push/blow the air towards the air unit(s). This will help exchange the air so that it quickly gets processed through the system.
- Leaving a system running 24/7 will help clear the air faster.
- Since the unit is relatively quiet, it can be run on medium or high setting without disturbing normal activities.
- The EnviroKlenz® Air Cartridge operates best when it is aligned with the rail entrance.

# DON'TS

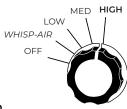
- Do not place the air unit directly against a wall, as you want to ensure airflow.
- Do not use with an ozone-producing machine.

## **SETTINGS**









### WHISP-AIR

Average 1-2 air exchanges per hour.\* 85 CFM. Great for situations that require minimal noise such as sleeping and watching TV.

### LOW

Average 2-3 air exchanges per hour.\* 150 CFM Ideal for everyday maintenance use when a VOC or chemical source is not overly present or noticeable.

### **MEDIUM**

Average 3-4 air exchanges per hour.\* 200 CFM Ideal for most situations in which a VOC or chemical source is noticeable but not overbearing, such as cooking odors or outdoor pesticide use.

### HIGH

Average 4-5 air exchanges per hour.\* 250 CFM Very high impact setting ideal for the most critical environments that need immediate and effective removal of VOCs and/or chemicals. This includes newly applied paint, renovation, construction, fire damage, and flood damage.

\*Averages based on an airspace of 3750 cubic feet.

### LIGHT INDICATORS

 When the UVC lights are turned on, the indicator lights (labeled UV1 and UV2) should be on and green. If the UV light switch is on, but the indicator light(s) are off, the UVC bulb(s) need to be replaced.

### **UVC OZONE SAFETY**

- UVC Lights or germicidal UV are at a much more specific wavelength than what is termed "UV" broadly, which encompasses the wavelengths of 100-380 nm. UVC are low-pressure lamps, more like a fluorescent lamp, with a specific wavelength of 253.7 nm (1182.5 THz).
- To create ozone from UV, the light wavelength would need to be in the range from 160-240 nm.
- Since the EnviroKlenz Air System Plus uses UVC with a wavelength of 254 nm, it is outside of the ozone-producing range.
- You can run the system without the lights being on, but you will not get the benefits of the UVC lights.

# **TROUBLESHOOTING**

ISSUE	ACTION
"Odor/pollutant is not completely eliminated."	<ul> <li>Remove source(s) from area.</li> <li>Remove contaminated item(s) from area.</li> <li>Locate source and treat with EnviroKlenz® Everyday Odor Eliminator.</li> <li>Replace EnviroKlenz® Air Cartridge and repeat EnviroKlenz® Air process.</li> <li>Adjust airspeed of the unit.</li> </ul>
"Odor returns after a few days."	<ul> <li>Site may have become recontaminated, take steps to prevent recontamination and repeat EnviroKlenz® Air Process.</li> <li>Treat source odor with EnviroKlenz® Everyday Odor Eliminator.</li> </ul>
"Air System will not turn on."	<ul> <li>Make sure Air System Plus is plugged in.</li> <li>Make sure the back panel is in place.</li> <li>Check power at the outlet.</li> <li>Test the on/off switch.</li> </ul>
"The blower wheel is not turning."	<ul><li>Check for obstruction(s).</li><li>Tighten set screw.</li></ul>

# **CONTACT**

#### **Address**

24301 Walden Center Drive, Suite 101 Bonita Springs, Florida 34134

#### **Email**

custserv@timilon.com

#### **Phone**

239-330-9650

# **PATENTS**

EnviroKlenz® is a Registered Trademark of Timilon Corporation Bonita Springs, Florida, USA. The EnviroKlenz® Air System Plus is produced in the USA and is protected by multiple USA and International patents, including, but not limited to patent numbers 7,276,640; 7,335,808; 7,661,483; 7,956,232; and 8,038,935.

# **PRODUCT FAMILY**

Visit our website at www.EnviroKlenz.com to see our full product line.



## WARRANTY

Timilon Corporation warrants that for a period of five years from the date of purchase, this product will be free from manufacturing defects. Timilon Corporation, at its option, will repair or replace the product or any component of the product found to have manufacturing defects during the warranty period. If the product is no longer available, replacement may be made with a similar product of equal or greater value.

This warranty is non-transferable and is valid from the date of the original purchase. Proof-of-purchase is required to obtain warranty performance. This warranty does not cover consequential damages and/or damages resulting from negligent use or misuse of the product by failure to store, maintain and/or use the product in accordance with directions otherwise. In addition, disassembly, repairs, or modification by anyone other than Timilon Corporation or acts of God such as fire, flood, hurricanes, and tornadoes will not be covered.

#### **Limited Warranty**

Timilon provides a 30-Day Return Window and the following limited warranty. This limited warranty extends only to the original purchaser.

Please note that any warranty services or questions must be accompanied by the order number from the transaction through which the warranted product was purchased. The order number serves as your warranty number and must be retained. Timilon will offer no warranty service without this number.

Timilon warrants this product and its parts against defects in materials or workmanship for five years labor and five-year parts from the original ship date. During this period, Timilon will repair or replace defective parts with new or reconditioned parts at Timilon's option, without charge to you.

Shipping fees incurred from returns for under-warranty service will be paid by Timilon.

All original parts (parts installed by Timilon at the original system build) or parts replaced by Timilon or its authorized service center, become the property of Timilon. Any after-market additions or modifications will not be warranted and the customer is responsible for the payment, at current rates, for any service or repair outside the scope of this limited warranty.

Timilon makes no other warranty, either express or implied, including but not limited to implied warranties of merchantability, fitness for a particular purpose, or conformity to any representation or description, with respect to this other than as set forth below. Timilon makes no warranty or representation, either express or implied, with respect to any other manufacturer's product or documentation, its quality, performance, merchantability, fitness for a particular purpose, or conformity to any representation or description.

The warranty and remedies set forth below are exclusive and in lieu of all others, oral or written, expressed or implied. No reseller, agent or employee is authorized to make any modification, extension or addition to this warranty.

Procedures for Obtaining Warranty Service

### RMA (Returning Merchandise Authorization) Policy:

If repairs are required, the customer must obtain an RMA number and provide proof of purchase. RMA and services are rendered by Timilon only. All returned parts must have a RMA number written clearly on the outside of the package along with a letter detailing the problems and a copy of the original proof of purchase. No COD packages will be accepted. No package will be accepted without an RMA number written on the outside of the package. RMA numbers are only valid for 7 days from the date of issue.

### Register for your warranty at EnviroKlenz.com/Warranty

\*The serial # is on the back of your Air System near the bottom on the sticker

# CARTRIDGE AND FILTER CHANGE SCHEDULE

With our Auto Refill Program, you won't have to worry about re-ordering your replacement filters and/or accessories again. Find out more about the Auto Refill Program by visiting

EnviroKlenz.com/Refill

### ENVIROKLENZ AIR CARTRIDGE

installation date	Scheduled change date* *6 months after insta	installatio	n date	date*	d change after install
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### **HEPA FILTER**

	Scheduled change date*
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Scheduled change

# **Enviro**Klenz®

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