Ionic Breeze[®] Frequently Asked Questions

1. What do the Ionic Breeze® Quadra® and the Ionic Breeze® GP do?

The Quadra and GP models of the Ionic Breeze Silent Air Purifier are efficient, high-quality air cleaners that circulate air with silent electronic propulsion. Both products operate silently and continuously, with very low power demands. Both trap airborne irritants, bacteria, allergens, dust and other contaminants on permanent, stainless steel collection blades. Costly replacement filters are not required.

2. What is the most important difference between the GP and the Quadra?

The new Ionic Breeze GP features the added benefit of germicidal protection provided by a built-in Philips Ultraviolet Germicidal Sterilamp[®].

3. Are the Quadra and GP equally effective for collecting particles?

Both units are about equally effective in the same size room, but because of differences in size and operation, the airflow coming from the front of the unit may not feel the same. The collection grid on the GP is nearly 20% larger than the *Quadra's* grid, so trapped particles cover a larger area and require less frequent cleaning.

4. Is the Ionic Breeze GP ultraviolet light safe?

Yes. The germ-killing UVC light is created by a Philips Sterilamp, manufactured in Holland; it resembles an ordinary fluorescent tube. In the Ionic Breeze GP, this Sterilamp is completely shielded inside the unit and meets all government safety standards for home appliances. (The visible blue light is not the UVC, which is invisible.) The Sterilamp turns off automatically when the back panel is removed. There are important usage and safety guidelines in the instructions, but the Ionic Breeze GP is as safe as other common electric appliances, even in homes with pets and toddlers.

5. Are there other air cleaners with UV germicidal lamps? Is this idea new?

There are no other air purifiers on the market that match Ionic Breeze GP's unique technology and features – totally silent operation; ultra-low power consumption; no replacement filters; continuous 24-7 operation; plus UV germicidal protection. There are a handful of HEPA-style air cleaners with built-in UVC ultraviolet germicidal irradiation, but they have initial purchase prices in the range of \$1,000 to \$1,700 – with significant added downstream costs for replacement filters and power.

6. What are the benefits of the UVC germicidal lamp?

In the Ionic Breeze GP, the Philips Sterilamp helps to kill a wide variety of airborne bacteria, mold and viruses that circulate into the unit. The specific energy found in the photons of UVC ultraviolet light – at a wavelength in the range of 254 nanometers – is just the right amount to physically destroy the DNA of microorganisms. This ultraviolet germicidal irradiation (UVGI) technology has been used for decades in hospitals, health-care clinics, the food industry and elsewhere to reduce bacteria, mold and viruses. Viruses are especially susceptible to destruction by brief exposure to UVC light. You are welcome to research the basics of UVGI yourself on the Web to learn about the full range of infectious microorganisms that are destroyed by this particular wavelength. Start by going to www.sharperimage.com/GP.

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7. How does Ionic Breeze technology compare to a HEPA air cleaner?

Ionic Breeze is the better choice for home use. Both HEPA and Ionic Breeze effectively remove airborne particles in submicron ranges. HEPA (High Efficiency Particulate Arresting) technology drives air by fan through a super-fine disposable filter made of paper. Ionic Breeze is preferable because:

- Ionic Breeze's permanent collectors simply wipe clean. Ionic Breeze has no disposable filters to find, buy, store and replace. HEPA machines require expensive replacement filters.
- Ionic Breeze is silent, runs on 10 watts (Quadra) or 28 watts (GP) and is designed to clean the air continuously. HEPA machines are noisy, use up to 10 times the power and are impractical to run continuously.

8. How expensive is an Ionic Breeze compared to a HEPA air cleaner?

The initial purchase prices for an Ionic Breeze air purifier and a good-quality HEPA air cleaner are close - about \$350. But the annual operating costs for a HEPA are much higher. Ionic Breeze runs 24 hours a day on no more than 10 (or 28) watts - like a night-light; a HEPA's motor-driven fan demands up to 250 watts. With a HEPA, one would pay about \$150 more per year for electricity. What's more, the Ionic Breeze has no expensive replacement filters, so there are no added costs. In contrast, a HEPA will typically cost an additional \$150 every year for filter replacements. That's why we say the Ionic Breeze is "practically free." Your \$300 savings -- compared to a HEPA -- means the Ionic Breeze pays for itself in 14 months. For the same results, a HEPA will cost \$1,500 more over a five-year period.

9. How do the Ionic Breeze GP and Quadra clean the air?

They clean by trapping airborne particles as they circulate past an array of electrically charged stainless steel blades. Contaminated air from the room is drawn in through the vents at the back of the unit. As the particles enter, they are electrically charged and are attracted to the oppositely charged collection blades inside. These charged particles will stick to the blades until wiped off by the user.

10. How do the Ionic Breeze GP and Quadra move air without a motor or fan?

A regular fan works by rotating and physically pushing air with its blades. In a typical HEPA air filter, a noisy motor will power a rotating fan that makes noise as it spins. In contrast, Ionic Breeze works by using electrostatic forces to move air molecules – think of the power of same-pole magnets to push away from each other; the process is proprietary and patented (Zenion Effect Technology U.S. Patent No. 4,789,801). This solid-state technology uses an electrical charge to create air that is densely packed with positively charged ions and negatively charged electrons. (An ion is an atom with a positive or negative charge.) This "electronic linear propulsion" is absolutely silent.

Ionic Breeze^{*} Frequently Asked Questions

11. Is Ionic Breeze technology effective against allergens?

lonic Breeze technology has been extensively tested at two prominent U.S. universities and at America's foremost allergy research center. In one recent report, the center's director wrote, "When running (lonic Breeze) in a house with a cat...results provide overwhelming evidence that the lonic Breeze can remove large quantities of cat allergen from the air; that the quantities collected suggest that it can clean large volumes of air..." Other tests – which are ongoing – show that lonic Breeze does a great job capturing particles that contain pollen and other airborne irritants.

Used in conjunction with other allergen removal steps suggested by medical specialists (e.g., limiting carpeting in the home and using mite-proof bedding), the reduction in airborne particles by the Ionic Breeze helps to create a low-allergen environment.

12. Why should I run my air cleaner continuously?

To be truly effective, ALL air cleaners should be run continuously. Our own tests, and those of others, confirm that indoor air pollution rapidly returns to pretreatment levels when an air filter is turned off. Air cleaners with noisy fans and big 250-watt power demands are rarely run continuously for obvious reasons. In contrast, Ionic Breeze is DESIGNED to run 24 hours a day, every day of the year. First, Ionic Breeze technology is TOTALLY SILENT and second, it's powered by no more than 10 (or 28) watts.

13. What size and type of particles do the Ionic Breeze GP and Quadra trap?

Ionic Breeze technology is effective at trapping airborne particles ranging in size from .05 to 30 microns. (A micron is SMALL. The width of a human hair ranges from 50 to 200 microns!) The very small particles include tobacco smoke, viruses and some allergens; medium-size particles include other kinds of smoke, bacteria and other types of allergens; and larger-size particles include mold spores, pollen and dust.

14. Does the room size affect how the Ionic Breeze GP or Quadra clean?

The size of a room affects the time it takes to reduce airborne particles to the lowest concentration. Additionally, other important environmental factors can affect particle levels, including:

- Types of flooring and carpeting
- Furniture type and quantity
- Presence of pets
- Activity in a room
- Ventilation
- Level of outdoor air pollution

15. In what size room are the Ionic Breeze GP or Quadra effective?

Any size room will benefit from the continuous removal of harmful particles from the air. As a general guideline, we suggest one Ionic Breeze Silent Air Purifier for areas up to about 500 square feet (one large room or two smaller rooms). While both models are effective, Ionic Breeze GP has greater air-cleaning capacity than the Quadra – with about 18% more collection area, a 5-minute boost function and UVC germicidal protection.

Ionic Breeze* Frequently Asked Questions

16. What effect does an air cleaner's "high air velocity" have on air quality?

In actual room settings, an air cleaner's high air velocity tends to agitate and disturb small particles that have settled in carpets and upholstery, on floors, tables and shelves. The Ionic Breeze GP and *Quadra*, in contrast, have slow air velocity, which helps them to maintain consistent quality and cleanliness of indoor air as they operate 24-7.

17. How often do the collection blades need to be cleaned?

Depending upon the amount of air pollutants, the collection blades should be wiped or rinsed clean about every two weeks, or anytime the Ionic Breeze makes an audible sound or whenever the cleaning indicator light flashes. (NOTE: Because smoke and airborne residue from burning wood, wax logs or candles is so substantial, we recommend wiping the blades clean as soon as possible after enjoying a fire or candlelight.)

18. How are the collection blades cleaned?

Simply slide out the collection blades and wipe them clean with a damp cloth, paper towel or sponge. The blades also may be rinsed clean under the tap or with a kitchen sprayer. (NOTE: The blades must be allowed to dry completely.)

19. What can be done if the Ionic Breeze starts to make noise?

If basic cleaning fails to stop the noise, try the following special cleaning tips:

- Unplug the unit, remove the collection grid and set it aside.
- Invert, rotate and shake the main housing for several minutes. This aggressive action will cause internal cleaning beads to scrape the ionizing wires inside the unit getting rid of any particles clinging to the wire. (May require several attempts.)
- Up-end the main housing and shake out collected dust from the base.

Plug the unit back in and listen. If the noise persists:

- Unplug the unit and remove the grid.
- Remove the back cover to expose the germicidal lamp area. (GP model only.)
- Use compressed/canned air to blow away debris and dust from the wire and any visible parts inside the unit. (A hand-held hair dryer can also be used.)

Reassemble the unit and test again. If the noise persists, cautiously try the following:

- Unplug the unit and remove the collection grid.
- Use a cotton swab taped to a stick, cardboard from a dry-cleaner hanger, or a long tube of rolled newspaper to wipe down the ionizing wires inside. These thin wires run down the entire length of the unit. Use only gentle pressure to avoid breaking the wires.
- Blow away dust using canned/compressed air and reassemble the unit.

This should be a "last-ditch" effort, since too much pressure could break the wires and cause the unit to become defective. If the wires break or the noise persists, call 1-800-344-5555 for further assistance.

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20. What is the fresh scent the Ionic Breeze sometimes produces?

That faint scent is ozone (O3), a molecule consisting of three oxygen atoms. It is a common component of outdoor air. The U.S. government has set safe standards for ozone and the lonic Breeze GP complies with those standards.

21. Is the Ionic Breeze GP or Quadra an "ozone generator"?

No, they are not. An ozone generator is a device specifically designed to produce large amounts of ozone as its primary method of treating and removing odors from indoor air. The EPA regards such ozone generators as unsafe for home use. The Ionic Breeze GP and *Quadra*, in contrast, release only small, trace amounts of ozone – sufficient to eliminate many common household odors but insufficient to cause any concern. Because this amount is so small and incidental, Ionic Breeze Silent Air Purifiers are considered not to be ozone generators. Ionic Breeze GP and *Quadra* are electrostatic air cleaners that meet all government standards for safety, including ozone release.

The Ionic Breeze complies with U.S. safety standards for low ozone emission (less than 50 parts per billion). We recommend that individuals with a history of respiratory disease consult their doctor about possible heightened sensitivity to very low ozone.

22. What is CADR?

CADR stands for Clean Air Delivery Rate, and it is a way to measure how fast an air cleaner removes airborne contaminants over a short period of time. CADR is a standard laboratory test for some manufacturers in the air-cleaner industry, using a specific size chamber with premeasured levels of airborne particulates.

23. Does CADR measure the effectiveness of the Ionic Breeze GP or Quadra?

No, not at all. CADR is not designed to test the new Ionic Breeze technology, which has a low air-speed flow versus conventional kinds of air cleaners that rely on a high-speed airflow for their operation. One key to the Ionic Breeze's efficiency and effectiveness is its silent, 24-hour operation. Its airflow is slower but constant.