
BIRDBUFFER® QT

Operating Instructions



P/N 80041 (120VAC)

**Thank you for purchasing *BIRDBUFFER® QT* for bird control.
Read this guide thoroughly before operating your *BIRDBUFFER® QT*.
Keep this manual in a safe place for future reference.**

info@birdbuffer.com
www.birdbuffer.com

425-697-4274
425-776-5129 (fax)

BIRDBUFFER® is a patented and registered trademark of BirdBuffer®

Avian Control® is a registered trademark of Avian Enterprises LLC

EcoBird® is a registered trademark of Roth Chemical

Specifications subject to change without notice.

Patent number 7334745

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1.1 Owner's Record

The model number and serial numbers are located at the back of the BirdBuffer. Record them in the space below. Refer to these numbers in any correspondence with your retailer or with BIRDBUFFER®, Inc.

Model Number: _____

Serial Number: _____

We believe you will enjoy years of great service if you care for and maintain
BIRDBUFFER® QT.

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1. Important Safety Information

WARNING!



Read and understand all labels and operating instructions before installing or operating the *BIRDBUFFER® QT* and Avian Control® or EcoBird® Fluid.



WARNING: Risk of Fire or Electric Shock

- Never work on *BIRDBUFFER® QT* without first disconnecting the power cord.
- This product should only be operated from the type of power source indicated on the marking label (120 VAC). If you have any doubts about the capacity or grounding of your existing circuits, consult a qualified electrician.
- This product is equipped with a two-wire plug and 12vdc adapter. Do not use with other voltage rated adapters.
- Do not expose the device to rain or moisture. Make sure the area around the device is dry before turning power on.
- Provide adequate space for ventilation. Make sure the unit is located with open area around it.
- Operate only in an upright, level position.



CAUTION: Risk of personal injury or equipment damage.

- Avian Control® or EcoBird® Fluid will cause temporary irritation to eyes if touched while installing or pouring the fluid. Wear protective eyewear when filling the *BIRDBUFFER® QT*. If fluid gets into the eyes, rinse thoroughly with water for 15-20 minutes.
- The fluid (Avian Control® or EcoBird®) may harm plastics, rubber and painted surfaces. Take precautions to avoid contact with these materials. Clean up spills promptly with soap and warm water.
- The fluid is very slippery. To avoid risk of injury, clean spills promptly.
- Never operate the *BIRDBUFFER® QT* with water-based fogging fluids. This will cause irreversible damage to the unit. Use of fluids other than purchased from *BIRDBUFFER® Avian Control® or EcoBird® Fluid* will void the warranty.
- Do not operate the *BIRDBUFFER® QT* in very hot or freezing conditions.

2. Description of The *BIRDBUFFER*® QT

- The *BIRDBUFFER*® QT is a compact, unobtrusive device which may be used indoors or in covered areas only for control of pest birds.
- The *BIRDBUFFER*® QT will provide coverage for an area of approximately 5,000 square feet.
- The *BIRDBUFFER*® QT produces a fine vapor using Avian Control® or EcoBird® Bird Repellent. The vapor is very repellent to birds but non-harmful to humans, animals, or even the birds.
- The repellent formulation is based on a fruit derivative called Methyl Anthranilate, or MA, which is commonly used as a food flavoring. MA is on the U.S. Food & Drug Administration's "Generally Recognized as Safe" (GRAS) list.
- The fan is designed to blow the vapor away from the machine, to create a larger coverage area.
- *BIRDBUFFER*® QT is automated. It operates with an on/off cycle control to produce vapor at intervals of 20 seconds to 3 minutes, during the time of expected bird activity.

3. Set of Equipment Supplied

Carefully unpack your *BIRDBUFFER® QT* shipping container. Verify that you have received everything listed below. If something is missing or damaged please call your retailer or sales representative or call *BIRDBUFFER®* support at 425-697-4274.

- *BIRDBUFFER® QT*
- Accessory packet including:
 - 2 X key for fluid fill door.
 - Cap and liner for Fluid Reservoir
 - Spare Aerator with Washer
 - Set of 2 Dry-Wall Anchors and Mounting Screws
- 1 X 12vdc power adapter for 120vac
- Instruction booklet

3.1 Optional Accessories

- Avian Control® or EcoBird® Fluid (as ordered)
 - **Warning!** : Avian Control® and EcoBird® fluids are not compatible with each other. **Do not mix** the different fluids together. Tank must be emptied and thoroughly cleaned if switching from Avian Control® to EcoBird® or vice-versa.

3.2 Tools Required For Job

- Can of Windicator Vapor P/N 820011(for air direction)
- Dated bottle of Avian Control® or EcoBird® (dated within 1 year, Fig. 1)
- Gloves (supplied with fluid)

Please contact *BIRDBUFFER®* (425-697-4274) for more information on optional accessories.



Figure 1 Avian Control® and EcoBird® for *BIRDBUFFER® QT*

4. Operating The *BIRDBUFFER*® QT

4.1 Vapor Applications:

1. *BIRDBUFFER*® QT delivers an invisible vapor which is released into the open atmosphere. The vapor will stay suspended and not settle to the ground when air movement is available.
2. The *BIRDBUFFER*® QT can operate for up to a month using only 1 quart (1000ml) of fluid. Avian Control® or EcoBird® bird repellent fluid is used without any dilution.
3. The *BIRDBUFFER*® QT comes preset to produce timed intervals of vapor from 6:00 AM to 8:00 PM.
4. Vapor works on most flying birds, dependent on their flying activity.
5. Birds in flight will absorb just enough of the vapor to cause them to want to leave the area. It may take several exposures; therefore the timer is necessary to assure continuous vapor in the air during daylight active periods only.
6. Some small birds like starlings & sparrows are very difficult to dissuade. These and other smaller birds need more concentration and may require other stimulus such as a BB Thermal Fogger. Contact *BIRDBUFFER*® for further instructions.
7. Be sure the birds can find an exit. Have it well-lit or open for the birds to see clearly.

4.2 Preparation for Bird Control

1. Good bird control requires a thorough cleaning of all droppings, feathers, nests or other signs that birds have been in the area.
2. Wearing proper personal protective clothing, such as gloves, goggles, breathing masks and boots, may be necessary. Airborne dust contains viruses and is not safe.
3. Once clean, this area will now become your starting point. The area of bird activity may necessitate re-directing or increasing the timing of the unit if not strong enough.
4. Timing of the unit is critical. When adding fluid, always check the clock and timer settings to make sure they haven't reset or changed. It may be necessary to reset the local time for Daylight Saving. The cycle-timer does not need to be changed.
5. Proper daily operation of the unit will insure that new flocks or migrating birds will stay away.

4.3 Selecting the location

1. Look for a good location for the machine to rest solidly on the roof or mount to the wall. The *BIRDBUFFER*® QT **must be operated in a level position.**
2. Place *BIRDBUFFER*® QT away from the vicinity of the nuisance birds, keeping the output of the machine away from direct contact with electrical instruments and people, rubber equipment, electrical wires, painted surfaces or contact with close objects.
3. Wind direction is essential to best coverage. Determine the prevailing direction of the wind and note which direction the wind is moving.
4. Point the machine *with* the prevailing wind assisting. Use existing air currents to allow the vapor to expand and spread over a larger area.
5. The space between the keyhole openings is 167mm. The *BIRDBUFFER*® QT can be mounted from the front or the back, so it can face either direction.

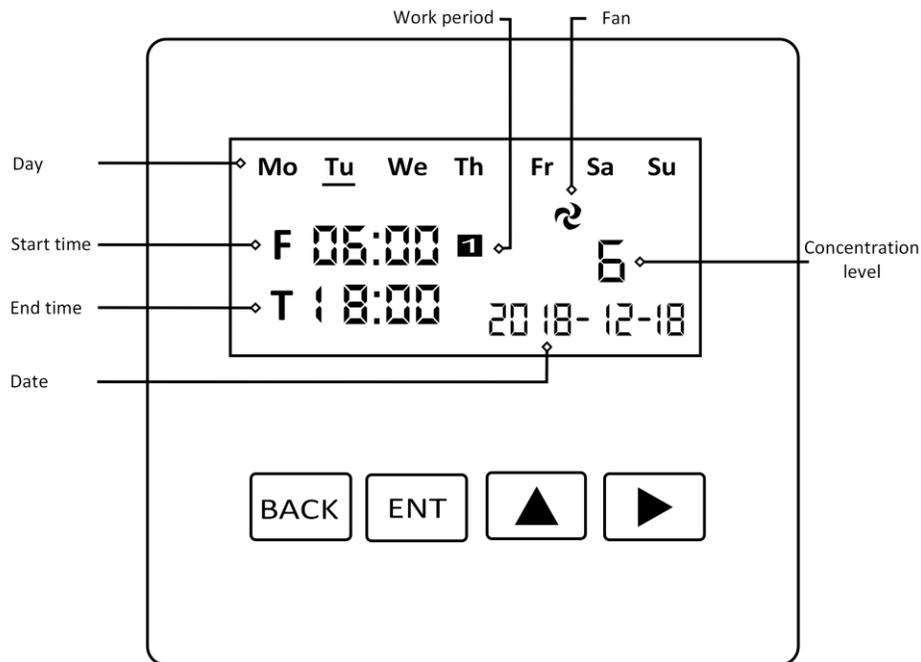
4.4 Electrical Power Requirements

1. This machine requires a properly grounded 120VAC, 2 amp circuit for operation.
2. For temporary power, use a grounded, minimum size 16 AWG extension cord.
3. This machine requires 2 amps of electricity.
4. If you have any doubts about the capacity of your existing circuits, consult a qualified electrician.
5. Protect all electrical connections from the weather. Use a cover for outdoor applications to keep all electrical cords out of water.

4.5 Hooking up The *BIRDBUFFER*® QT

1. Check for proper matching voltage outlet (section 4.4).
2. Plug 12vdc adapter directly into outlet.

4.6 Operating the *BIRDBUFFER*® QT



Control Panel

1. After hanging or mounting the BirdBuffer® QT and plugging it in, turn “on” the power switch. The panel will briefly illuminate. If you are within the preset operating period, the unit will begin operating immediately.
2. Open the fill door with the provided key and unscrew the white fluid reservoir. Fill the reservoir to the 1000ml mark, and
3. The concentration level (cycle timer) comes preset to 2 ½ minutes on and 2 minutes off. It will run this cycle from 6:00 am to 8:00 pm. This will be sufficient to cause most birds to leave the area in 2 weeks to 3 months; however, you can adjust the cycles for longer or shorter periods as needed.

4.7 Setting Local Time and Date

1. Your *BIRDBUFFER® QT* should come preset to your local time and date. If for any reason your settings are lost, use the following procedure to reset them.
 - Switch the power to the unit on; the panel display will briefly illuminate. If the display screen goes dark at any time, press **ENT** to re-illuminate it.
 - Press the **▲** and **▶** buttons at the same time; the time cursor will flash.
 - Press **▲** to increase the number; press **▶** to move to the next setting. Keep in mind that this is a 24 hour clock, so 3:00 pm reads as 15:00.
 - Confirm that all time and date settings are correct; then press **ENT** to return to the main menu.

4.8 Setting Working Time and Concentration Levels

1. Your *BIRDBUFFER® QT* comes with preset start/end times and concentration levels. To increase or decrease these settings, use the following procedure:
 - Press **ENT** to activate the menu.
 - Press **▶** to select the day you want to set. There will be a white line above the selected day. Normally you will want all days to have the same setting. If you set Monday to your desired time and concentration, the other 6 days will be set the same. If for any reason you want another day to have a different setting, scroll to that day and set it as needed.
 - When you have selected the day, press **ENT** again to access the start/end time menu. Line **F** controls the start times and line **T** controls end times. **▲** increases the number in the field; **▶** moves on to the next setting.
 - The start time must be earlier than the end time.
 - When you have the start/end times set, **▶** will move the cursor to the concentration (cycle) setting. See table on the next page for concentration levels.
 - When you have selected the concentration level you want, press **ENT** to save your setting.
 - Your unit comes set to operate in one 14-hour work period; 6:00 am to 8:00 pm. However, there are 3 available work periods, if you don't want or need your unit to run all day. For instance, you can set your *BIRDBUFFER® QT* to run from 6:00 am to 10:00 am, then again from 11:00 to 4:00 pm, and finally from 6:00 to 8:30 pm. To access the 2nd and 3rd work periods, once you have finished setting up work period 1, press the **▶** button. The indicator should now show work period 2. Repeat the process to access and set work period 3.
 - To reset all of your programming, press **BACK** and **▶** at the same time for 5 seconds. You can then start your settings over.
 - The screen will shut off if there is no activity for 15 seconds. You can turn the screen back on by pressing any of the panel buttons.

- There are nine available concentration levels, which control the duration of time the unit is running and the interval between each operating cycle.

Level #	Operating cycle duration In seconds	Interval between cycles In seconds
1	10	300
2	30	300
3	100	300
4	60	120
5	90	120
6	150	120
7	150	60
8	300	60
9	300	10

4.9 Battery replacement

1. The circuit board on the *BIRDBUFFER® QT* uses a CR1632 coin-cell battery to maintain clock and output settings. This battery will last approximately 2 years. If your will no longer maintain its settings, it is time to change the battery.
2. Unplug the *BIRDBUFFER® QT* from its power source.
3. Using a Phillips-head (crosshead) screwdriver, remove the 4 screws holding the electrical panel in place. There are 2 screws located inside the keyhole mounts on the fluid door side of the machine, and an additional 2 screws on the bottom. Slide the panel gently to the right until it releases from the body. Remove the panel.
4. The battery is mounted directly on the circuit board. Being careful not to disconnect any of the wire leads, use a small screwdriver to lift the battery from its carrier.
5. Replace the dead battery with a new CR1632 3V coin-cell battery.
6. Repeat the process in reverse to replace the panel.
7. After changing the battery, you will need to reset all settings, following the above instructions.

4.10 Avian Control® or EcoBird® Fluid Storage

1. Store fluid only in the original container apart from pesticides, fertilizers, food or feed that may cause cross-contamination from odor.
2. Store out of reach of children and pets. Store at room temperature. Keep tightly closed when not in use. Do not store in direct sun light.
3. Follow all storage and handling instructions on the fluid usage label.
4. For questions regarding contents and safety of Avian Control® or EcoBird® fluid, consult the fluid SDS.

5. Service and Maintenance

Care of your *BIRDBUFFER*® will give you years of service. Note: cleaning your unit is going to pay off in constant good performance. Your *BIRDBUFFER*® QT will provide years of reliable service with proper care and maintenance.

1. Each month, clean up accumulated dust and dirt.
2. Check in the fluid reservoir for dirt or debris. Clear fluid should be visible. Allow the reservoir to run completely dry before adding new fluid. Do not top off as this dilutes the freshness of the fluid.
3. Wipe off any condensed fluid which may have accumulated around the output.
4. Check the electrical connections to be certain they are not becoming brittle or weak. Push all connections in to be certain all are not loose.
5. Be certain to check the clock for day/date and output settings
6. Do not transport or ship the *BIRDBUFFER*® QT with fluid in the reservoir. This can void your warranty.

6. Troubleshooting

6.1 If the breaker trips, the panel display will not illuminate

- Check to see if adequate power is going to the unit, and then reset the breaker switch.
- Inadequate extension cords can result in low line voltage, which causes the breaker switch to trip. Check cords for proper size and condition (see section 4.4). Cord must be 16AWG 3 wire if 100'. Replace cord with heavier duty if worn. Check to see circuit of outlet is not overloaded with other equipment.

6.2 If the panel display will not illuminate but there is power at the outlet

- The power adapter may have failed. Replace with new power adapter.

6.3 If there is no vapor

- If unit is running, but no vapor is coming out, be sure you have used the correct vapor fluid and fluid is inside.
- Check the fluid level to be certain there is fluid in the tank. Fill as necessary.
- Check the fluid draw tube inside the reservoir. Make sure it is in place and has no leaks.
- Make sure the output isn't blocked and the fan is working correctly.

6.4 If the birds have stopped responding,

- Check the clock/timer to see the time is correct
- Check the output to see if anything is blocking it
- Check the "ON" times to be certain the digital display is showing the correct times.
- Check the fluid: open the fill cap and inspect reservoir
- Note: walking birds do not respond. You must get them flying.

7. Specifications

The BIRDBUFFER® QT developed and patented by BIRDBUFFER® Everett, WA USA P/N 800041 120vac (With 12vdc Adapter)	
Weight	12 lbs (5.4kg)
Shipping Weight	15 lbs (6.8kg)
Size	11.25" x 4.5" x 17" (285 x 115 x 432mm)
Shipping Box Size	15" x 8" x 20" (381 x 203 x 508mm)
Outlet size	2.25" x 2.25" (57 x 57mm)
Fluid	*Avian Control® <u>or</u> EcoBird® Fluid (DO NOT MIX!)
	Grape like scent, even, transparent, long-lasting
Fluid Consumption	1 qt. or 1000ml per 30 days
Output speed	4 mph velocity
Warm Up Time	None
Operating Temperature	35°F – 104°F
Continuous Vapor	9 Timer Settings Available
Duration indoors	Vapor lasts 2 - 3 hours
Area Coverage	Approximately 5,000 – 10,000 Sq. Ft. (465 - 930 m ²)
On/Off Cycle Control	Included: See Adjustment Table Page 10
24 hr. Timer	Included: Preset
Electrical Supply	12vdc power adapter for 120vac outlet
Limited Warranty	One year limited warranty on tank and compressor, 90 days on electrical components
Accessories included:	1 x 12vdc power adapter
Fluid:	Avian Control® is a registered trademark of Avian Enterprises LLC. EcoBird® is a registered trademark of Roth Chemical, Inc.

8. Shipping Preparation

1. If shipping by a common carrier, **you must empty all fluid from the unit** by draining. Unscrew the fluid reservoir and return unused portion to its original bottle.
2. Return unit upright and wipe up all spills or drips.
3. Put unit in a plastic bag to prevent other dripping in box while being shipped. Standard carriers may decide not to deliver the box if a leak is detected. Always send an SDS sheet with the fluid or machine that has touched the fluid for carriers to have this information and not discard the machine.
4. Discard fluids according to local instructions as listed on the SDS sheet or return to the original marked container.
5. Surround the unit with heavy duty cardboard boxes with at least 2" space. Set the machine inside the box in the upright position. Never ship the unit on its back.
6. If you are returning the unit for repair, follow the steps on the RMA authorization.

9. One Year Limited Warranty

Model: _____ Purchased on (date): _____

Serial number: _____ Purchased from: _____

Congratulations!

You can now look forward to many years of reliable operation and outstanding performance. Thank you for making BirdBuffer your personal choice in bird defense. Please take a moment to **fill out the top of this warranty**, and then keep it – with the receipt – in a safe place.

If you would like to receive information about specials, sales, and new products, please log on to www.birdbuffer.com and click on the “Contact Us” link.

We appreciate your business, and wish to provide you with a quality product that will serve you for many years to come. Once again, thank you for choosing BirdBuffer, and enjoy your new product!

LIMITED WARRANTY CONDITIONS

This limited warranty guarantees to the original purchaser that this product shall be free of defects in material and workmanship, under normal use, for a period of one year from the date of purchase shown on the sales receipt. This warranty covers parts and labor providing the product is returned to BirdBuffer in the original shipping carton and packaging. The warranty for electrical is a (90) NINETY DAY limited warranty.

Damage resulting from shipping, accidents, misuse, negligence, unauthorized repairs or modification is not covered by this warranty. Using any fluid other than what is recommended for this machine will void warranty. No liability is accepted for injury or for loss, damage or expense resulting from any interruption whatsoever in the operation of the product or from any consequential loss arising there from. No liability is accepted for normal wear and tear.

We wish to satisfy YOU, our customer, and have implemented many measures to prevent problems and assure customer satisfaction. However, should you need a missing part or have a functional problem with your product, please call:

(425) 697-4274, from 7:30 am – 4:00 pm (Pacific Time), Monday – Friday, except for holidays. Our customer service department will respond to your problems immediately.

Subject to the following conditions, BirdBuffer will repair any defect or fault in the unit if it is caused by a proven factory defect within one year of delivery to the end user.

Insignificant deviations of the regular product quality does not guarantee replacement rights, nor do faults or defects caused by water, by generally abnormal environment conditions or Force Majeure:

1. Faulty parts or equipment will be repaired or replaced (manufacturer’s choice) with correct parts. Faulty units must be shipped to BirdBuffer at customer’s expense. Call for an RMA# - AN RMA# MUST COME WITH THE UNIT. Payment arrangements for repair must be made before receiving your RMA#, in case the unit is not covered under this limited warranty.
2. Repairs/replacements will only be made with the approval of the customer.

3. Exposure to outside elements voids Warranty. Unit cannot be used outdoors or in wet weather without complete protection against the elements. Even then, high salty or humid conditions will cause instant corrosion of connectors and will void Warranty.
4. The customer loses all rights for limited warranty services if any repairs or adjustments are done to the units by unauthorized persons, and/or if spare parts are used, which are not approved by BirdBuffer. The right of limited warranty service is also lost if a fluid other than appropriate BirdBuffer fluid has been used or if units are sent in without first emptying the equipment of fluid.
5. Freight costs to and from BirdBuffer, when under the limited warranty services, are the responsibility of the customer. Customer must place appropriate insurance on return of product. However, if product is returned due to factory defect within the first year, BirdBuffer will cover the cost of returning the repaired unit to the customer.
6. Limited warranty services do not cause an extension of the limited warranty period or the start of a new limited warranty period. The warranty of replaced parts ends with the limited warranty period of the whole unit.
7. Further claims, especially for damages, losses etc. outside the unit are excluded.

Send unit to: BirdBuffer
RMA # XXXXXXX
1420 80th St. SW #D
Everett, WA 98203



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