

# Wein Vortex VI-3500

## Room Ionic Air Purifier



## **VI-3500 Room Air Purification System**

Congratulations on your purchase of the VI-3500 Room Air Purification System, another advanced technology product from Wein Products, Inc. Now you can effectively clean up to 800 square feet of indoor air space, using the most advanced pulsed ionization purifier available.

In order to receive the maximum benefit from your purifier, please take a moment to read the instructions and information contained within this booklet. Also, please complete the enclosed warranty card and return it to Wein Products, Inc. within 30 days in order to validate your warranty.

### **Ionization - Nature's Own Air Purifier**

An ion is a molecule which has gained or lost an electron. A positive air ion is a molecule that has lost an electron; a negative air ion is generally a molecule of oxygen with an extra electron. These charged atoms are created in nature by sunlight, moving water, moving air or radiation, all of which cause electrons to leave hydrogen, nitrogen and other molecules, and attach themselves to oxygen molecules.

Negatively charged ions are beneficial to the environment because they attract the positive ions found in dust, pollen, bacteria, cigarette smoke, mold spores—even toxic chemical fumes—and pull these microscopic hazards to the earth using electrostatic forces. With the contaminants no longer airborne, the air becomes cleaner and fresh smelling. In nature, rainfall is the most effective of all air cleaners—a typical shower produces trillions upon trillions of negative ions.

Indoor living spaces do not benefit from this natural ionization process—tight insulation and poor air circulation even compound the problem. Positive ions become trapped

indoors where no negative ions can be produced..... not even by air conditioners which simply cool already polluted air, destroying the few negative ions in the air when it passes through the ducts.

### **VI-3500 - Technology Imitating Nature**

The VI-3500 uses the wonders of miniature technology to imitate nature's ionization process in one of the most compact, efficient and economical air purifiers available. Small enough to use in any room, yet powerful enough to clean large air spaces, the VI-3500 is more effective than many larger, more costly units.





Beginning the moment you plug it in, the VI-3500 releases a powerful stream of 3.4 trillion ions per second into the air in a pulsing "on-off" cycle. During the "on" cycle, powerful vortex waves of ions are electronically swirled into the air at a rate of 150 feet per minute, effectively washing the air of even the most microscopic pollutants. Meanwhile, a built-in ion detector monitors ion production levels. During the "off" cycle, the ionized pollutants fall harmlessly to the foam collector pad on the VI-3500 or to the floor. The pollutants are removed during your normal vacuuming and dusting, and when you wipe the VI-3500 pad clean.

And, unlike other ionization units, the VI-3500 ion emitter stimulates airflow by discharging ions in a rapid, spiral vortex motion—actually drawing airborne pollutants to the device, instead of waiting for them to randomly pass near the unit.

The VI-3500 precipitates a wide variety of airborne contaminants, including:

- pollen
- dust and dust mites
- bacteria
- mold spores
- viruses
- odors
- animal dander
- toxic chemical fumes
- second-hand cigarette smoke

And, the VI-3500 negative ionization can help relieve the fatigue, eye strain, headaches and irritability that comes with living and working in artificial, sealed environment as well.

*After installing several (VI-3500) machines in different offices, I'm happy to report that the negative ion generators are doing their job here at Synergis. Our beta testers have reported more alertness, less eye discomfort, and improved productivity during the day.*  
*David B. Sharp, III, President & CEO, Synergis Technologies, Inc.*

### **How To Use the VI-3500**

1. Place unit on a tabletop, at least 2 feet away from any walls.
2. Rotate the ion emitter wand located on the back of the unit into an upright (vertical) position.
3. Plug the adapter unit into any AC household receptacle, and into the back of the VI-3500 and activate the push switch. The red status light on the right side of the top of the unit will be illuminated, and the ion monitor on the left will be activated.
4. Negatively charged ions will immediately start spreading into the room, and there will be a subtle but noticeable vortex of air swirling around the emitter.
5. A harmless static build-up may be noticed when a grounded surface is touched immediately after being in very close proximity to the unit. This static electricity is perfectly normal and safe.

### *What can Air Ionization Do For You?*

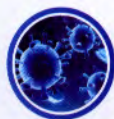
Reprinted from the AMCOR Science Report

- A. An air ionizer cleans the air of solid pollutants: dust, cigarette smoke, soot, pollen and household odors.
- B. Ion count falls from 2,000 – 4,000 ions per cubic centimetre in nature-clean outdoor air to a few hundred or less indoors. Air ionizers enrich the air with negative ions. This is caused by the integration of ions with pollutants such as: dust, soot, cigarette smoke and pollen. The combined molecules are precipitated from the air by the electrostatic attraction to the ground. Air ionizers can actually rebuild the ion count indoors.
- C. Air ionizers can help in many cases of headaches, particularly in "weather-sensitive" persons.
- D. Air ionizers clean the air of solid pollutants, such as: pollen, flying dust fibers, down feathers, soot, smoke, etc. Therefore, in many cases, they can help people who suffer from asthma and allergies that are being triggered by such solid pollutants.
- E. Air ionizers clean the air of pollen. Therefore, hay-fever sufferers can be helped by this elimination.
- F. Air ionization contributes in many cases to relaxation from tension and to inducing better sleep.

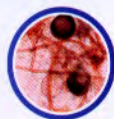
### **Indoor Air Pollution**



**Dust** 42,000 dust mites can live in only one ounce of dust! Forty pounds of dust are generated per year per 1,500 square feet of space, hosting 15 species of dust mites. Airborne fragments cause eye irritation, allergies, eye-ear-nose-throat infections, asthma attacks, fatigue and depression.



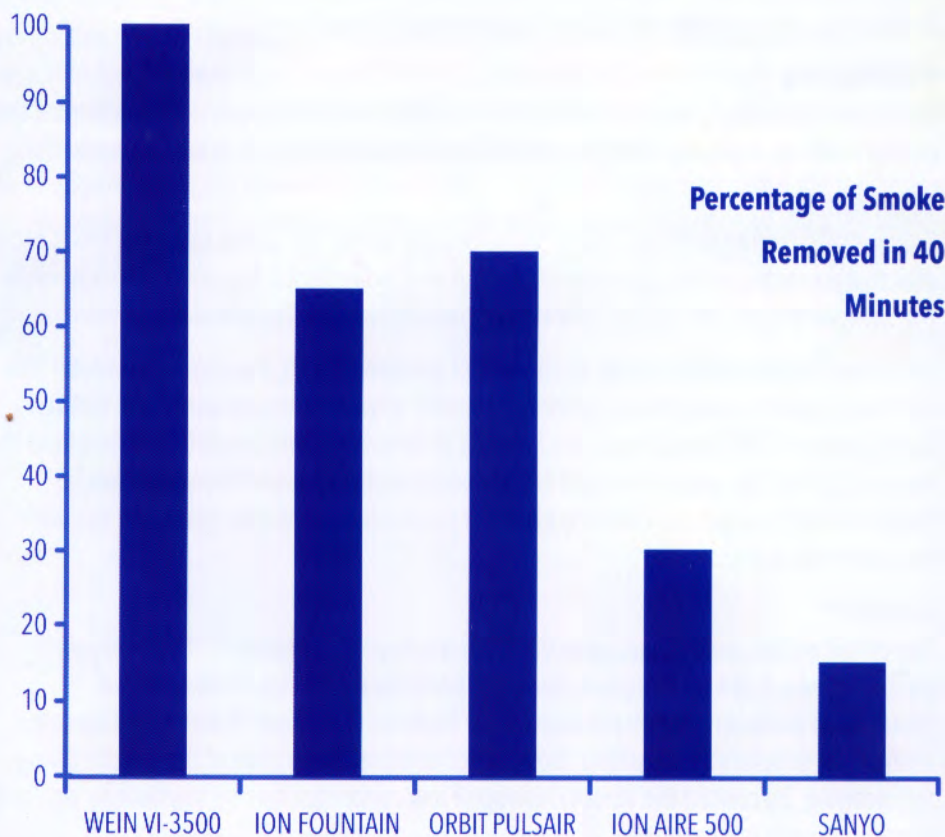
**Bacteria** Bacteria are found in your heating and cooling systems, house pets, garbage, bathrooms—everywhere in your home! Causes cold, flu, respiratory infections and eye infections.



**Mold Spores** Mold spores are found in your heating and cooling system, in damp clothing, cleaning materials and the moisture in your ceilings, walls, carpets, drapes, etc. Causes allergies, sinus headaches, irritability, fatigue and depression.



	Visible with Naked Eye		Visible with Microscope				Visible with Electron Microscope		
Smoke							Tobacco Smoke		
							Cooking Smoke		
Minerals	Lint		Insecticide Dust						
		Dust							
Airborne Living Organisms	Pollen		Mold Spores						Virus
			Bacteria						
Ordinary Consumer Air Fresheners & Purifiers	→								
VI-3500	→								
Particle Size (in Microns)	50	20	10	5	1	.5	.1	.05	.01



## **THE SILENT VORTEX IONIC WIND ADVANTAGE**

A really good high powered effective negative room air ionizer will deposit particles that would have gotten deep into the lungs on the floor where it is easily removed by routine household vacuuming and cleaning.

## **PRECIPITATION TYPE IONIC AIR CLEANERS**

With other precipitator type ionizers such as the sharper image Quadra ionic Breeze and the Clearveil, trillions of air cleansing negative ions do not circulate far from the unit and negative do not circulate throughout the room as with the Wein Vortex VI-3500. These competitive units only localize the cleaning effect immediately near these units and catch and concentrate the pollutants on steel rods that then have to be cleaned every few days or the performance degrades and noise levels rise. Remember, the sign of an effective IONIC air cleaner that can clean the smallest most dangerous particles is soot deposition on the floor. The soot is hardly noticeable and will take months to be seen. Before then, regular household cleaning gets rid of the particles.

## **POSITIONING**

The Vortex should be placed as close to the center of the room as possible to enhance the overall room air cleaning effect. Do not place near walls or areas that are not washable.

## **COMPARISON**

Comparison testing with the Sharp Image Quadra shows the Vortex to be ten times more effective across the entire spectrum of aerosol and bioaerosol dangerous particles, while the Sharper Image Unit had problems precipitating the smallest particles.

The Vortex had no such problem at all sized of particles tested. Placing an ion meter two feet away from the competitors units show hardly any ion emission whilst the VORTEX high powered IONIC WIND units read trillions of beneficial ions circulation throughout the room air. In fact the walls floors and ceiling become changed and the Vortex can be turned off and still get the cleaning effect for hours afterwards. You cannot do this with the competitors units.

## **CLEANUP**

Deposited on the competitors collection rods are high concentration of dangerous pollutants which can be infectious live germs and toxic particles. Unless special precautions are taken, the disposition of this high concentration of toxic particles can represent a problem of launching these toxics into breathing zone of the person doing the cleaning. By contact the Vortex cleanup of low concentrations on the floor by washing or vacuuming is not harmful.



## **SUMMARY**

Testing by leading air pollution authorities in advanced laboratory facilities has proven that the WEIN IONIC VORTEX WIND systems work the best of any brand tested and are much more effective in reducing the concentrations of the most dangerous toxic particles including smoke, dust pollen, mold spores, germs and allergens than the other brands. Rigorous validation testing in the very large chamber shows a 95% reduction of the smallest most dangerous particle sizes in less than an hour.

**Stan Weinberg**  
**Chairman & CEO**  
**Wein Products Inc.**

## **THE "BLACK WALL" EFFECT**

Effective ionization will deposit dust on the surfaces close to the ionizer. There is no way to prevent this and still have a good negative charge in your air. The best thing to do is to place your ionizer away from the wall. What is happening is that your walls are very large positively charged surfaces and the negatively charged particles will be attracted to them. If you have your ionizer within less than three feet of your walls you are exposing them to the strongest part of the ionizer's plasma field, which is a 3-foot area around the ionizer. The dust collection on the walls is annoyance: however, it is evidence of all the particulate that you are not breathing. If your wall is of low porosity, the buildup is easily washed off. Also the new portable steam cleaners work wonderfully well.

# **THE SAFETY AND EFFECTIVENESS OF IONIC AIR PURIFIERS IN PREVENTING THE INHALATION OF DANGEROUS POLLUTANTS AND GERMS.**

**RESEARCHERS: S.A. GRINHPUN, G.MAINELIS, T.REPONEN, K. WILLEKE, M.A.TRUNOV, and A. ADIKARY**

**CENTER FOR HEALTH RELATED AEROSOL STUDIES, DEPARTMENT OF ENVIRONMENTAL HEALTH, UNIVERSITY OF CINCINNATI, OHIO, USA.**

## **EFFECTIVENESS:**

A year long study by eminent researchers in air pollution science has concluded that Wein ionic air cleaners can substantially prevent the inhalation of toxic particles such as smoke, dust, pollens, molds, many allergens, fungi, germs and the most dangerous particles that would otherwise remain trapped in the lungs.

This study was performed by leading authorities in air pollution research in laboratories that have no equal in this country that are used by EPA, NIH, OSHA, CDC, NIOSH, HUD, NIST, and NATO. Wearable and stationary ionic air cleaners from three different manufacturers were evaluated and the results and conclusions reviewed by experts. The Wein ionic air cleaners surpassed the other manufacturers by a wide margin. Indeed, in one study of a competitor's room unit versus the Wein Vortex VI-3500, 50% of the most dangerous particles still remained airborne and breathable while the Vortex VI-3500 eliminated over 95% of these particles. In other words, the Wein VI-3500 Unit was 10 times more effective.

Besides previous studies elsewhere on deodorizing perfumes and chemicals, the results show that the Air Supply from Wein Products Inc. prevents more than 85% of dangerous pollutants from being inhaled and that close to 75% of many germs are killed within two seconds of entering the human breathing zone.

These studies confirm previous studies by UCLA, The Good Housekeeping Institute, Fuji Testing Laboratories and MIE Corp. (Monitoring Instruments For The Environment)

## **SAFETY**

Ozone levels have been tested as safe by Underwriters Laboratories USA, Fuji Testing Laboratories, Japan, University of South California, Advanced Pollution Instruments, USA.

The Authors of this report conclude:

"The research teams at the Department of Environmental Health at the University of Cincinnati Medical Center are very excited about these studies and are now considering two papers to be prepared and submitted to major peer - reviewed journals with international circulation."

The researchers will present the report to the annual European Aerosol Conference at Leipzig University, Germany.

**Stan Weinberg**  
**Chairman & CEO**  
**Wein Products Inc.**



## Physical Efficiency of Vortex VI-3500 In the Environmental Chamber (about 24m<sup>3</sup> typical room air volume)

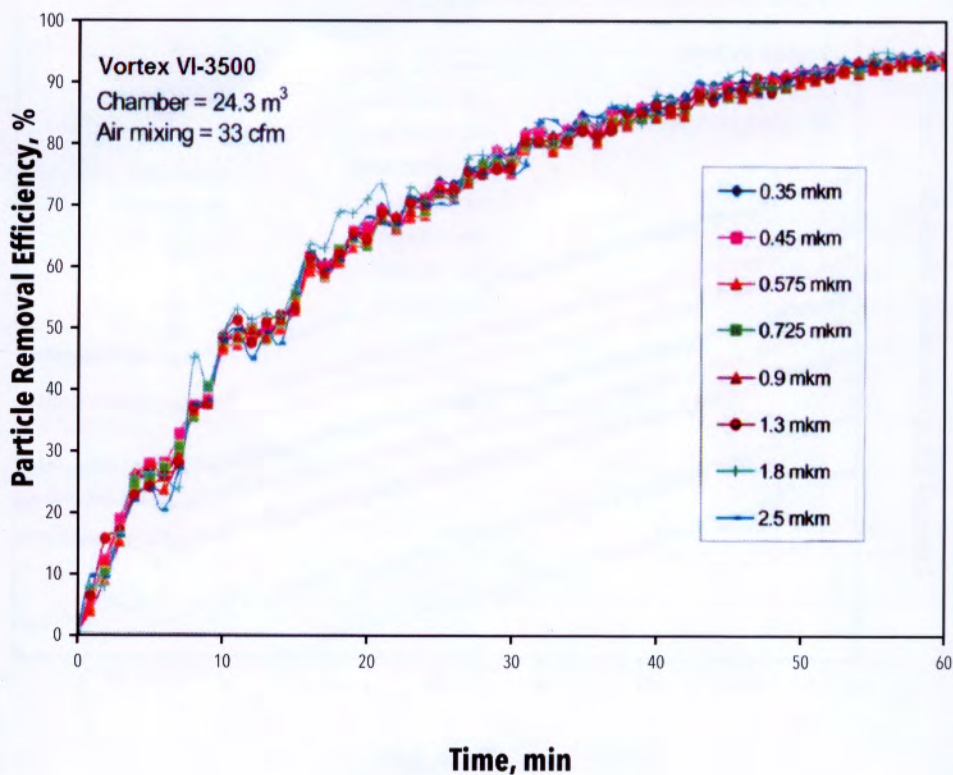
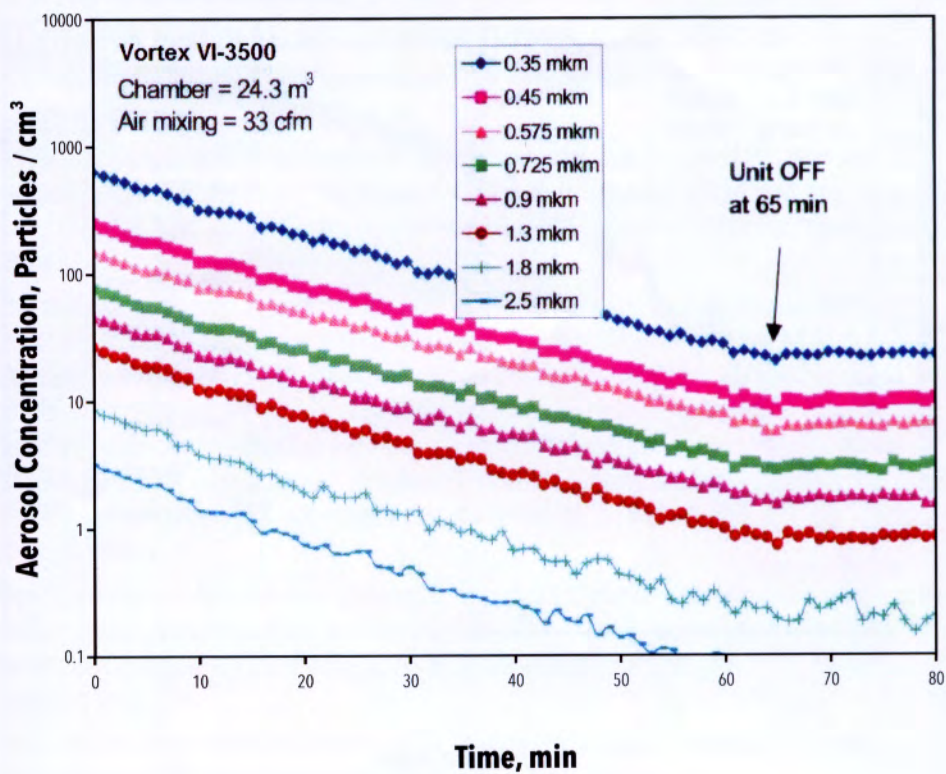


Figure 3-6

## Aerosol Concentration for Different Particle Size Fractions

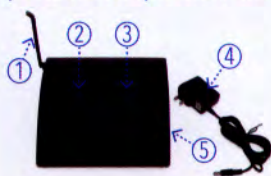


**Figure 3-7**



### Important Note:

The VI-3500 has been designed specifically for use around computer systems and other sensitive electronics. Unlike other ionizers, it will not damage or interfere with calculators, portable telephones, answering machines, radios, etc.



1. Vortex emission element
2. Ion monitor
3. Red LED status monitor
4. UL listed adapter
5. On-Off

### Maintenance

1. Wipe the black filter pad located on the unit with a damp cloth at least once a week. This will eliminate the bulk of the precipitated particles. Regular vacuuming and dusting will do away with particles precipitated into the rest of the room.
2. Keep the unit plugged in to continually clean the air. The unit uses less than 4 watts of power, so continuous usage costs only pennies per month.
3. Do not immerse in liquids.
4. The VI-3500 is maintenance-free, no replacement parts are required. Do not attempt to repair the unit. No user serviceable parts are inside the unit.

### Features

Ion Output:	3.4 trillion ions per second
Ion Monitor:	Neon discharge pulse monitor
Coverage Area:	800 square feet (20' x 40' room)
Particle Effectiveness:	As small as .01 micron
Airflow Output:	Greater than 150 feet per minute
Power Use:	Less than 4 watts
Adapter:	UL, CSA listed
Warranty:	1 year warranty
Mechanical Specifications:	size: 7 3/4" x 7 1/2" x 1 1/2" (sloped) weight: 1 pound, 2 ounces material: high impact ABS

### Wein Products Inc.

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