

# The AirPal Spectra™ Advantage

The AirPal Spectra™ operates at all times. Many other devices only work when your furnace's blower motor is on. With AirPal's continuous operation you get optimal lamp life and greater germicidal **effectiveness**.

UV light has a cumulative effect on the microbes that pass by AirPal Spectra's™ lamps. Those germs and viruses that are

not killed after the first pass do sustain some damage and will be **eliminated** after subsequent passes.

In many instances the damage to the microbe disrupts its ability to reproduce. This is important as a single bacteria can reproduce to hundreds of thousands or even millions of microbes in just 24 hours — which means that even the most efficient air filters lack complete **germicidal** effectiveness.



## AirPal Spectra™ Specifications

**Size:** 9" (L) x 7½" (W) x 2¾" (D); **Power:** 110VAC  
**Lamps:** 58 Watts (28 watts x 2)

# Health and Safety

The AirPal Spectra™ is designed to **reduce** or **eliminate** the germs that are circulated by your heating/air conditioning system that cause illness and allergies.

We have taken **proven** UV light technology and designed effective and **safe**, state-of-the-art products that are unsurpassed.

Special consideration has gone into our designs to **ensure** that no human exposure to the UV light is possible when properly installed and maintained by your heating contractor. With our patented cartridge **design**, the lamps are deactivated when detached from the main housing.

The AirPal Spectra™ rids your air of **many** of those bioaerosols that can cause illness and allergies. The process is completely **natural** and environmentally friendly as no chemicals are used.



# Frequently Asked Questions About UL Light and the AirPal Spectra™

- Q.** How does the AirPal Spectra™ work?  
**A.** The AirPal Spectra™ is installed at the cold air return of your heating/air conditioning system. There are two specially engineered lamps that emit UV light which greatly reduces or eliminates germs and viruses circulated by your system.
- Q.** What kind of germs and viruses are affected?  
**A.** The AirPal Spectra™ is effective against virtually any airborne microbe including rhinoviruses (colds), influenza, staph, and strep.
- Q.** How does germicidal UV light kill microorganisms?  
**A.** UV light destroys microbes by being absorbed by the proteins within the microorganism. After absorption the UV light destroys the microbe or inactivates the DNA which prevents the microbe from reproducing. A microbe is considered destroyed when it can no longer reproduce.
- Q.** Has this technology been tested?  
**A.** Yes. Both Westinghouse Electric and General Electric conducted laboratory tests on the germicidal effectiveness of UV lights on microorganisms. Germicidal UV light is used in hospitals, food processing plants and commercial buildings.
- Q.** Don't filters eliminate germs and viruses?  
**A.** Filters trap the microbes and even the most sophisticated ones do not contain 100% of the germs and viruses. These germs and viruses reproduce very quickly and those not trapped will recontaminate your home.
- Q.** Is UV light harmful to people?  
**A.** Prolonged, direct exposure to UVC light is harmful to all living organisms, people included. However, the AirPal Spectra™ has been designed so there is no exposure to people. This provides for safe operation and maintenance.
- Q.** What is the life of the UV lamps?  
**A.** The lamps are rated at 9000 hours which is approximately one year.
- Q.** Does the AirPal Spectra™ operate continuously?  
**A.** Yes. The AirPal Spectra™ is working 24 hours a day. This is not true with some other units that shut on and off with the system's blower motor.
- Q.** Is the AirPal Spectra™ expensive to operate?  
**A.** No. It uses less energy than a 60 watt light bulb.
- Q.** How do I know when it is time to replace the bulbs?  
**A.** There is an indicator light which shows you when the lamps are working. When the light is out it is time to replace the lamps.
- Q.** How can I get an AirPal Spectra™ installed?  
**A.** Contact your heating/air conditioning contractor. If you cannot find a contractor that carries the AirPal Spectra™, call Aquatron at 440/519-1600 for the name of a contractor in your area for installation.

For additional information on the AirPal Spectra™ contact:

**AirPal Spectra™**

The AirPal Spectra™ is manufactured by:

Aquatron, Inc.  
30700 Bainbridge Road  
Solon, Ohio 44139  
440/519-1600 • Fax 440/519-1602

**AirPal Spectra™**



**Protecting Your Family...**

...from illness  
caused by  
germs and  
viruses spread  
by your  
Heating and  
Air Conditioning  
system.

Reduce airborne  
allergens that  
can aggravate  
sinus, nasal and  
respiratory  
problems.

Safe,  
effective,  
without  
chemicals,  
tested and  
environmen-  
tally friendly  
UV light  
technology



The AirPal Spectra is available in two models - ozone and non-ozone



## Why you need the AirPal Spectra™...

According to the American Lung Association a significant segment of the U.S. population suffers from allergies caused by bioaerosols — mold spores, bacteria, and viruses are examples of bioaerosols.

Your heating and air-conditioning ventilation ducts and filters breed and circulate germs, viruses and allergy-causing mold spores. These germs include, Cold viruses, Staph, Strep and Influenza.

Filters and other air cleaning devices are not totally effective in removing bioaerosols and in many cases worsen the problem.

The AirPal Spectra™ is professionally installed by your Heating and Air Conditioning contractor. It measures just 7½" by 9" x 2¾" and is powered by regular 110V household current. For most installations no additional wiring is required.

The device has a dual lamp design and is installed at the cold air return of your system.

As the air passes the lamps, the UV lights silently destroy or inhibit colony formation of the airborne germs and viruses.

The AirPal Spectra works continuously for 24-hour-a-day, 365-days-a-year protection and uses no more power than a 60 watt light bulb.

## UV Light's Germicidal Properties

AirPal's Germicidal lamps are designed to deliver as much energy as possible at 2537 Angstrom Units which produces maximum germicidal effectiveness.

The UV light destroys the microbes by being absorbed by the proteins within the bacteria or virus. The absorption prevents the microbe from reproducing and is effectively destroyed.

The AirPal Spectra™ uses advanced Ultraviolet Light Technology to destroy many of the disease-causing microbes spread by your Heating and Air Conditioning system.

## Ultra Violet Light Applications

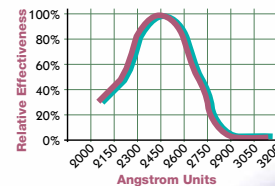
UV lighting has been used for germicidal purposes for over 40 years. General Electric and Westinghouse Electric tested and utilized the technology.

Today germicidal UV lights are used in:

Hospitals • Commercial buildings • Food processing plants

Now Aquatron has developed the AirPal Spectra™ by applying proven UV light technology with state-of-the-art design engineering for a safe and effective unit for home use.

### Bactericidal Effectiveness of UV Lighting



## How the AirPal Spectra™ Works?

The UV lamps in your AirPal Spectra™ are specially designed to work in your unit to provide maximum effectiveness. They have a rated life of 9000 hours or up to one year of continuous use.

**AirPal Spectra™**