



Scent Shuttle

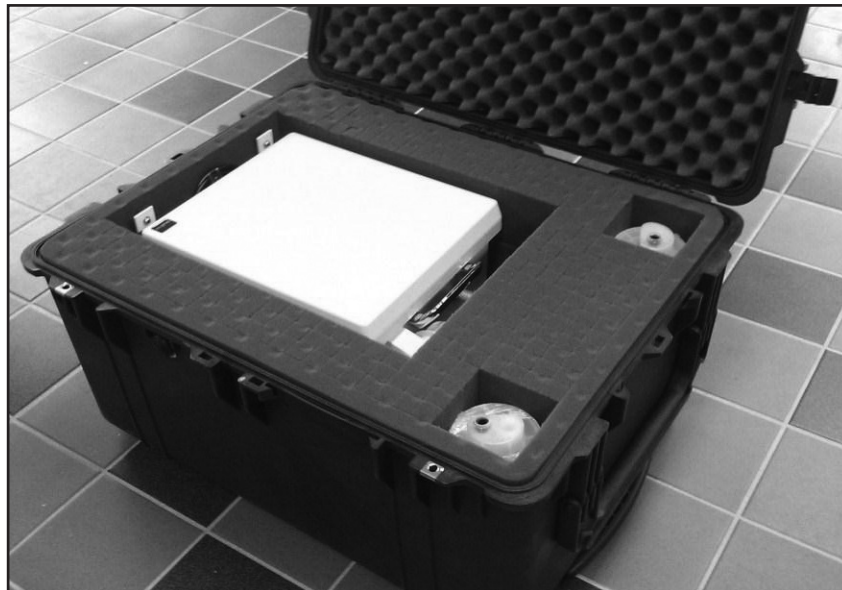
Model AQ1200WHTTT-SS Original Instructions



User Guide

Table of Contents

I. Introduction to the AirQ Scent Shuttle	1
II. IMPORTANT SAFETY INSTRUCTIONS	3
A. Appliance Precautions	
B. Fragrance Precautions	
III. Appliance and Controls	4
IV. USER MAINTENANCE	5
A. Changing the Cartridge	
B. O-ring Replacement	
C. Air Filter Replacement	
D. Battery Replacement	
E. Fan Replacement	
V. OPERATING INSTRUCTIONS	7
A. Unit Programming	
B. Setting Scent Intensity	
C. The Last Step	
VI. MOVING & STORAGE INSTRUCTIONS	10
VII. Troubleshooting	11
VIII. General Care and Customer Support	12
IX. Specifications	13



I. Introduction

The AirQ Scent Shuttle appliance (AQ1200WHTTT-SS) is a free-standing, computer-controlled, direct-diffusing air treatment system for interior spaces. The AirQ Scent Shuttle converts fragrances and odor control formulations (“Agents”) into ultra-fine droplets for controlled distribution as an aerosol or vapor directly into a room. It is designed for mobile use at events such as trade shows, conferences, fundraisers, parties, art exhibits, musical and theatrical performances, weddings, Bar Mitzvahs, lectures, PR campaigns and other events that might benefit from the temporary installation of ambient scenting capabilities.

The AirQ Scent Shuttle is managed by an on-board computer that is fully programmable for intensity to match space sizes from 1,800 to 150,000 cubic feet (50-4,200 cubic meters) per appliance as well as multiple duty cycles (programs) with start and stop times for each day of the week. Utilizing up to 3 duty cycles per day 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.

Typical AirQ Scent Shuttle applications include air treatment to enhance or improve indoor air quality including odor cancelling, and ambient scenting in public spaces such as casinos, malls, hotels, theaters, ballrooms, convention centers, hospitals, retirement and assisted living facilities, schools and restrooms. A single AirQ Scent Shuttle can do both odor control and ambient scenting at the same time.

The AirQ Scent Shuttle with Prolitec odor control formulations and fragrances will cancel a wide range of offensive odors and replace them with pleasant scents available from the Prolitec fragrance catalog or custom developed to meet client requirements.

The AirQ Scent Shuttle works by generating ultra fine, ultra-light droplets approximately 1 micrometer (μm) in diameter. By comparison, a droplet from a typical pressurized aerosol spray can is 50 microns (50000 nanometers) in diameter or 50 times larger than an AirQ Scent Shuttle droplet. In terms of weight and volume of liquid, the comparison is even more dramatic. A 50-micron aerosol droplet is 125,000 times heavier than a 1 μm MF droplet.¹ (See also Table 1 below.) This tiny MF droplet offers many performance benefits over a conventional aerosol including: completely uniform distribution of the treatment agent; 50 times more exposed surface area; and the absence of any liquid deposits on surfaces such as the interior surfaces in an HVAC system.

The AirQ Scent Shuttle Guide is packed with important information that will help the users optimize the performance of this modern air treatment system. We encourage you to read it carefully.

¹ This value is based on spherical volumes of two droplets of identical density

Table 1. AirQ Technology vs. Aerosol Spray Can Technology		
Parameter	Prolitec MF Technology	Aerosol Spray Can
Droplet Diameter, μm	1	50
Volume per Droplet, μm^3	0.52	65,450
Surface Area per Droplet, μm^2	3	7,854
Relative Volume per Droplet	1	125,000
Relative Weight per Droplet	1	125,000
Number of Droplets per Equivalent Volume	125,000	1
Surface Area/Volume, μm^{-1}	6.00	0.12
Relative Surface Area per Volume	50	1
©Prolitec Inc 2009, 2015		

II. IMPORTANT SAFETY INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS

A. Appliance Precautions

1. **WARNING** – When using electric products, basic precautions should always be followed, including the following:

- Read all the instructions before using the product.
- To reduce the risk of injury, close supervision is necessary when a product is used near children or pets.
- 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 AirQ Scent Shuttle. 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 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.

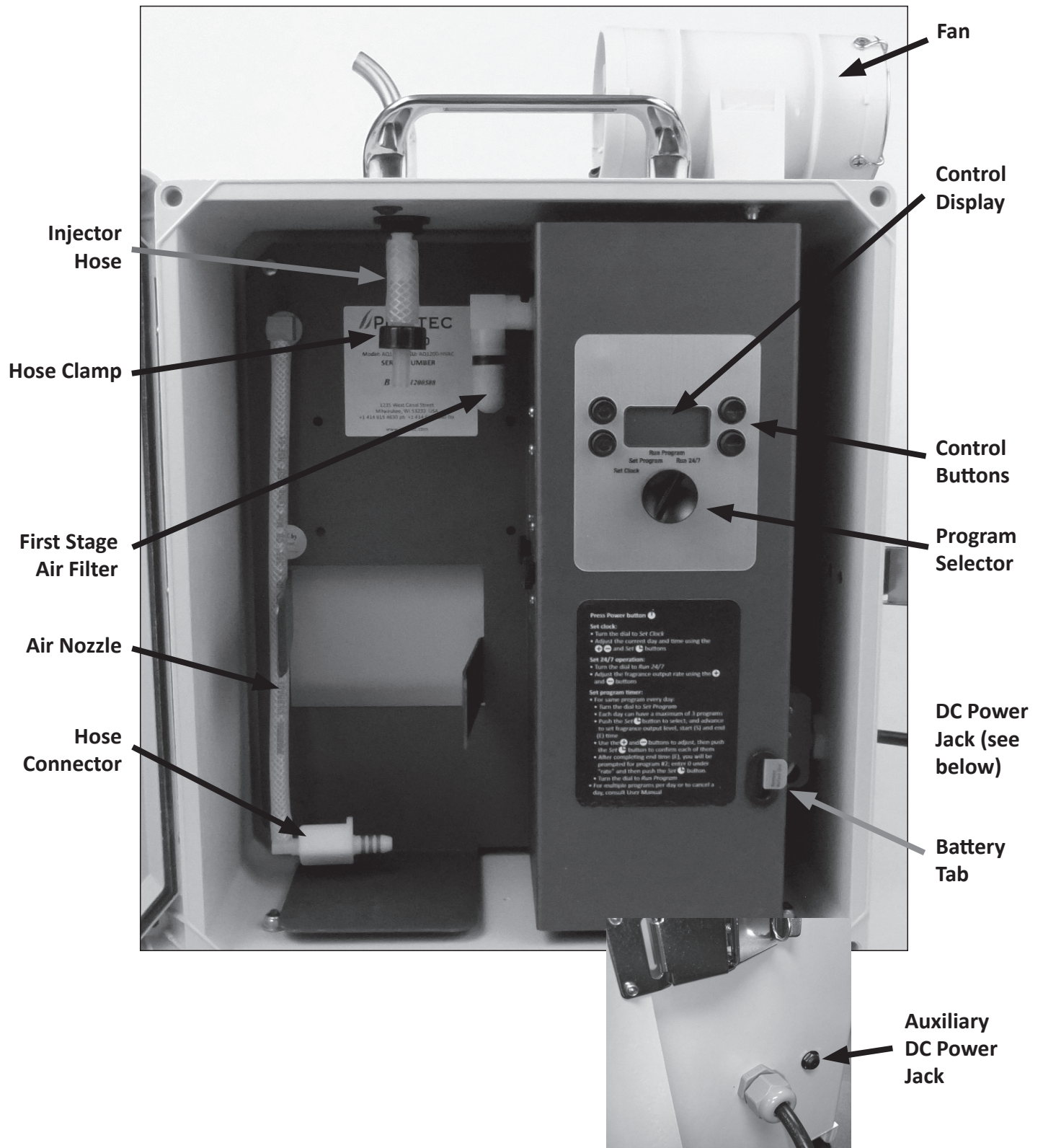
2. **INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS**

- 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.
- 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.

B. Fragrance Cartridge Precautions

- 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.

III. Appliance and Controls



IV. USER MAINTENANCE

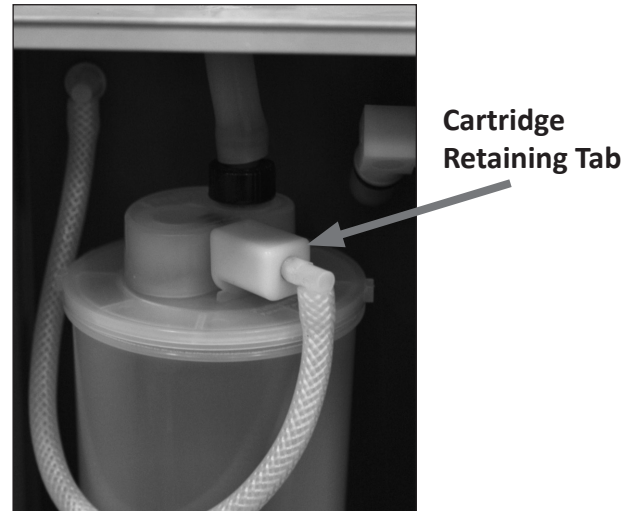
A. Changing the Cartridge

1. Unlatch and open the door to access the cartridge: The door should be opened only to perform a cartridge or programming change. When in use, the door must be closed.
2. Press POWER button to turn appliance OFF.
3. Remove air nozzle (located on the side of the cartridge head) by rotating 90 degrees and pulling towards you. *(See Picture 1 below)*
4. Detach Injector hose and hose connector from the cartridge output port (located on the top of the cartridge head). This is done by unscrewing the hose connector from the cartridge output port and pulling out.
5. Remove cartridge from appliance enclosure.
6. Install new cartridge, place and tighten hose connector firmly on cartridge output port.
7. Insert air nozzle and rotate the handle 90 degrees until secured (by stem retaining tab on cartridge head). *(See Picture 2 below)*
8. Turn appliance ON. Verify that the plume is not escaping inside the appliance and that all connections are tight. Close the door when complete.

Picture 1



Picture 2



USER MAINTENANCE

B. O-Ring Replacement – each year or as needed

1. Replace the air nozzle's 3 amber O-rings (part number 8211) if worn or damaged. Replace as needed and/or each year for preventative maintenance.
2. If there is any fragrance that leaks during the cartridge installation, clean it carefully with a paper towel and some ethanol or another alcohol.

C. Air Filters and check valve – every 6 months or sooner depending on use

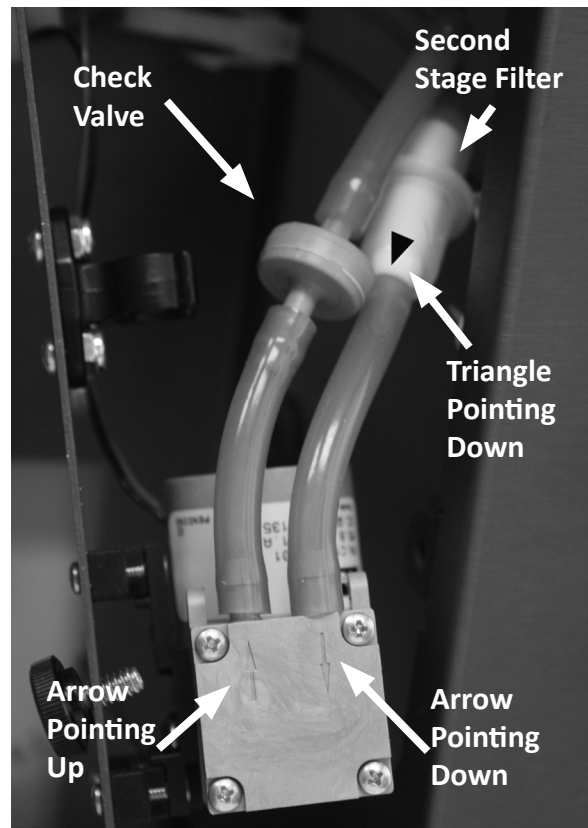
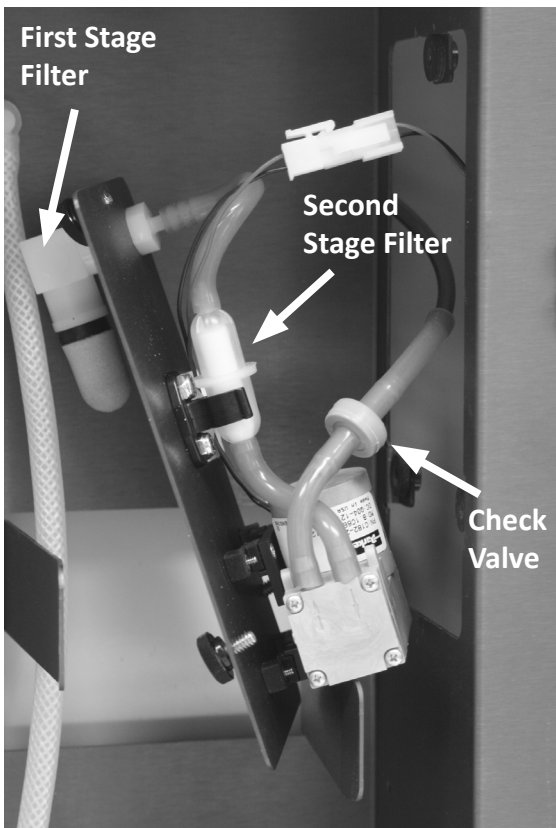
AirQ Scent Shuttle is equipped with two stages of air filtration and a check valve system.

The first stage is a sintered filter (part number 10417). It is can be unscrewed and washed with clean water as needed. Replace every 6 months.

The second stage filter (part # 5251) collects fine dust. Replace every 6 months or sooner depending on use. It is accessible behind the air pump panel. A layer of black dust on top of the filtering media is a sign that the filter should be replaced. To replace it, unscrew the 3 knobs to open the panel and exchange the filter after pulling off the rubber tubing from both sides of the filter. Note the small triangle showing the normal air flow direction and position filter accordingly as shown below.

The check valve should be replaced every 6 months (part # 10200). It is also located behind the panel. Note the position of the check valve. Replace check valve accordingly as shown below.

Reinstall the panel and screw the 3 knobs back in place being careful not to strip the threads. The screws should align and go in easily.

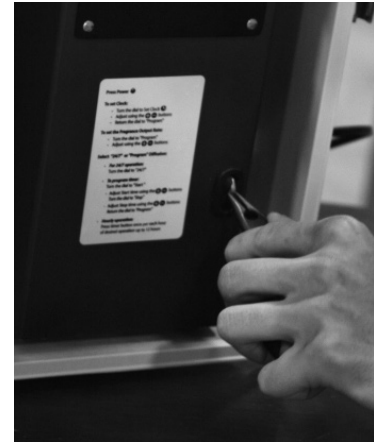


D. Battery Replacement – approx. every 2 years

(requires 3 Volt CR2032 Lithium Battery, part number 8111)

1. Unlatch and open the door to access the enclosure.
2. Using a pair of tweezers or needle-nose pliers, remove battery from the center opening of the oval grommet. The grommet is located on the front of the blue bracket below the operating buttons.
3. Insert the new CR2032 battery. The positive side of the battery should face your right while looking at the front of the appliance. The battery will have a + or – marking on a side.

Note: The battery is necessary to safeguard your program and to ensure operation will resume automatically even after several days of a power interruption. The battery should be replaced at least every 2 years for proper reliable system operation.



E. Fan Replacement – as needed

The AirQ Scent Shuttle's Fan carries a 3-year warranty. If the fan malfunctions, order a Fan Replacement Kit (part number KIT1200SSFAN).



V. OPERATING INSTRUCTIONS

A. Unit Programming

1. Unlock and open the door
2. Turn on the power by pressing ON/OFF button in the upper left corner of the control panel.
3. Set the Clock
 - Turn the dial to Set Clock. The day-of-week icon will blink.
 - Adjust the day forward or backwards using the +/- buttons on the right side of the control panel.
 - Press the Set button on the lower left corner of the LCD display. The time will blink.
 - Adjust the time forward or backwards using the +/- buttons. AM or PM is indicated on the right side of the time digits.
4. 24/7 Mode
 - If you want the AirQ Scent Shuttle to run continuously -7 days a week, 24 hours a day 7 Days a week turn the dial to Run 24/7. If not, skip to Step 5.
 - You can adjust the fragrance intensity level (1 to 50) using the +/- buttons. Refer to *Setting Scent Intensity* for the intensity level to set.
5. Set multi-program timer
 - Turn the dial to Set Program. The Program icon comes on.
 - The day-of-week icons will all blink, indicating you are selecting all days with the same program. If you want to program a specific day, use the +/- buttons to select the day. You can set maximum of 3 on/off programs same for every day or individually for each day. After selecting the day, press the Set button to advance.
 - Now the "1" icon is turned on to indicate you are setting program 1. The Rate digits blink to prompt you to set the rate. You may set to any value between 1 to 50, or set to 0 to disable the program. Press the Set button to advance.
 - If you set the rate to 0, then the current and subsequent programs are all disabled. For example, if the rate for program 2 is 0, then program 2 and 3 are disabled.
 - If you set a non-zero rate, then the rate digit changes to "S" to indicate start time. The hour digit should blink to prompt you to set the start hour. Use the +/- buttons to set the hour. Then press the Set button to advance and set the minute. Press the Set button to advance.
 - The rate digit now changes to "E" to indicate you are setting the end time. Use the +/- buttons to set the end time. Press the Set button to advance to the next program.
 - Program icon 2 should now turn on. Use the +/- and Set buttons to set the start and end times for program 2 and then for program 3. Note that if you need only 1 or 2 programs for the day, you simply disable the subsequent programs by setting its rate to 0.
 - After setting the programs, turn the dial to Run Program.

Hint: To set same programs for Monday to Friday, you may set the programs for every day first and then disable Saturday and Sunday. You may review the programs by doing the same as in programming. Just beware not to accidentally set the every day programs as this will also set and change the programs of all the days.

B. Setting Scent Intensity

1. Consult the Settings Table, which provides a setting for the size in cubic feet (length x width x ceiling height) of the space you are treating. Use the indicated intensity setting as a starting point from which you can increase or decrease to taste. Number of fresh air changes per hour and user preference will affect settings.

Settings Table

Output Level Range Settings	Normal Off-Cycle (NOC)		Short Off-Cycle (SOC)	
	Space to be treated (in Cubic Feet)	Space to be treated (in Cubic Meters)	Space to be treated (in Cubic Feet)	Space to be treated (in Cubic Meters)
1 thru 5	1,800-25,000	50-700	1,800-25,000	50-700
6 thru 10	25,000-47,000	700-1,300	25,000-47,000	700-1,300
11 thru 15	47,000-66,400	1,300-1,860	47,000-66,400	1,300-1,860
16 thru 20	66,400-83,700	1,860-2,340	66,400-83,700	1,860-2,340
21 thru 25	83,700-98,850	2,340-2,770	83,700-98,850	2,340-2,770
26 thru 30	98,850-112,050	2,770-3,130	98,850-112,050	2,770-3,130
31 thru 35	112,050-123,450	3,130-3,450	112,050-123,450	3,130-3,450
36 thru 40	123,450-133,500	3,450-3,730	123,450-133,500	3,450-3,370
41 thru 45	133,500-142,350	3,730-3,980	133,500-142,350	3,370-3,980
46 thru 50	142,350-150,000	3,980-4,200	142,350-150,000	3,980-4,200

2. Press the power button on. Turn the dial to Program and set the intensity level with the +/- keys. You will see the level numbers (1 to 50) on the right side of the screen.

Hint: There are many variables involved in 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 completely satisfied. Do not set scent level to maximum setting or higher than recommended in the Settings Table, but start from the recommended lowest level and increase progressively for optimum results.

C. The Last Step

1. Set the dial to either Run 24/7 or Run Program if you have set and want to run the timer program.
2. Make sure the power is on. The blue light will show through the button.
3. Close and lock the door, storing the key in a known place.

VI. MOVING AND STORAGE INSTRUCTIONS

1. Remove the cartridge.
2. Unplug the appliance.
3. Store at -4°F (-20°C) to 158°F (70°C), 5% to 95% humidity

VII. Troubleshooting

Condition	Causes	Solutions
Power light off.	The Appliance is not plugged in or the plug has no power	<ul style="list-style-type: none"> • Make sure the power connection is operational. • Verify that the power button light is blue when pressed.
Unit does not start automatically after a power interruption.	Back-up battery not operational	<ul style="list-style-type: none"> • Verify the protective yellow battery tab has been removed. • Verify the battery is positioned with the positive side facing the right. • Replace the back-up battery.
The fragrance cannot be detected when coming into the treated area from an untreated area.	The output rate is too low or there is an insufficient number of appliances serving the space.	Increase the output rate by one or two settings and evaluate detection in 30 minutes. Repeat as needed. If consumption requires Cartridge change more frequently than each month, install an additional appliance.
	The O-Rings on the stem that fits into the head may be worn out and causing an air leak.	Replace the O-Rings by removing the worn one with a pointy tool and rolling on the new ones
Fragrance intensity is stronger than just detectable.	The output rate is too high.	Lower the output rate in increments of one or two settings or down to the starting rates suggested in the room size chart.
The power light is on but there is no output or you cannot hear the compressor in the appliance.	You are in an "OFF" period in the Timer cycle.	Simply wait a few minutes for the appliance to cycle on. If the real problem is that the scent cannot be detected, increase the output rate as instructed above.

Troubleshooting, General Care and Customer Support

Condition	Causes	Solutions
The power light is on and the compressor can be heard but no fragrance detected.	The output tube may be blocked.	Remove the hose from the output tube leaving the Cartridge in place in the appliance. Turn the appliance on so you can hear the compressor. Use a flashlight to observe the top of the output head for a plume of droplets. If you can see the plume then the blockage may be in the hose or the injector tube. Check these. If there is no plume something is blocking the output tube. Check and remove it.
	The air intake may be blocked.	Another method for clearing obstructions is, while the appliance compressor is running, block the output tube with a finger for 2 or 3 seconds and then open it by removing your finger.
	The O-Rings on the stem that fits into the head may be worn out and causing an air leak.	Replace the O-Rings by removing the worn one with a pointy tool and rolling on the new ones.
You detect the fragrance when entering the room but after a while you no longer notice it.	This is called olfactory adaptation and is normal.	Leave the area for 5 to 10 minutes. Come back inside, you will smell the fragrance once again. Do not hesitate to repeat this process every time that you doubt the presence of the fragrance in the area.

VIII. General Care and Customer Support

- Do not drop AirQ Scent Shuttle on the floor. Do not drop it in or position it near an open basin of water.
- Do not paint or otherwise try to alter the color of the outer cover.
- Always keep the lids on Cartridges when stored outside of the AirQ Scent Shuttle.
- Do not operate AirQ Scent Shuttle in very dusty areas that may cause the air intake to clog.
- Do not move or transport an appliance with a cartridge installed.
- Please call Prolitec Customer Service at 866.387.4333 for return shipping instructions or questions.

IX. Specifications

AirQ Scent Shuttle

Technical Characteristics

Reference	AirQ Scent Shuttle : Model AQ1200WHTTTT-SS
Type	1 head nebulizer integrated with cartridge
Diameter of particles	300 nm to 1 μ micron

Power Input

Input	100 – 240 VAC at 0.6 A
Frequency	50/60 Hz
Protection	Switching power supply
Internal Power	12 VDC at 1.5 A
Back-up battery	Lithium 3V, #CR2032

Performance Up to 150,000 cu. feet (4,200 cu meters) subject to air flow conditions

Control Programmable start & stop times
 Programmable output 1 to 50

Dimensions

Height X Width X Depth	20" x 13.5" x 7" (50.8 cm X 34.3 cm X 17.8 cm)
Weight with full container	13.5 lb (6.1 kg)

Approvals UL/CSA listed power supply

Cartridge

Reservoir - 1250ml
 Disposable/Recyclable

Patented Prolitec Inc.

Multiple patents pending

