
BIRDBUFFER® T.D. II

Operating Instructions



P/N 800012 (120VAC) (Heated unit below 55° F)

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

info@birdbuffer.com

www.birdbuffer.com

866-557-4274

425-697-4274

425-776-5129 (fax)

BIRDBUFFER® is a patented and registered trademark of BIRDBUFFER LLC

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 LLC, Inc.

Model Number: _____

Serial Number: _____

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

**BirdBuffer LLC
1420 80th St. S.W., Ste. #D
Everett, WA 98203
(866) 557-4274 * (425) 697-4274
www.birdbuffer.com
info@birdbuffer.com**

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1. Important Safety Information

WARNING!



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



WARNING: Risk of Fire or Electric Shock

- Never work on *BIRDBUFFER T.D. II*® 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 three-wire grounding-type plug. This plug will only fit into a grounding type power outlet. Do not defeat the safety purpose of the grounding-type plug.
- 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 within 12 ft (4 m) of open area around it.



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 T.D. II*®. 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 T.D. II*® with water-based fogging fluids. This will cause irreversible damage to the tank. Use of fluids other than purchased from BIRDBUFFER LLC Avian Control® or EcoBird® Fluid will void the warranty.
- Do not operate the *BIRDBUFFER T.D. II*® in freezing conditions without a heater system installed. The unit will not start in temperatures below 50° F (10° C) without the heater system.

2. Description of The *BIRDBUFFER T.D. II*®

- The *BIRDBUFFER T.D. II*® may be used indoors and outdoors (with outdoor cover) for control of starlings, pigeons, blackbirds, cowbirds, gulls, Canada geese, mallards, and other birds that have become a nuisance or health hazard in the target area. For owls, vapor at night.
- The *BIRDBUFFER T.D. II*® produces a fine vapor using Avian Control® or EcoBird® Bird Repellent, which stays suspended for over an hour and does not settle to the ground. The vapor is very repellent to birds but non-harmful to humans, animals, or even the birds. After several exposures to the vapor, birds generally leave the area. The vapor is not harmful to target or non-target birds or other animals.
- The repellent formulation is based on Methyl Anthranilate, a constituent of concord grapes. Methyl Anthranilate, or MA, has been used by the food and drug industry for more than forty years to flavor candy, sodas, gums, and drugs; and it is on the U.S. Food & Drug Administration's "Generally Recognized as Safe" (GRAS) list.
- The motor is designed to throw the vapor away from the machine at approximately 40 mph. The blower projects the vapor longer distances.
- *BIRDBUFFER T.D. II*® is automated. It operates with an on/off cycle control to produce vapor pulses with duration of from 3 seconds to 5 minutes, at intervals of 3 seconds to 5 minutes, during the time of expected bird activity.
- Now it is possible to cover large areas of open spaces. The vapor is invisible and non-obtrusive. It will give you "invisible protection, visible results®".
- The fluid has a pleasant, grape-like fragrance.

3. Set of Equipment Supplied

Carefully unpack your *BIRDBUFFER T.D. II*® 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 LLC. Support at 1-866-557-4274 or 425-697-4274.

- *BIRDBUFFER T.D. II*®
- 6" adjustable wrench for drain plug.
- Removable rain cover for electrical panel.
- 1 X IEC power cords w/ 3 prong grounded outlet (must be grounded)
 - Cord to power the machine (power to timer and heater)
- 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.
- 4 cables 38" long with locking snap hooks (optional at time of order)
- Drip pan P/N 820034 (holds 2 gallons)
- 3' X 5' Absorbent mat P/N 820057 (chemical resistant)
- Foam footing for rooftop protection P/N 820045
- Magnetic mount external heater P/N 820030 (below 25°F)
- Stand for rooftops P/N 820064
- Pole mount stand P/N 820062
- Wide pole mount stand for fan and BirdBuffer P/N 820063

3.2 Tools Required For Job

- Stop watch or second hand
- 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 LLC (1-866-557-4274) for more information on optional accessories.



Figure 1 Avian Control® and EcoBird® Fluid for *BIRDBUFFER T.D. II*®

4. Operating The *BIRDBUFFER T.D. II*®

4.1 Vapor Applications:

1. *BIRDBUFFER T.D. II*® delivers an invisible dry vapor which is released into the open atmosphere. The vapor, which may condense at opening of nozzle only, will stay suspended and not settle to the ground when air movement is available.
2. For the vapor to be effective, the birds must be exposed by flying through it. It is designed to irritate birds only, affecting their eyes and mucous membranes without harm. Vapor works on most flying birds, dependent on their flying activity.
3. When birds fly, they breathe faster and 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. Vapor is not effective at night, except for owls.
4. Some small birds like starlings & sparrows can become pests doing tremendous damage, and are very difficult to dissuade. These and other smaller birds need more concentration and may require other stimulus such as a BB Thermal Fogger. Three to five thermal treatments per week may be necessary in the beginning of the project. Contact BIRDBUFFER LLC for further instructions.
5. Usually 4 hours in the morning and 4 hours before sunset, or more concentration during lunch time, is sufficient each day. It takes time for birds to locate a new home and new feeding grounds. After the initial vapor operation, most birds may return to see if the vapor has subsided. In subsequent vapor operations the number of birds returning will decrease, as they will be searching for new roosting areas or moving.
6. A flock of birds will be exposed to the vapor as a group and therefore will effectively learn to locate new nesting/feeding areas together during the day. If one bird stays inside, they will all want to come in. When they leave, it translates to the other birds that it is not a good location to roost or feed.
7. Be sure the birds can find an exit. Have it well-lit or open for the birds to see clearly.
8. Both Avian Control® and EcoBird® fluid bird repellent are used without any dilution. They are made from food-grade liquid formulation, which does not mix with water.
♦ **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.**
9. Vapor requires very little product. With one gallon of fluid you can vaporize for an entire month over several acres with favorable wind. As birds leave, reduce "ON" time and use less fluid i.e., 1 gallon (3.8 Liters) = 6-8 wks.

4.2 Preparation for Bird Control

1. Good bird control requires the need to *clean* the area of all droppings, feathers, nests or other signs that birds have been in the area. This may include washing difficult to reach areas. Bird activity or “signs” are a signal to other birds that birds live here and are welcome. Removing the “welcome sign” is a very important step.
2. Use proper cleaning material, as bacteria and other parasites are frequently contained in the bird droppings, feathers and nests.
3. Wearing proper personal protective clothing, such as gloves, goggles, breathing masks and boots, may be necessary. Airborne dust contains viruses and is not safe.
4. If painted surfaces have been deeply pitted and raw metal exposed due to the acidity of bird droppings, use proper care in repainting the area.
5. 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.
6. Timing of the unit is critical. There is a battery backup for the built-in 24 hour timer. If the battery goes dead and the power goes out, the timer will no longer be set to the correct time and may not turn on at the designated time periods. Reset the time on the 24 hour clock timer only. The cycle-timer does not need to be changed.
7. Proper daily operation of the unit will insure that new flocks or migrating birds will stay away. They will fly in and leave if they are not established birds. Established birds (or local birds) are birds that have been there a long time, were born there, or feed there regularly every year. It always takes longer to remove locals, and may require fogging in the early AM before sunrise.

4.3 Selecting the location

1. Look for a good location for the machine to rest solidly on the roof or optional stand, or hang from trusses with the (optional) supplied cables.
2. Place **BIRDBUFFER T.D. II®** 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 . A clear area of 50 ft.-100 ft. or more in front of the output is required.
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. We recommend using Windicator Fog, flags or some type of smoke to show the wind or air circulation to direct the vapor towards the birds’ flying areas. Changing winds may help in covering more area. Normally 60% of the same wind direction is good. For extreme wind conditions, set the “ON” time higher, while reducing the “OFF” time.

4.4 See Direction of Air With Windicator

1. Windicator Haze-In-A-Can (*Figure 2*) lets you see which way the current carries the vapor from the **BIRDBUFFER T.D. II®** and how far it may travel. Spray the Windicator to see air flow changes, detect drafts, and photo the air currents (*Figure 3*).



Figure 2



Figure 3

2. Determine location of *BIRDBUFFER T.D. II*® to be upwind of bird pressure area.
3. Locate electrical power within 4' of machine.

4.5 Hang it or Mount it?

1. If trussing is under an overhang or an eave, it is easy to hang the *BIRDBUFFER T.D. II*® with hooks in the ceiling or around trussing, and then hang it with the cable hooks.
2. Ceiling hooks (not included) may also be placed under the ceiling to hook the cables to. The cables simply snap/hook on to the feet of the machine for easy access. Hang the unit high enough to go over any other items, but low enough to service. Snap hooks easily hook on to extended feet.
3. If using optional mounting bracket (#820062), attach bracket to wall and mount *BIRDBUFFER T.D. II*® (Figure 4).
4. A heavy-duty floor or roof stand (#820064) is also available (see section 4-10).
5. Some food courts have shelves to set the unit on. Bolt it down and you're set to go.



Figure 4

4.6 Electrical Power Requirements

1. This machine requires a properly grounded 120VAC, 10 amp circuit for operation.
2. Use a meter to verify a full 120VAC is being supplied. For temporary power, use a grounded, minimum size 12 AWG 3 wire cord for 100' or less. If over 100', hard wire with proper electrical double outlet (quad box if in cold areas needing a heater connection). Only use NEMA approved molded plugs (no cube taps or octopus plugs). **Do not use 2 wire extension cords or lamp cords.**
3. This machine requires 10 amps of electricity. If the extension cord gets warm, you need to replace with a larger size cord.
4. If you have any doubts about the capacity or grounding of your existing circuits, consult a qualified electrician.
5. Do not add other equipment on this circuit.
6. Protect all electrical connections from the weather. Use a cover for outdoor applications to keep all electrical cords out of water.

4.7 Hooking up The *BIRDBUFFER T.D. II*®

1. Check for proper matching voltage outlet (section 4.6).
2. Plug cord into IEC connector, pushing in completely. Male plug must be plugged directly into outlet.

4.8 Operating the *BIRDBUFFER T.D. II*®



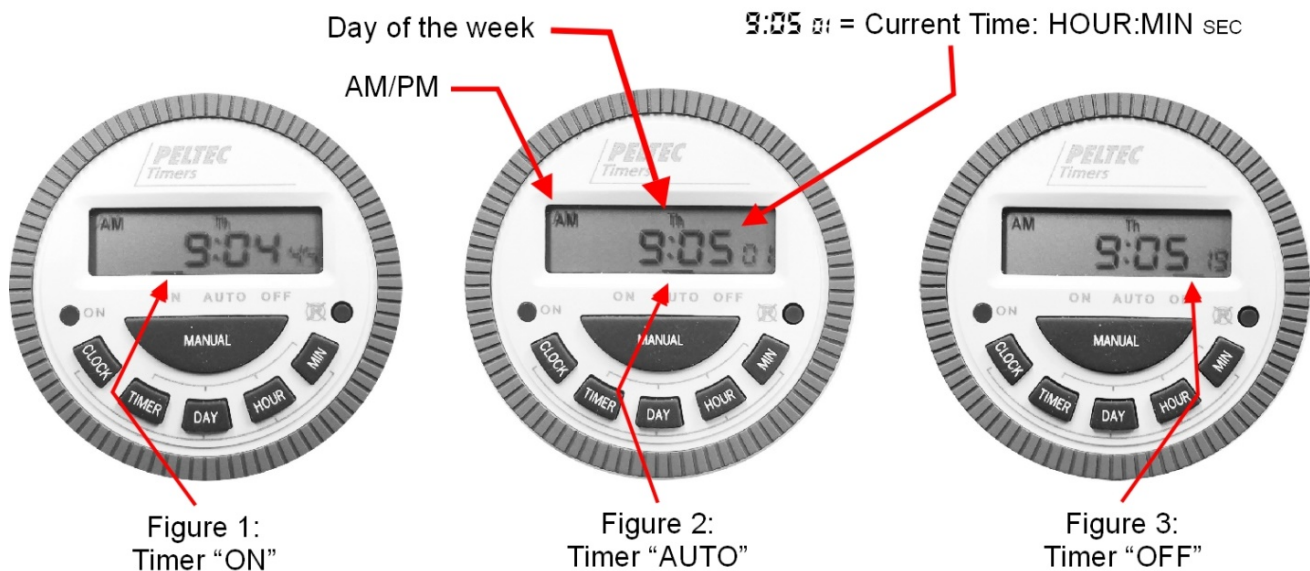
Figure 5

1. After hanging or mounting the BirdBuffer T.D. II and plugging it in, turn “on” the power switch, which will illuminate. Remove the timer cover and press the “MANUAL” button until the display indicator line is above the “ON” position (see timer instruction section 4.9). This will provide constant power to the unit.
2. This unit has a self-regulating thermostatically controlled heating unit to keep the inside unit above 55°F at all times. TURN ON HEATER SWITCH WHEN BELOW 55 DEGREES. The heater must ALWAYS have power.
3. The two knobs to the right of the 24 hour timer control the “on” and “off” settings. This allows you to control the length of time that the T.D. II is actually operating during the 24 “ON” periods. You may adjust this setting while the machine is running to set longer or shorter “on” time.
4. The “ON” knob controls the length of time that the compressor and blower are in operation (3 seconds to 5 minutes).
5. The right knob controls the length of time the compressor will be “off” (3 seconds-5 minutes).
6. The cycle timer comes preset to 1 minute on and 5 minutes off. It will run this cycle from 5:00 am to 8:30 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.

4.9 24 Hour Timer Instructions

1. Used in conjunction with the cycle-timer, the 24 hour timer allows you to automate your BirdBuffer unit's output. With its 8 on-and-off periods, you can set the BirdBuffer to run at times of high bird activity, such as daylight hours only, and remain off for the rest of the time. During the periods that the 24 hour timer is "ON", the cycle-timer turns the blower and compressor "ON" & "OFF" to extend the time of particle release.
2. For example, if the 24 hour timer is set on "AUTO" between 6 AM and 8 PM, and the cycle-timer is set for cycles of 2 minutes "ON" and 1 minute "OFF", then within the 6 AM – 9 PM time frame the BirdBuffer will be running 2 out of every 3 minutes. This allows you to increase bird control during heavy pressure periods.
3. By planning and adjusting the 24 hour timer and the cycle-times, during active bird periods, it is possible to provide the most efficient amount of haze when it is needed.
4. The following instruction sheet explains the various functions of the 24 hour timer and how to adjust them for the best possible automated bird control.

OVERVIEW:



5. Press the "MANUAL" button until the small indicator line on the display is above "AUTO" (Figure 2). This allows the unit to work at intervals as set on the timer.
6. The timer comes preset to a standard operating schedule. You may need to adjust the timer to operate for longer or shorter intervals, using these instructions, depending on bird activity.
 - a. **Set the clock to the current time of day, keeping in mind any change of daylight savings.** Press and hold the "CLOCK" button. Press the "DAY" button until the correct day is displayed. Press the "HOUR" button until the correct hour is displayed. AM or PM is visible in the upper left. Press the "MIN" button until the correct minute is displayed. Release the "CLOCK" button. Clock is set.

- b. **Set the timer ON/OFF Times:** Press Timer button. “1^{ON}” appears in the window. To select the first desired “ON” time, press “HOUR”, then “MIN”. Make sure that all of the days of the week are shown in the display. If not, press “DAY” button until they are. Figure 4 shows the 1st timer setting to come on at 5:00 AM, 7 days a week. During that period, the BirdBuffer will cycle on and off by way of the built-in-cycle timer.



Figure 4

- c. **To select the first desired “Off” time,** press Timer again. “1^{OFF}” appears in the window. Press “HOUR”, then “MIN”, to select the first “Off” time. Figure 5 shows the first timer setting to shut off at 6:30 AM, 7 days a week.



Figure 5

- d. Set up to 8 On/Off cycles by repeating the process for each “ON” time and each “OFF” time. Be sure to set “OFF” time before choosing a different “Program Period”.
- e. **Complete and check timer settings:** Finally, press “CLOCK” to return to current time. Check that the “Indicator Line” under the current time is about “AUTO”; if not, press the “MANUAL” button until “AUTO” is indicated. To confirm programmed settings, press “TIMER” repeatedly to do sequentially review all On/Off settings. Verify times and days of the week for each setting.

NOTE: It is important that you make sure the “MANUAL” switch is in the “AUTO” position. The “ON” position (Figure 1) will leave the power to the BirdBuffer “ON” all of the time, even though the timer’s dial will still show the current time of day. The “OFF” position (Figure 3) turns the timer “OFF”, so the BirdBuffer will not run at all.

7. If you have determined that you want the BirdBuffer to operate for 24 hours each day, press the “MANUAL” button until the indicator line is above “ON”. This disables the 24 hour timer and allows the BirdBuffer to run continuously.
8. If for any reason you want to start over, use a pen or pencil tip to press the reset button on the face of the timer marked ⊗. This erases all clock and program settings. You will have to re-enter all of your settings, so use the reset button with care.
9. **Battery replacement:** The 24 hour timer uses a CR2032 coin-cell battery. This battery will last approximately 2 years. If your timer no longer has a display visible, it is time to change the battery.
- a. Using a Phillips-head (crosshead) screwdriver, remove the six screws holding the electrical panel in place. Remove the panel.

- b. Once you have access to the back of the timer, use a coin to rotate (clockwise) the slotted cover to open the battery compartment.
- c. Replace the dead battery with a new CR2032 3V coin-cell battery.
- d. Repeat the process in reverse to replace the panel.
- e. After changing the battery, you will need to reset all settings on the 24 hour timer, following the above instructions.

24 Hour Timer Factory Presets

#	ON Interval	Off Interval
1	On 5:00 – 8:30 am	Off 8:30 – 9:00 am
2	On 9:00 am – 12:30 pm	Off 12:30 – 1:00 pm
3	On 1:00 – 4:30 pm	Off 4:30 – 5:00 pm
4	On 5:00 pm – 8:30 pm	Off 8:30 pm – 5:00 am
5	Not used- available if needed	Not used- available if needed
6	Not used- available if needed	Not used- available if needed
7	Not used- available if needed	Not used- available if needed
8	Not used- available if needed	Not used- available if needed

Recommended Settings for Work/ Public Environment

	ON CYCLE	OFF CYCLE	½ hr. before dawn to ½ hr. after sunset	NIGHT	FLUID/MO.
Small Area >10,000 sq. ft.	30 sec.	3 min.	3 ½ hr. ON 30 min OFF	OFF	2 qts.
Medium Area >20,000 sq. ft.	45 sec.	2 min.	3 ½ hr. ON 30 min OFF	OFF	3 qts.
Large Area >50,000 sq. ft.	2 min.	2 min.	3 ½ hr. ON 30 min OFF	OFF	4 qts./4 wks
Open Area ½ acre	2 min.	2 min.	3 ½ hr. ON 30 min OFF	OFF	4 qts./4 wks
Open Area 1 acre	3 min.	2 min.	ON.	OFF	7 qts.
Open Area 2 acres	3 min.	1.5 min.	ON.	OFF	7 qts.
MORE	3 min.	1 min.	ON	OFF	8 qts.



CAUTION: Risk of eye irritation. Wear goggles when pouring fluid.

Bird Repellent Fluid causes acute but temporary irritation if it comes in direct contact with the eyes. Always use protective eyewear when operating the generator up close. If fluid gets into the eyes, rinse thoroughly with water for 15-20 minutes.

10. It is ok to run this machine empty. No harm will come from testing the machine while empty or if it runs out of fluid.
11. If all is working as directed, you are now ready to place the fluid inside the machine. Pour 1 gallon of **Avian Control® or EcoBird® Fluid** into fill spout. Use full strength. **Check for** any leaking from the drain plug. Use the provided wrench to tighten the plug. Unit will work with ½ quart; it does not need to be full (½ qt. could last 64 hrs. of constant vapor). Use of any other fluids will void your warranty. Only add fluid when empty. Keeping fluid fresh promotes highest bird control response.
 - a. **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.
12. Test the machine again to see the vapor coming from the machine. If unable to see vapor output, place a light source behind vapor and look into the light, through the vapor. You should smell the scent. It should not be strong if used indoors.
13. Next, press the “MANUAL” button until the display indicator line is above “AUTO”. This allows the unit to work at intervals as set on the timer.

4.10 Vapor Fluid Storage

1. Store vapor 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.

4.11 Roof Protection



1. Use the Roof Stand #820064 for outdoor use, the Drip Pan #820034, and the chemical Absorbent Mat #820057 to protect the roof surface from the legs and any chemical spills.
2. Rooftop Protective Feet #820045 hold the BirdBuffer T.D. II up about 6" on a larger base and are made with soft material to protect the roof and give height to stay out of snow.

4.11 Use of additional Magnetic Heater

1. When the temperature drops below 32° F, the heater built in to the BirdBuffer T.D. II cannot maintain the warmth necessary. Attach the Magnetic Heater #820030 to the left side of the front of the machine (if hanging or accessible) or the front fill hatch where the tank is exposed to the cold.

4.12 Cover for outside #820059

1. Use of the BirdBuffer® T.D. II outdoors requires a metal cover to protect the electrical panel from rain and snow. After setting the timer and testing the unit, simply insert the cover so that the holes line up with the studs on the unit (on both sides of the panel) and slide down.
2. Using the BirdBuffer® T.D. II without a cover outdoors will void the warranty and could possibly damage the electronics as well as motors.



5. Frequently Asked Questions

5.1 How Does Vapor Work?

The fine vapor particles irritate their eyes and mucous membranes with minimum risks to them. Vapor works on all active birds, but they must breathe the vapor in order for it to be effective. It may take several exposures to the vapor for the birds to learn to leave the area. Smaller birds respond slower and may need higher concentrations to activate them to fly more.

5.2 Do I Have to Dilute the Vapor Fluid?

Avian Control® and EcoBird® Bird Repellent are made with a natural grape concentration formulation which does not mix with water. **USE FULL STRENGTH.** Check date to be certain product is fresh within one year.

5.3 How Much Fluid Do I Need?

Generally 1 gallon lasts 1 month when the cycle-timer and 24 hour clock are set to work as instructed. Longer duration settings may use more fluid. Check fluid levels and usage more often.

5.4 How Often Do You Have To Vapor?

The *BIRDBUFFER T.D. II*® should be used every day for best effect. It takes time for the birds to find a new home and new feeding grounds. Nesting birds will continue to nest until younglings are ready to fly. New flocks will not join them while the *BIRDBUFFER T.D. II*® is working.

5.5 What Is The Best Time To Vapor?

Apply vapor in the area of bird flight during their highest activity. Usually, operating the unit for 4 hours after sunrise and 4 hours before sunset is sufficient to repel established birds from the treated area. If birds are present, be certain the birds have an exit and can leave the area. For best effect the birds must fly through the vapor.

6. 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 T.D. II*® will provide years of reliable service with proper care and maintenance.

1. Each month, take out the filter in the door and check vents outside in order to remove accumulated dust and dirt. Keep the vents clear and wash the filter with soap and water, then replace. If you are using the *BIRDBUFFER T.D. II*® in a high dust area, you will need to change the filter (or wash it) more frequently. You may need to order additional filters to keep the unit clean. A separate finer filter is available for fine dust.
2. Check in the fluid tank for dirt or debris. Clear fluid should be visible. Allow the tank to run completely dry before adding new fluid. This keeps fresh fluid in the tank and keeps it fresh for best bird control. Do not top off as this dilutes the freshness of the fluid.
3. Check the drain plug for leakage. If you notice any leaking from the drain plug, use the provided wrench to tighten the plug. After tightening, observe to make sure leaking has stopped.
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 change the clocks for daylight savings time and adjustment of daylight hours when the birds are active.
6. Do not transport or ship the *BIRDBUFFER*® with fluid in the tank. To drain the tank, refer to the instructions in the section Shipping Preparation (9). This can void your warranty.

7. Troubleshooting

7.1 If the breaker trips, the indicator light on breaker switch 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 4.5). Cord must be 12AWG 3 wire if 100'. Replace cord with heavier duty if worn. Check to see circuit of outlet is not overloaded with other equipment.

7.2 If the compressor starts to work, then stops and pops the fuse

- You may have a cold unit. Below 50° F is too cold and it will not start due to sluggish lubricant in the pump. Replace the fuse (see section 7.1 above) and let the unit warm up in a warmer environment or be certain the heater is working. Once it is warmed up, try again.
- Add the thermostatically controlled magnetic heater to the front of the unit for colder weather than 35° with the internal heater. This is an easy add on. Just plug it in.

7.3 If there is no vapor

- If compressor 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
- Also, ***Water-based vapor fluid causes clogging of the tiny arteries and will cause the unit to stop working.*** Replacement of tank may be necessary if this occurs.

7.4 If you notice fluid leaking from the drain plug

- Use the provided adjustable wrench to tighten the plug. After tightening, observe to make sure leaking has stopped.

7.5 If the birds have stopped responding,

- Check the clock/timer to see the time is correct
- Check the opening on 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 the inside tank with a flashlight for clean
- Note: walking birds do not respond. You must get them flying.

8. Specifications

The <i>BIRDBUFFER T.D. II</i> ® developed and patented by BIRDBUFFER LLC Everett, WA USA P/N 800012 w/heater 120vac	
Weight	53 lbs
Shipping Weight	68 lbs
Size	23.25" x 16" x 12.25"
Shipping Box Size	25" x 19" x 19"
Outlet size	2.25" x 2.25".
Fluid	*Avian Control® <u>or</u> EcoBird® Fluid (DO NOT MIX!)
	Grape like scent, even, transparent, long-lasting
Fluid Consumption	½ oz (30ml) per ½ hour or 1 gallon per 30 days
Output speed	40mph velocity
Warm Up Time	None; with heater 3 mins.
Operating Temperature	35°F – 104°F
Continuous Vapor	Can run continuously, recommend use with cycle timer & 24 hr timer
Duration indoors	Vapor lasts 2 - 3 hours per 30-45 sec output use
On/Off Cycle Control	Included: adjusts 3 seconds to 5 minutes both "on " and "off"
24 hr. Timer	Included: "On" and "Off" settings
Main Power Breaker 120 VAC	5 Amp
Heater Breaker	5 Amp
Electrical Supply	120 VAC, 10amp, 60 Hz
Limited Warranty	One year limited warranty on tank and compressor, 90 days on electrical components
Accessories not included:	Floor mat for chemicals Thermostatic magnetic heater for colder than 35° Drip pan for catching pouring fluids Thermal fogger for smaller birds Avian Control® Fluid
Accessories included:	1 x power cords (optional; supplied on request) 4 x hanging cables with snap hooks
Fluid:	Avian Control® is a registered trademark of Avian Enterprises LLC. EcoBird® is a registered trademark of Roth Chemical

9. Shipping Preparation

1. If shipping by a common carrier, **you must empty all fluid from the unit** by draining. Place a container under the drain plug, then remove plug to allow fluid to drain out. Gently tilt the machine upward. This will allow all of the fluid to drain from the unit. Do not tip backwards when full of fluid. This will cause fluid to fill the vaporization head and causes damage.
2. Reusing this fluid requires filtering through a nylon filter. Always check used fluid for clarity and date. Never use old or outdated fluid. If the fluid is dark, discard according to directions.
3. Return unit upright and wipe up all spills or drips.
4. 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 MSDS sheet with the fluid or machine that has touched the fluid for carriers to have this information and not discard the machine.
5. Discard fluids according to local instructions as listed on the SDS sheet or return to the original marked container.
6. Mount unit on a plywood base and attach using bolts or screws. 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.
7. If you are returning the unit for repair, follow the steps on the RMA authorization.

BirdBuffer® TD II Maintenance Log

Date	Check Fluid	Add Fluid	Check/Clean Filter	Change Filter

*** For best results, change filter every 30 days.**

Use BirdBuffer filter #820071 (30PPI) or #820074 (60PPI, for dirtier locations)

*** Add fluid monthly or when empty.**

Avian Contol® or EcoBird® Fluid with BirdBuffer dated label.

11. 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:

(866) 557-4274, 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



Tel: (866) 557-4274 or (425) 697-4274

Fax: (425) 776-5129

Website: www.birdbuffer.com

E-mail: gary@citcfx.com



Find us on Facebook!
www.facebook.com/BirdBuffer

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