

AirQ 270 TT/WM





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AirQ 270 2

About AQ/PS/RZ 270

Welcome to a whole new world of air treatment from Prolitec, the technology leader in air care with scent. The AQ270 appliance is the most advanced commercial air-treatment system on the market today. It is the world's first fully adjustable commercial air-treatment system engineered to serve indoor spaces ranging in size from 100 to 15,000 cubic feet (6 to 425 cubic meters).

AQ270 is a patented, computer-controlled, always-on system capable of main-taining a constant, uniform and controlled level of scent or odor neutralizer. The basic technology of AQ270 has been tested and proven in demanding commercial environments such as retail stores, malls, hotel lobbies and other public spaces where scent is used to enhance the environment, market a product, or erase an odor.

The AQ270 is managed by an on-board computer that is fully adjustable, enabling intensity settings to match space sizes from 100 to 15,000 cubic feet (3-425 cubic meters) per appliance. The AQ270 is programmable, capable of executing 21 distinct start and stop times, repeatable daily or weekly. Utilizing up to 21 programs and the full range of 50 intensity settings allows you to optimize the fragrance levels depending on peak and non-peak occupancy in the space. This new feature can save you money on fragrance AND service visits. Multiple appliances can work together in the same space.

The classic design blends well into any environment. AQ270 comes standard in Textured True Black or Eggshell White. At sufficient order quantities, AQ270 can be supplied in a custom color. AQ270 can also be concealed in a fixture, cabinet or behind a wall-mounted shroud to match any interior design.

AQ270 can use 100V to 240V AC power sources and comes complete with plugs for local power receptacles. AQ270 is designed to be mounted on a wall with a flush-mounted power source behind it. With our tabletop kit added, it can be configured to stand alone on a flat surface, and with our cable tie kit, it can be strapped to a support pillar.

AQ270 is simple to install and program for specific room size, airflow conditions, and desired scent intensity. Minimal maintenance is required beyond the periodic change of the disposable fragrance cartridge, inspection and annual replacement of two o-rings, and a simple wipe down or dusting of exterior surfaces. Once installed in the right location, AQ270 will outperform any other system, providing completely uniform scent distribution.

The AQ270's advanced technology creates a scent effect with a smaller quantity of fragrance ingredients than any other method. The chemicals employed in making AQ270 fragrances are fully compliant with the most restrictive air-quality and inhalation standards. AQ270 generates no harmful VOCs and uses no ethanol or propellants. Quite simply, used as directed, AQ270 is the greenest, most eco-friendly way to introduce scent into an interior space with no negative impact on indoor air quality. This is not an accident. The scientists and engineers at Prolitec are committed to the highest ecological and human safety standards.

This User Guide is easy to read. It is also important to read. AQ270 is a high-performance appliance that, installed and used correctly, will meet the most demanding requirements.

Unpacking

Remove AQ270 from the container. The following items should be included:

- 1. AQ270 Appliance
- 2. Power Supply
- 3. Key
- 4. Mounting Hardware
- 5. Installation Template



MOVING AND STORAGE INSTRUCTIONS

- 1. Remove the cartridge.
- 2. Unscrew and remove the two screws on the right.
- 3. Lift the appliance upward, off the mounting screws.
- 4. Unplug the appliance.
- 5. Store at -4°F (-20°C) to 158°F (70°C), 5% to 95% humidity

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General

Location

AQ270 is designed for permanent installation on wall surfaces over a 110 to 240V outlet, or used as a table- or shelf-top unit.

Service Area

The service area range of AQ270 is from 100 to 15,000 cubic (6 to 425 cubic meters). Of course this can vary significantly depending on airflow, number of fresh air changes per hour, temperature, humidity and desired service interval. AQ270 can be adjusted from 1 to 50 to accommodate these variations.

Configuration

AQ270 is available in a wall-mount configuration, which has a 110-240V power source and plug in the back of the appliance, and must be placed over the power source. Special power supply adapters and plugs are provided.

Colors

AQ270 comes standard in black or white, and at sufficient quantities can be special ordered in any color.

Estimating how long a cartridge will last and the number of days between services is critical to performing an installation that can be serviced efficiently. This includes determining the number of AQ270s needed for a space. Please refer to AirQ's 'S3 (Sizing, Service & Success) Tool,' available at AirQ Tools. The chart below can be used as a rough guideline for sizing.

Room-Size Table

	Normal Off-Cycle (NOC)		Short Off-Cycle (SOC)		Very Short Off-Cycle (VSOC)	
Output Level Range	Room Volume Range		Room Volume Range		Room Volume Range	
	CFT	СМ	CFT	СМ	CFT	СМ
1-5	200-800	6-23	600-2500	17-71	2100-6700	59-190
6-10	1000-1700	28-48	3000-4700	85-133	7500-9700	212-275
11-15	1900-2800	54-79	5100-6600	144-187	10100-11400	286-323
16-20	3000-4000	85-113	7000-8400	198-238	11700-12500	331-354
21-25	4200-5300	119-150	8700-9900	246-280	12700-13300	359-376
26-30	5600-6900	158-195	10200-11200	289-317	13400-13800	379-391
31-35	7200-8600	204-243	11400-12400	323-351	13900-14200	393-402
36-40	8900-10500	252-297	12600-13400	357-379	14300-14600	405-413
41-45	10900-12600	308-357	13500-14200	382-402	14600-14800	413-419
46-50	13100-15000	371-425	14400-15000	408-425	14800-15000	419-425

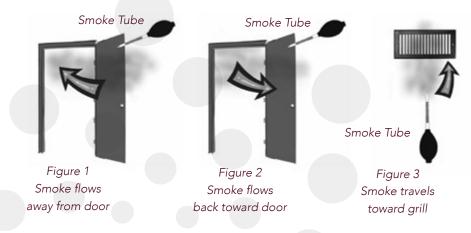
These settings are suggested as a starting point. Start on the lower end of the range and adjust after one hour. Fragrance type, room size, number of fresh air changes per hour, temperature, humidity and user preference will determine the final setting. Best practice is to use AirQ's 'S3 Tool' at AirQ Tools.

Appliance Location

- Placement of AQ270 appliance is the KEY TO OPTIMAL PERFORMANCE. It is important to identify a location where the output of AQ270 can use, rather than fight, the natural air currents in a room.
- 2. Air currents in a room are determined by using a SMOKE TEST KIT available from Prolitec or any source of smoke or vapor, such as a candle or match.
- 3. To conduct a smoke test, stand at the entrance of the room in front of the door and observe the direction of the smoke or vapor. If the smoke drifts into the room AQ270 appliance should be installed somewhere near the door.

See Figure 1. If the smoke drifts out of the room, the AQ270 appliance should be placed on the wall furthest from the door. See Figure 2. If there is no clear direction that the smoke travels or it travels upward into the air-conditioning return grill, find a position near the air-conditioning supply grill. See Figure 3.

NOTE: The location of AQ270 MUST NOT be near an HVAC return grill, exhaust fan or vent, or an open door or window through which air is leaving the space. Remember, you want to work with the natural air flow, not against it.



Wall-Mounting AQ270

Step 1 – The Electrical Source

Before the AQ270 appliance can be mounted, a qualified electrician must install an electrical outlet at the position you have decided to place AQ270. The appliance is then mounted over the outlet and plugged in.

In some locations local codes or rules require that the main power source be located beside the appliance. This will require an AQ270 hardwiring kit. If the appliance is PERMANENTLY CONNECTED in this way, a readily accessible disconnect device must be used. Consult with your electrician.

If it makes sense to plug the appliance into an outlet that is near, but not behind the appliance, a rectangular, plastic wire-concealment conduit should be used (PN 10619).

Step 2 - Mounting Kit, Parts and Tools

The mounting kit provided with AQ270 includes an installation template and 4 long round-head screws and 4 wall anchors suitable for plastered drywall. If you have another surface you will need to get anchors suitable for the wall material and screws that work with these anchors. The screws need to be the same length as the ones provided.

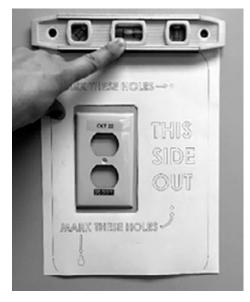
You will need the following tools:

- 1. A good level to help you make the installation template exactly horizontal.
- 2. A hammer.
- 3. A Phillips screwdriver to match the screws provided or whatever screwdriver matches the screws needed to attach to the anchors you have chosen.
- 4. A pointed tool like a small screwdriver to insert through the holes on the appliance to mark the right spot for the anchors.
- 5. A Drill.



Step 3 – Positioning the Installation Template

Place the installation template directly over the power outlet (if hardwired or plugged elsewhere, position the template to the side of the power source). Use the level to make sure the installation template is horizontal. Position the template so that the electrical outlet is centered in the template. While holding the bracket level, use a pointed tool, screw or screwdriver to mark the location of the four wall anchors. Check again with the level to ensure the template is horizontal.





Step 4 – Installing the Anchors

Use an electric drill to make a 1/8" hole at the exact location you marked. This will serve as a guide for the anchors. Use a hammer to tap the anchors in far enough so they stay well in position. Then screw them straight into the drywall. Avoid screwing them in at an angle.



HINT: If you use an electric drill with a Phillips driver head, make sure the head fits the anchor perfectly, as the anchor or screw can strip easily. Set the drill to a slow rotation.

Step 5 – Installing the Left Screws

Use an electric drill to install two screws into the left anchors. Do not bottom the screws out on the anchor but leave 1/8 inch between the head of the screw and the anchor.

Step 6 – Hanging the Appliance

Plug in the power supply. Keep the power cord neat and tight to the supply. Plug in the supply to the appliance. Hang the appliance by lining up the appliance so the left holes slide over the two left screws. Some installations do not accommodate mounting of the appliance over a power outlet. In this case, untie the power cord and extend it to a nearby outlet using a conduit (not included - PN 10619) to conceal and keep it out of reach. An outlet cover may also be used over the adapter.

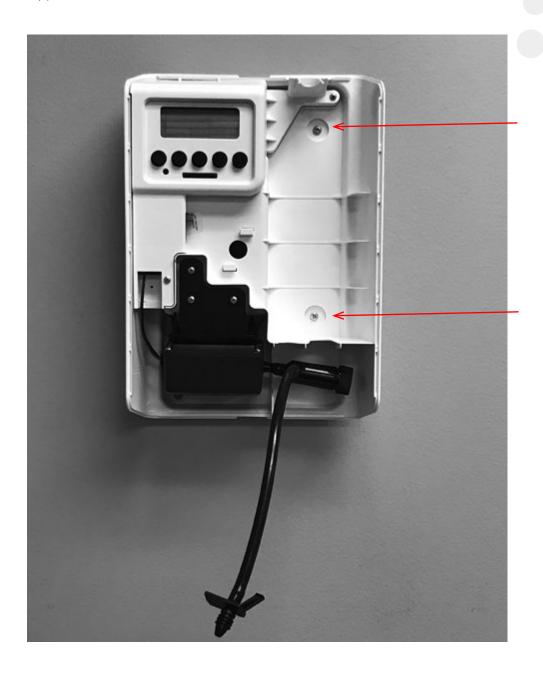
The standard installation is to position the appliance right over the power source, storing the power-supply block and the power cord in the recess in the back of the appliance. To make this easy, do not untie the power cord and take just enough wire to make the connection.





Step 7 – Final Two Screws

Secure the appliance to the wall with the final two screws.

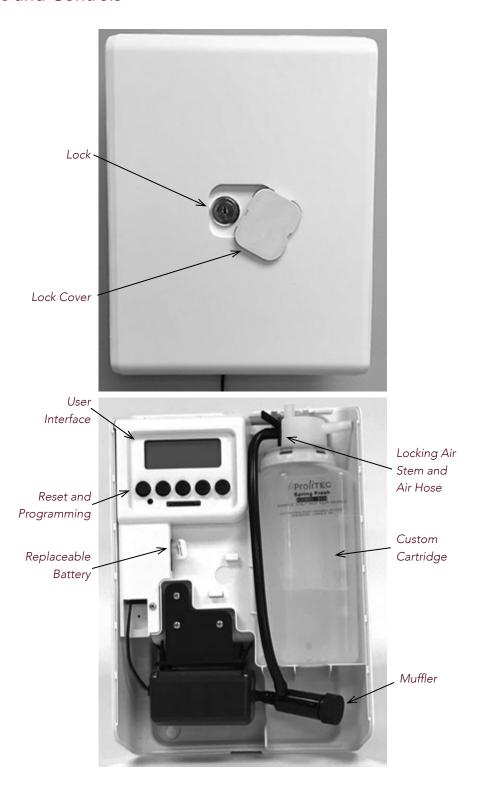


Step 8 – Replacing the Cover

After <u>cartridge installation</u> and <u>unit programming</u>, replace the cover and lock it, storing the key in a known location.

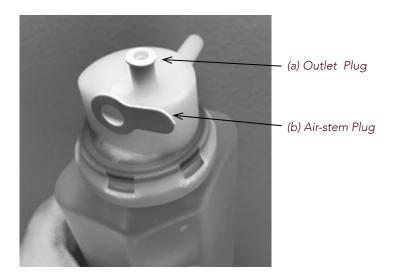
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Features and Controls



Setting Up the Cartridge

- 1. Use the key to unlock and open the door.
- 2. Prepare the cartridge.
 - Remove the big plug from the air-stem port (b) on the flat surface (back side) of the cartridge.
 - Remove the plug from the top outlet port (a) of the cartridge.



3. Insert the airstem into the air-stem port in the cartridge head. Rotate air stem to locked position.



4. Place cartridge in recess. If the muffler does not fit as shown, then remove the air hose assembly and reattach as shown.

CORRECT:



INCORRECT:



Reattach if needed

5. If the appliance has been previously programmed activate preferred setting. If not (see <u>Programming the Appliance</u>), press \bullet so the backlight turns on, snap and lock the door.

- 1. Unlock and remove the front.
- 2. Turn on the power by pressing ϕ on the control panel.
- 3. Set the Clock.
 - ullet Press ullet to cycle through the modes to the options mode. The day of the week will blink.
 - Adjust the day forward or backward using \oplus or Θ .
 - Press Θ to set the day of the week and the hour will blink.
 - Adjust the hour forward or backward using \oplus or Θ .
 - Press ② to set the hour and the minute will blink.
 - Adjust the minute forward or backward using \oplus or Θ .
 - Press ② to set the minute and the hour and minute will both blink.
 - Change between 24-hour and 12-hour modes using \oplus or Θ .
 - Press Θ to set the time mode and the off-cycle will blink.
 - Change between normal (NOC, 7 minutes), short (SOC, 2 minutes), and very short (VSOC, 30 seconds) modes using \oplus or Θ .
 - ullet Press $oldsymbol{arOmega}$ to set the off-cycle and the fan setting will blink.
 - Adjust the fan speed up or down using \oplus or Θ .
 - ullet Press igotimes to set the fan speed and the day of the week will blink.
- 4. 24/7 Mode.
 - If you want AQ270 to run continuously 7 days a week, 24 hours a day press → until **24/7** is displayed above the time. If not, skip to Step 5.
- 5. Set Program Mode.
 - Press 🕀 until **Set Program** is displayed above the time. The program number will blink in the lower right corner of the display
 - Adjust the program number forward or backward using igoplus or igoplus.
 - $\bullet\,$ Press Θ to set the program number and the status will blink.
 - Adjust the status between on ("on") and "off" ("oF") using \oplus or Θ .
 - $\bullet\,$ Press $\mbox{\Large \sl O}$ to set the status and the intensity will blink.
 - Adjust the intensity up or down using \oplus or Θ .

- Press Θ to set the intensity and the day of the week will blink.
- Adjust the day of the week forward or backward using \oplus or Θ .

HINT: In addition to individual days, you can also set "all days," "week days," or "weekend days."

- Press \odot to set the day of the week. **Start** will display on the far right side and the hour will blink.
- Adjust the start hour forward or backward using \oplus or Θ .
- Press ② to set the start hour and the minute will blink.
- Adjust the start minute forward or backward using \oplus or Θ .
- ullet Press $oldsymbol{arOmega}$ to set the start minute. Stop will display on the far right side and the hour will blink.
- Adjust the stop hour forward or backward using \oplus or Θ .
- $\bullet\,$ Press $\ensuremath{\mbox{$\mathcal{O}$}}$ to set the stop hour and the minute will blink.
- Adjust the stop minute forward or backward using \oplus or Θ .
- ullet Press $oldsymbol{oldsymbol{\Theta}}$ to set the step minute.

The appliance will automatically switch from **Set Program** to **Run Program** after 30 seconds of inactivity, or you can press \bigcirc until **Set Program** is displayed above the time. You may review the programs by pressing \bigcirc while the appliance is in **Run Program** mode.

The online SD card programming tool can be found at http://airqtools.com/sdcard/

- 1. Multiple programs sets can be created, which are unique to the user, and stored in a list.
- 2. Create a program set using the **create program** button.
 - Each program set will require a name.
 - Each program set can contain 21 unique programs, which can be turned on or off within the set.
 - Programs, identified by number 1-21, include a day or days, on/off times, and intensity settings.
 - The tool will warn the user of overlapping programs.
 - Programs sets need to be saved.
- 3. Edit an existing program set using the edit button to the right of the program name.
- 4. Copy an existing program set using the **copy** button to the right of the program name. This can be especially useful for quickly duplicating a very similar set of programs.
- 5. Delete an existing program set using the **delete** button to the right of the program name.
- 6. Export an existing program set using the **export** button to the right of the program name.
 - A .zip file containing your program set (schedule.txt), the latest firmware (discover.hex), and the final instruction for use (readme.txt) will download to your computer.
 - Insert an SDHC card and format it FAT32.
 - Copy the files needed (schedule.txt for programs, discover.hex for firmware) to the top level directory of the card (not in a folder or .zip file).
- 7. Insert the SD card into the appliance, with the label side down.

Loading new firmware from an SD card

- 1. Copy discover.hex to a FAT32 formatted SD card.
- 2. Insert the SD card, with the label side down.
- 3. Press the reset button, and the five buttons will light in sequence from left to right.
- 4. The \bullet and \bullet buttons will light alternately.
- 5. Press and hold \circ for one second, and the display will show **LOAD** for

- 6. The five buttons will light in sequence from left to right.
- 7. Remove the SD card; the display will show the currently loaded firmware version and the pump will run for one second.
- 8. Press \bullet to turn on the power.
- 9. Be sure that the power is on and the appliance is in **Run Program** mode prior to closing and locking the door.

Programming the Appliance from an SD card

- 1. Copy schedule.txt to a FAT32 formatted SD card.
- 2. Insert the SD card, with the label side down.
- 3. Press the reset button, and the five buttons will light in sequence from left to right.
- 4. The \circlearrowleft and \oplus buttons will light alternately.
- 5. Press and hold \circ for one second, and the display will show **LOAD** for about ten seconds.
- 6. The five buttons will light in sequence from left to right.
- 7. Remove the SD card; the display will show the currently loaded firmware version and the pump will run for one second.
- 8. Press \bullet to turn on the power.
- 9. Press Θ to cycle through the modes to the **Run Program** mode.
- 10. Press ∅ to view the start time for the first program.
- 11. Press Θ again to view the stop time for the first program.
- 12. Press \oplus or Θ to view the second and third programs.
- 13. Be sure the power is on and the appliance is in **Run Program** mode prior to closing and locking the door.

Copying programs to an SD card

- 1. Insert a FAT32 formatted SD card, with the label side down.
- 2. Press the reset button, and the five buttons will light in sequence from left to right.
- 3. The \bullet and \bullet buttons will light alternately.

- 4. Press and hold \oplus for one second, and the display will show **SAVE** for about ten seconds.
- 5. The five buttons will light in sequence from left to right.
- 6. Remove the SD card; the display will show the currently loaded firmware version and the pump will run for one second.
- 7. Press \bullet to turn on the power.
- 8. Be sure that the power is on and the appliance is in **Run Program** mode prior to closing and locking the door.
- 9. The new file created on the SD card will be called "outsche.txt." Changing it to "schedule.txt" allows the programs to be loaded on another appliance.

Setting Scent Intensity

- 1. Determine the approximate size of the room in cubic feet or cubic meters by multiplying length x width x ceiling height.
- Consult the Room-Size Table to give you a level (1 to 50) to set. THIS IS ONLY A STARTING POINT.

Hint: There are many variables to finding the scent level that works: size, airflow, number of fresh air changes per hour, number of people in the space and, most of all, user preferences. Experiment with different levels until you are satisfied. Utilize the S3 Tool.

Scent Control

If you followed the Room-Size Chart or S3 Tool, you have set AQ270 to the low end of the range for your room size. If after one hour you feel the scent is not detectable, increase the setting by about 10%. For example, if your start setting was 20, increase it by 10%, or to setting 22. Keep increasing until you and others in the space can detect a slight scent throughout the space.

The Last Step

- 1. Set the appliance to either **24/7** or **Run Program**.
- 2. Make sure the power is on.
- 3. Close and lock the door, storing the key in a known place.

USER MAINTENANCE

Cartridge Change

When the reservoir is empty the cartridge needs to be changed. The change process is simple. Best practice is to wear gloves when manipulating the cartridge.

- 1. Unlock and remove the front cover.
- 2. Turn off the power by pressing the power button.
- 3. Grab the cartridge and disconnect air stem.
- 4. Inspect the air stem seal for damage. Replace if damaged.
- 5. Remove plugs from new cartridge and use them to plug empty cartridge.
- 6. Deliver empty cartridge to recycling center at a later date.
- 7. Connect new cartridge and to air stem and seat in appliance.

Cartridge Change Maintenance Checklist Items

Cartridge plume: Use a high-intensity flashlight or your headlamp to confirm that a plume is streaming from the output port. If there is no plume:

- Check that the other output port is plugged. It should be.
- Check that the power is on and the appliance is running.
- Check that the o-rings on the air stem are in place and not cracked or broken. Replace if necessary.
- If the appliance is set to **Run Program**, switch it to **24/7** and check for a plume.
- If no plume, set it back to **Run Program** and change the cartridge.
- If still no plume, try another cartridge just to make sure. If no plume, replace the appliance. (See <u>Changing an Appliance</u>).
- Wipe the unit clean inside and out.

Changing an Appliance

Appliance malfunctions are not intended to be serviced in the field, however the pump is field replacable. If there is no plume after following the procedure outlined above or there is any excessive noise level, then the appliance must be replaced with a new one.

General Care

- AQ270 is an electronic appliance. Treat it like a laptop.
- Do not place or store AQ270 or its cartridges in extreme heat (more than 130° F) or in freezing temperatures.
- Do not drop AQ270 on the floor. Do not drop it in or position it near water.
- Do not paint or otherwise try to alter the color of the outer cover. AQ270 is available in any color.
- When shipping, pack in the original box and place it in an outer cardboard box.
- Always keep the plugs in cartridges when not in use.

Always remove the cartridge from the appliance before moving it anywhere. Otherwise leakage can occur, destroy the unit and the warranty is voided.

Applications

AQ270 is used to enhance indoor air quality by neutralizing odors or introducing and maintaining a scent in the air or both at the same time. This is accomplished by blending ultra-low concentrations of odor neutralizers and fragrance ingredients ("Air-Treatment Agents") into the air. In fact, AQ270 is fully effective with air concentrations of Air-Treatment Agents less than 1 part per million (ppm). This means that for every 1,000,000 molecules of air there is only one molecule of Air-Treatment Agent.

There are four basic applications for AQ270: ambient scenting, product marketing, odor control and aromatherapy. These applications are different in terms of their objectives, but they all employ the same combination of Prolitec's proprietary air-treatment chemistry and AQ270 computer-controlled delivery system.

Ambient Scenting

Ambient Scenting is the use of a scent alongside other design elements in a space to help create or enhance its ambience. In this application, scent is comparable to visual elements such as graphics, colors, materials, textures and shapes as well as auditory elements like music. With ambient scenting, a carefully selected fragrance is used to enhance themes, animate visuals, make a tree or a flower smell like a tree or a flower, and many other uses. Major brands are using scent to extend and animate their brand by associating a scent experience with a brand, like a hotel chain using ambient scenting to make all their lobbies smell like the same scent.

Indoor air quality and the overall ambience of a space can be substantially improved with the introduction of a pleasant scent. Scent can cause humans to recall a brand with positive feelings and communicate brand values. Scent can create inviting environments that attract retail customers and cause them to stay longer and shop more, improve employee productivity, and make all the occupants feel positive about their experience in the space.

Of all the senses, the sense of smell is the most powerful trigger of memory. Hotels, casinos, retail establishments and other businesses seeking to provide a positive experience that clients will recall and repeat should use scents to enhance indoor air quality. The use of a signature scent to extend the brand image is a powerful tool for the sophisticated marketer.

Typical areas where Ambient Scenting is used:

- Retail Stores
- Hotel Lobbies
- Malls
- Showrooms
- Clubs and Bars

Product Marketing

Product Marketing is the use of scent as a medium of communication in advertising and promotion of certain products for which scent is a primary element or feature. Presenting the scent of a scented product to customers at the point of sale is the most powerful way to sell any product with a scent including fine fragrances; soaps, detergents and fabric softeners; lotions and potions; scented health and beauty aids; food products like coffee, fruits, and baked goods; and other fresh and aromatic products.

AQ270 is used as an automated presentation and product-sampling system to deliver the exact aroma of a scented product throughout a store or at the point of sale. For example, enabling the client to experience a fine fragrance, personal care or home fragrance is the most effective way to sell it. Scent is the main feature of these products. Using AQ270 to present that scent to a customer is the best way to present and sell the product. In this way, AQ270 delivers a true and complete experience of the scent to clients and passers by without intrusion or sales associate intervention.

Billboards and advertising panels can be equipped with AQ270 to treat the surrounding air space with the scent that is being advertised on the billboard. This is particularly effective in high-traffic areas such as malls, airports and train and subway stations. This is a multi-sensorial approach that draws customers to the display while simultaneously enhancing the visuals and allowing the prospective customer to experience or "sample" the scent of the product.

Odor Control

One of the most challenging problems in indoor air quality is bad odors. Bad-smelling places have a negative emotional impact on all the occupants of the space. This means both employees and customers.

AQ270 and Prolitec's proprietary odor-remediation chemistry are capable of blocking the human ability to detect most malodors and replacing these odors with pleasant scents. Prolitec's proprietary air-treatment chemistry and the accompanying computer-controlled delivery system are rapidly becoming the standard solution for difficult odor issues in several industry sectors.

Typical problem areas that can be addressed by AQ270 include:

- Restrooms
- Garbage-compaction areas
- Areas adjacent to cooking and food preparation
- Swimming pools and adjacent areas
- Workout facilities
- Elevator shafts
- Hotel hallways

The Prolitec approach to odor remediation uses a proprietary and patented neutralizer that inhibits the human olfactory system from detecting the odor and then injecting a small amount of scent to create an ultra-low concentration in the air of less than 1 ppm. This approach is unique and much more effective than traditional approaches that simply douse the odor with a high concentration of scent.

Aromatherapy and Performance Scenting

It is well known that scent has a powerful impact on human emotion and behavior. The use of scent to influence human emotion is just like Ambient Scenting but with a specific objective for the occupants of the treated space. The use of scent and the essential oils of flowers, herbs and trees to promote health and well being is the well-established branch of alternative medicine known as aromatherapy. It is also recognized that scent can be used to optimize performance in the workplace. The benefits include reduced errors in routine functions, increased employee sense of well being, higher morale, improved customer service and overall improved productivity.

AQ270[™] and Prolitec aromatherapy chemistry can help make a workspace a more comfortable and appealing place to be. As examples of the positive effect of aromatherapy on the workplace, below are results of several relevant studies:

- A 1991 study demonstrated that "sustained attention tasks" were performed with greater accuracy by the participants in scented rooms compared to those in the non-scented control rooms.
- Another study found that fragrance had a dramatic and positive effect on a proofreader's efficiency.
- It is commonly known that the Tokyo Stock Exchange diffuses peppermint into the air in the afternoons to make the brokers feel invigorated.

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¹ Dr. Joel Warm and Dr. William Dembar. "Olfactory Stimulation and Sustained Attention." *Compendium of Olfactory Research*, (Dubuque, Iowa: Kendall/Hunt Publishing Co., 1995) p. 47.

² Mark Kilauga et al. "Consumer Panel Study on the Effect of Peppermint and Lavender Fragrances on Proofreading." *Compendium of Olfactory Research*, (Dubuque, Iowa: Kendall/Hunt Publishing Co., 1995) p. 131

IMPORTANT SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS

Appliance Precautions

- WARNING When using electric products, basic precautions should always be followed, including the following:
- Read all the instructions before using the product.
- Children should be supervised not to play with the appliance.
- Do not put fingers or hands into the product.
- The appliance must be operated in an upright or vertical position.
- The appliance should not be used with the door in the open position. The door is opened only to perform a cartridge or program change.
- Never put your nose to the output of the AQ270. Within 12 inches of the output, the fragrance is highly concentrated. The improper inhalation of high concentrations of fragrance may cause irritation including watery eyes, headache, cough and upper respiratory discomfort.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

2. INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

- The appliance is built to be plugged into an 110VAC or 220VAC power outlet. Must be used only
 with the approved and included power supply. The UL and CE compliant power supply converts
 power to 12V DC to power the appliance. The appliance must only be supplied at Safety Extra
 Low Voltage (SELV).
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid a hazard.
- Unplug before cleaning.
- To reduce the risk of electric shock, the appliance should only be plugged into a properly grounded outlet box. If there is any doubt as to whether an outlet box is properly grounded, a qualified electrician should be consulted.
- It is recommended that the user remove the appliance from the wall to test and reset the GFCI outlet on a regular basis.

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- Use only AirQ by Prolitec fragrance cartridges.
- Read the Consumer Product Safety Information Sheet and the Material Safety Data Sheet
 provided with each shipment of Cartridges. Insure that these information sheets are available for
 review by employees.
- Use latex gloves to handle a Cartridge to avoid the liquid getting on hands. The AirQ fragrances are formulated so as to not be harmful in contact with the skin, but the concentrated nature of the fragrances may make the scent difficult to remove from hands and skin.
- Wash your hands after all contact with Cartridges or fragrance.
- While AirQ Air Treatment Agents do not contain ingredients deemed harmful to the skin, if there is skin contact, wash with soap and water. If there is contact with the eyes, irrigate the eye with fresh water for 5 minutes. If there is any eye irritation, consult a physician immediately.

Frequently Asked Questions (FAQs)

How does AQ270 work?

AQ270 uses a patented technology to convert liquid fragrance compounds into tiny droplets less than 1/100th the diameter of a human hair. By comparison, an aerosol droplet is 100 times bigger and 1,000,000 times heavier. AQ270 droplets present 100 times more surface area to the air being treated, which means much less fragrance is used to create the scent effect. AQ270's tiny droplets are extremely light so they float easily into the air and disperse throughout a space to create an even scent effect.

What size room will AQ270 handle?

AQ270 is fully adjustable for different size rooms. AQ270 is effective in spaces from 100 to 15,000 cubic feet (6 to 425 cubic meters). The cubic measure is width x length x ceiling height.

Where can I place AQ270?

AQ270 should be placed on a wall where it can take full advantage of the natural air currents in the space as determined by a smoke test or as known by you. Accessory kits can be ordered for placing the unit on a table top.

Do I need to adjust AQ270?

Yes! AQ270 is a powerful machine. AQ270 can handle small and very large rooms. If it is set too high for the room size, it can cause discomfort for some people. Adjusting is simple. Take the time to do it right.

How do I adjust AQ270?

With the power cord plugged in you can adjust AQ270 up and down using the Θ and Θ buttons just to the right of the LCD screen. You can see the setting levels (1 to 50) on the right side of the LCD. ALWAYS START WITH THE RECOMMENDED SETTING and adjust upward in small steps.

How strong should I make the scent?

Less is more. AQ270 allows you to erase odors and use only a small amount of scent. Unlike most other air fresheners, AQ270 is adjustable. Use this important feature. Always start on the lowest settings for the size of the space then adjust upward in small steps.

IMPORTANT

ALLOW ONE HOUR TO ASSESS the scent strength after starting or adjusting. It is best to assess strength when you first enter the room from another room.

How about safety? Is AQ270 safe to use with children and pets?

When used as directed, AQ270 is the safest air freshener available. Of course, it is important to read the Material Safety Data Sheets enclosed with each cartridge, which should be stored in a secure, visible location.

How does AQ270 differ from aerosol room fresheners?

The more expensive aerosols can produce a very pleasant scent, but only for a few minutes and in very high concentrations just in the area they were sprayed. AQ270 is what is known as a "continuous action" air freshener. AQ270 is programmed to deliver an evenly distributed scent throughout the room.

Is AQ270 eco-friendly?

Yes, AQ270 is the most eco-friendly air freshener on the market. Unlike aerosols, AQ270 uses no propellants and produces no harmful volatile organic compounds, or VOCs. Unlike many air fresheners, AQ270 uses no ethanol or similar solvents to enhance the evaporation of fragrance chemicals.

I only want to scent the room at certain times. Do I have to turn it on and off every time?

AQ270 has a tiny on-board computer for fully automatic operations. You can set set up to 21 separate start and stop times. (See <u>Programming the Appliance</u>)

If I want a different scent, can I switch cartridges?

Yes, simply remove the cartridge and replace it with another.

IMPORTANT

Always keep plugs in cartridges when not in use. If you have misplaced the plugs from the cartridge being removed from AQ270, you can use the plugs from the new cartridge being inserted.

Will AQ270 leave deposits on furniture or carpeting?

No, provided you do not direct the output at a surface closer than 12 inches away.

Will AQ270 fragrances stain surfaces or fabric?

Yes, all air-care fragrances will stain wood and stone and all fabrics if spilled. The best solution is avoidance by replacing the plugs on cartridges after removing them and keeping the plugs on all cartridges when not in use.

How do I clean up a drip?

If there is a drip, blot it as quickly as possible and then clean with soap and water.

IMPORTANT

Never situate an AQ270 on a horizontal surface without the proper Table Top accessory kit, otherwise spills may occur.

Specifications

Dimensions

AQ270 Appliance 11" x 7.5" x 3" (27.9 cm x 19.1 cm x 7.6 cm)

Weight

2.35 lbs (1.07 kg) empty

Power Supply

Input — 100 – 240V AC at 0.6A Frequency — 50/60 Hz Protection — Switching power supply Internal Power — 15VDC at 1 A Battery — Lithium 3V, #CR2032

Approvals

FCC part 15, CE, RoHS Compliant, UL Power Supply

Working Temperature

0° to 40° C

Working Humidity

85% or less

Liquid Capacity

500 mL cartridges

Service Area

Up to 15,000 cu. ft. (425 m³) served

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