

BirdHazer-P® Product Manual

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Thank you for purchasing our BirdHazer-P bird control device. This document contains a lot of valuable information to help ensure your best chance for success.

We encourage you to read it in its entirety and keep it handy for future reference.

Visit our website's resource page for the most current copy of this document.

Phone: 305-456-2813

1. Safety First – The following basic safety precautions should always be followed!

- Do not use damaged batteries, unsafe plug, or power.
- Keep out of reach of children. Make sure it's locked between services.
- Keep away from flames, heat sources and combustible/explosive materials.
- Do not place directly above where people can congregate for an extended time.
- Do not use the BirdHazer-P[®] in direct sunlight or wet environments.
- Do not block sprayer head with hand or other obstruction.
- Do not spill conductive or corrosive liquid on or inside the BirdHazer-P.
- Install in a way to ensure it does not fall. Damage due to fall will void warranty.
- To prevent spills, it must remain in a vertical position when containing fluid.
- Not recommended to just place on a flat surface due to risk of accidental tipping.
- Only use the BirdHazer-P[®] in covered, ventilated "semi-enclosed outdoor spaces."
- Designed for use only with oil-based ready-to-use fluids that do not require dilution with water.
 - Compatible with Roth Chemical's EcoBird 4.0 Bird Repellent fluid. Follow all Product Label Instructions.
 - Product Label and SDS can be found at: <u>https://BirdHazer.com/safety/</u>
 - The fluid turns to gel and then freezes as the temperature drops below freezing. Freezing cycles where the temperature drops below freezing for a few days and then bounces back after a few days, will not damage the BirdHazer[®].
 - Turn the BirdHazer-P[®] OFF during the time of year when the temperature stays below freezing for extended periods.

2. Product Registration and Compliance

- This document is intended to comply with rules, regulations, and laws in the United States only.
- The manufacturer of this BirdHazer-P[®] device:
 - Complies with Part 15 of the FCC Rules regarding the Bluetooth connectivity's safety and compatibility.
 - Meets all CE legal requirements relating to safety, health and environmental protection.
- Meets all ROHS legal requirements that restrict the use of specific hazardous materials found in electronic products.
- The EcoBird 4.0 fluid used in this BirdHazer-P[®] is registered in accordance with the US EPA for use in the following states:
 - All 48 states in the Continental United States plus Puerto Rico. (It is NOT registered in Alaska and Hawaii).
 - New York restricts the use of this product to only licensed pest control professionals.
- Since the information in this section can change in real time, please reach out to us if you have any questions or concerns about registration and compliance in your state.

3. BirdHazer-P® Components

a. **Key** (not pictured but included in box) for the lock that is located on top of the BirdHazer-P[®] as shown. The same key works on all BirdHazer[®] devices. Turn counterclockwise to lock.

b. Atomizer Head assembly includes:

Green O ring (inside bottom of head assembly). **Note - May fall off when refilling bottle.** White O ring (behind head assembly).

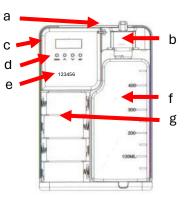
Tube – (Bottom of tube contains a filter).

- c. USB C power input located on left side of the BirdHazer-P® as shown, cord not included.
- d. Manual Control Panel.
- e. Serial number Two locations. As shown here and at the back of the BirdHazer-P.
- f. Bottle (capacity approximately 1 Pint, 16 ounces or 500 mililiters).
- g. Battery compartment (uses four D batteries not included).
- h. Wall mounting openings (Top rear of the BirdHazer-P[®] and pictured in section 5).
- i. Wall mounting bracket Also pictured in section 5.

4. Recommended Uses

- This BirdHazer-P[®] is perfect for loading docks, porches, balconies, outdoor dining areas, greenhouses, and any semi-enclosed space where flocking pest birds can congregate to cause damage or health concerns due to their feeding behavior and droppings.
- Can also be used in these spaces to help deter nesting activities, but we recommend combining with population reduction, strategic exclusion and nest removal (by a professional and when allowed by law) along with cleaning/sanitizing of droppings first.
 BirdHazer-P[®] should be placed as close as possible to the nesting site(s).
- Its uses are only limited by your imagination and since the advances in technology that lead to this BirdHazer-P[®] have combined with reduced costs in equipment and reduced product consumption, it can be affordable enough for a little trial and error.

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7"W 2"D 10"H ↓ BirdHazer.com Front Right Left

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5. Initial Setup Instructions

Site selection

Observing the above safety precautions, select a site that is at least higher than eye level, the higher the ceiling, the higher the placement, but not recommended higher than 2/3 the total ceiling height unless they are placed at a foot below ceiling level and above ceiling fans that are constantly turned ON. Ideal placement should take advantage of outside air flowing in and fans moving the air inside the target air space. May need to place multiple BirdHazer-P[®] units near corners (or on either side) to manage changes in airflow.

Mounting the BirdHazer-P® to the wall – SHOULD ALWAYS be mounted to a wall to prevent falling/tipping and possible spilling of fluid. The total weight of the BirdHazer-P® fully loaded with batteries and fluid is slightly less than four pounds.

Adhesion – This can be a two-visit (or extended visit) process but necessary if the owner does not want holes in their wall.

- You can get creative with Velcro, just be careful with textured surfaces and verify loading capacity of the strip you are using.
 Recommend using the bracket and investing a little more money on the heavier capacity Velcro strips. Test adhesion first.
- Or apply a silicone-based, exterior adhesive thinly to the entire back side of the mounting bracket.
- Attach it to the wall (make sure it's level). To reduce the total weight of the device while the adhesive cures, consider only filling 1/4th the bottle's fluid level, especially if you are coming back in a week.
- Once you are sure the adhesive can hold the weight, mount the BirdHazer-P®.

Fastening – Safer option because it is less likely to fall off the wall if the adhesive fails.

- Temporarily secure the mounting bracket to the wall using painter's tape (make sure it's level).
 Drill a hole through the bracket and into wall over the indentation below the clear plastic plugs on each side of the mounting bracket.
- Drive in both screws, then mount the BirdHazer-P® to the mounting bracket.

Powering the BirdHazer-P®

Battery – Properly insert four new, alkaline D batteries (not included). A set of brand name alkaline batteries should last one month for typical settings as described later. Recommended if the ideal location for the BirdHazer-P[®] is not close to a plug-in power source. Do not recommend sacrificing effectiveness of a location away from power source to save on batteries.

Plug-In – BirdHazer-P[®] can be plugged into a standard 110V power source using a USB C cable (not included). No different than with other devices like cell phones, flashlights, etc. Recommended if the location is near a plug-in power source AND an ideal location based on air flow. The drawback is that someone may unplug it, or even steal the cable to charge another device.

6. Manual Programming – Performed using the screen and buttons on the BirdHazer-P® as indicated in section 3 item d.

- Press and Hold MODE Button for five seconds to turn the unit ON and OFF.
- To set local time and day of week, press and hold the SET button for five seconds.
 - Press the UP or DOWN buttons to select the hour (in military time) then press SET.
 - Press the UP or DOWN buttons to select the minute then press SET.
 - Press the UP or DOWN arrows to select the current day of the week then press SET.
 - Battery power indicator has one bar for every 20% of remaining battery life.
 - \circ $\,$ $\,$ Five bars for 100% and one bar for 20% for example.
 - The BirdHazer-P[®] will stop operating below 5%.
- To set work time and intensity
 - o Press the MODE button once to enter EVENT 1 as indicated in the LED display.
 - \circ ~ The display will indicate the ON hour. Press SET to adjust the ON time.
 - \circ $\,$ $\,$ Press the UP and DOWN arrows to change it, then press SET.
 - Press the UP and DOWN arrows to select the ON minute and press SET.
 - The display will flash the "MON" day of week on the LED display. Pressing the UP and DOWN buttons, you can turn days ON and OFF. UP to turn ON and DOWN to turn OFF. Then press MODE.
 - o The display will indicate the OFF hour. Press the UP and DOWN arrows to change it, then press SET.
 - o Press the UP and DOWN arrows to select the OFF minute and press MODE.
 - o The display will indicate the WORK seconds. Press the UP and DOWN arrows to change it, then press MODE.
 - o The display will indicate the PAUSE seconds. Press the UP and DOWN arrows to change it, then press MODE.
 - Now it will move to EVENT 2. Repeat the above steps to program ON, OFF, WORK and PAUSE for EVENT 2, or keep pressing MODE to skip through EVENTS 2 through 5.
 - Once you reach the end of EVENT 5, it will return to operating mode.
 - If you accidentally press MODE past operating mode, keep pressing MODE through EVENTS 1 to 5, slowing down as you reach EVENT 5 until it returns to operating mode.
- **System reset** Can only be done manually and not via Bluetooth.
 - Press and hold MODE and SET at the same time for five seconds to return the unit to factory settings.
 - This will also reset the name of the BirdHazer-P[®] making it difficult to differentiate between multiple units at the same site.
 You can only change the name of the BirdHazer-P[®] via Bluetooth Programming as detailed in the next section.

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SET

MODE UP DOWN

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7. Bluetooth Programming

- Download the Aroma-Link App using one of these QR codes depending on your mobile device.
- Make sure the Bluetooth function on your mobile device is turned ON and open the App.





Apple

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Aroma-Link

Other

 Image: Second system
 Bluetooth

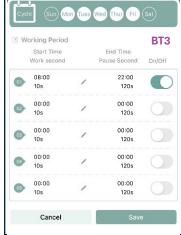
 Device List(1)
 refresh

 Image: BirdHazer 2401001.A0
 Image: AC17F:F3:19:00:01

 Image: AC17F:F3:19:00:01
 Image: BIC2

 Image: AC17F:F3:19:00:01
 Image: BIC2







- Select BLUETOOTH. The default Bluetooth Password is 1234.
- The name of the BirdHazer-P[®] device will show as "SmartAroma.A0" and will default to this name on device reset. You can rename name it later as shown in the first screenshot (BT1).
- The BirdHazer-P[®] will automatically set its time and day of week to the one on your device.
- Screenshot (BT2) Device Settings:
 - You can change the name of the BirdHazer-P[®] by pressing the pencil icon to the right of the name in the top center. Suggest you rename it to easily identify it when servicing multiple devices near each other at the same location.
 - You can also change the Bluetooth password by pressing the "bars" icon in the upper right corner. If you forget it, perform a System Reset as described in section 6 above.
 - Battery percentage remaining is in the upper left corner.
 - The system confirms a connection by creating a moving wave inside the large circle.
 - The times indicated inside the circle are the currently operating setting.
 - The next two ovals indicate WORK and PAUSE seconds set indicating which one is active.
 - Press the ON/OFF bottom to turn the unit ON (darker color) or OFF (lighter color).
 - Press the SET button to manage settings.
- Device Settings
 - The bar across the top of **screenshot (BT3)** has the days of the week. Toggle touch each circle to white to indicate the days of the week you want the unit to operate. It's showing set to Monday through Friday if the location is only open those days to save fluid and batteries on Saturday and Sunday for example. Toggle all seven days to white for daily operation for ALL EVENTS.
 - The next section has five rows, one for each of the device's EVENTS.
 - It indicates the time it turns ON, OFF, how long it WORKS and how long it PAUSES.
 - The buttons on the right indicate whether that EVENT is selected. Default is only 1 ON.
 - Press the pencil looking icon in the center of each row to manage the settings for each EVENT. Normal operations will only require the use of the first EVENT. 2-5 are for additional customization like: EVENT 1 ON from 10AM to 2PM for lunch and EVENT 2 for ON from 6PM to 9PM for dinner if the case of a restaurant for example. But, keeping in ON during all the hours of potential pest bird activity is better to keep the product lingering longer in the target air space.
- Event Settings
 - Screenshot BT4 indicates the selected EVENT's SETTINGS for the days of the week you toggled ON in the previous screen.
 - Start Time is the time of day (in military 24-hour format) you want the unit to turn ON.
 - Touch START TIME to change the time using the wheels that will show up in the bottom of the screen and press CONFIRM.
 - End Time indicates the time you want the unit to turn OFF.
 - Touch END TIME to change the time using the wheels that will show up in the bottom of the screen and press CONFIRM.
 - Work(s) is to select how long you want the BirdHazer-P® to operate each time the unit turns ON and OFF during the selected start and end times.
 - The range is from 0 to 30 seconds.
 - It cannot run longer than 30 seconds at a time because it will burn the pump.
 - After you enter an amount within 0 to 30, press the screen in the center to close the number pad.
 - **Pause(s)** is to select how long the BirdHazer-P[®] pauses between each working session.
 - The range is from 90 to 900 seconds.
 - 90 is the minimum amount of time it needs to pause to not burn the pump.
 - After you enter an amount within 90 to 900, press the screen in the center to close the number pad.
 - Before pressing the SAVE button on the bottom of screen BT4 double check that all
 days of the week are toggled ON to your original setting. It will only show the current day of the week if you did not
 select all days in the previous screen in case the changes you just made are only for the current day of the week.
- Verify your settings before walking away from the BirdHazer-P.



Top View

8. Recommended BirdHazer-P[®] Spacing

- Each BirdHazer-P[®] can effectively cover a volume of approximately 16,000 cubic feet.
- This is subject to air flow and pest bird pressure but is a good place to start.
- To calculate maximum spacing, divide 16,000 by the ceiling height then find the square roof of that number to calculate maximum spacing between multiple devices.
 - For example. In a 10-foot-high ceiling, divide 16,000 by 10. Which gives you an area of 1,600 square feet.
 - To calculate maximum spacing, find the square root of the area. It's a number that equals 1,600 when multiplied by itself.
 - The square root of 1,600 is 40. This means that the units should NOT be spaced more than 40 feet apart from each other.
 - Generally, the higher the ceiling, the higher the bird pressure and the more the airflow from outside, the closer the spacing.
 - Manage expectations and plan for the possibility of decreasing spacing and/or adding more units in the future.

9. Filling the Bottle

- The bottle is set in place with the white rubber ring. Pull the bottle out using your fingertip on the angled nozzle.
- Untwist the head assembly from the bottle counterclockwise until it separates from the bottle.
- Pull the head and tube out of the bottle and set it on the ground on an absorbent material.
- While wearing disposable gloves, set the bottle on the absorbent material and slowly fill it, using a funnel, but not past the top and into the tip. Promptly wipe any spilled fluid.
 - Tip: Set the BirdHazer-P[®] bottle with the short side facing you and hold the Eco 4.0 gallon jug with the "long side" facing you to minimize potential for accidental spills.
- Before re-inserting the head assembly, make sure the green O-ring and tube are seated in place.
 - The green O-ring will set in place when the bottle is screwed in all the way.
- Slowly screw it back in a clockwise motion. As you reach the end of the turns, it will feel harder.
- CAUTION DO NOT OVER-SCREW the head past the buckle on the bottle as shown.
- Reinsert the bottle using enough pressure for the white rubber O-ring to set back in place.

10. Servicing the BirdHazer-P

- Unlock the BirdHazer-P[®] and open the door.
- Top off fluid and check remaining battery life, if not plugged into USB C port.
- Replace batteries as needed to ensure continuous operation between services.
- Clean according to Maintenance Instructions in section 10.
- Verify pest bird activity with client (just because the birds are not present during your visit does not mean they may not be there another time), then adjust the timer settings as needed.
 - We recommend setting at maximum output (30 secs WORK and 90 secs PAUSE at first to help "train" the existing pest birds to modify their behavior. Then dial it down according to their behavior during subsequent services until you find the "sweet spot."
- Document fluid and battery consumption, pest bird activity and any changes to the timer settings.
- Close the door and lock the BirdHazer-P.
- Schedule the next service.
 - We recommend servicing the BirdHazer-P[®] weekly for the first month and then at least monthly moving forward.

11. Maintenance and Storage

- During every battery change or at least every month, with the batteries removed and the USB C cable unplugged, wipe any oily residue from the housing and inside the BirdHazer-P[®] (including the battery terminals) with a clean cloth.
- If the unit will be stored for future use.
 - Remove and discard or reuse the batteries and unplug the USB C cable and store it.
 - Empty the bottle and remove the tube from the head assembly.
 - Then rinse these components (NOT the housing) with warm running water and let air dry overnight.
 - The housing and internal parts should only be wiped with a clean cloth.
 - Then reassemble and store the BirdHazer-P® away from dust and excess heat or cold.

12. Troubleshooting the BirdHazer-P

- It's not running or does not Turn ON.
 - Test and check position of batteries or USB C plug and cord.
 - Make sure it's turned ON using the mobile app and/or by pressing and holding MODE button for five seconds.
 - There is no product coming out of the nozzle or it's very weak.
 - Make sure the nozzle is not blocked, the head assembly set in the rubber ring and check fluid level.
 - Make sure the bottle is properly seated and not over or under tightened.
 - Remove the head and tube, run warm water through them and let them air dry overnight.
 - Check head assembly: tube set in place, is clogged, or whether the O rings (green or white) are missing/not properly seated.

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• If either O ring is missing, reach out for a replacement. White O ring may be stuck in device's air output port.

- The filter at the bottom of the tube might be clogged, contact us for a replacement tube.
- If nothing works and you hear the pump running, the tube between the pump and the nozzle head may be loose or damaged.
- It's making strange noises but working fine. The pump may have fallen from its place inside the closed compartment.
 Reach out for help.

• Bluetooth is not working.

- Verify the Bluetooth icon in Manual Control Panel display is visible.
- Press "refresh" in the upper right corner as shown in the screenshot to the right.
- You may need to perform a System Reset. Refer to last item in section 6.
 - Resets Bluetooth, password to 1234.

13. Active Ingredient Mode of Action, Efficacy and Safety Information

- The active ingredient in EcoBird 4.0 vegetable-oil-based bird repellent fluid is Methyl Anthranilate (MA) at a concentration of level
 of 40%. It is derived from natural components of concord grapes and other plant materials, is generally recognized as safe (GRAS),
 is US EPA listed since 1985 and is FDA approved as a common food flavoring and fragrance additive.
- A benefit of using MA as a pest bird repellent is its lengthy safety record as a flavoring additive for human food consumption. MA is present in many fruit bearing plants, as well as cocoa, black tea, and flowers, at higher levels than in this product.
- When a bird inhales or ingests the MA, it irritates the trigeminal nerve in its beak causing temporary discomfort.
 - The bird immediately exhibits a biological response mid-flight to avoid the vapor and cannot adapt to the MA over time.
 - The vapor is completely harmless to birds since the effects wear off when they leave the area. Since it only affects avian biology, the vapor does not have the described effect on people, pets, or other animals.
 - Some people may find the grape smelling aroma unpleasant and even feel a mild respiratory irritation, while others love it, but most people just don't care, they're happy the BirdHazer-P[®] is doing its job.
 - It is considered safe according to section IX of the EPA's Final Rule regarding the safety of MA published on the Federal Register Vol. 67, No. 152 dated 8/7/2002 Rules and Regulations pages 51083-51088.
 - "Based on the toxicology data submitted and other relevant information in the Agency's files, there is reasonable certainty no harm will result from aggregate exposure of residues of methyl anthranilate to the U.S. population, including infants and children, under reasonably foreseeable circumstances when the biopesticide product is used as labeled..."
- The BirdHazer-P[®] produces a fine vapor particle (less than one micron in size) that stays in the air longer reducing the risk of leaving an oily residue on the ground. Additionally, this feature makes it more likely that a pest bird will encounter the product during flight inside a treated area.
- Since a bird's breathing is heavier during flight the MA is more effective vs when it's just perching.
- It's also more effective on some bird species vs others. Generally, the larger the bird and its beak, the more effective. Except for vultures, we do not recommend this product if the target pest bird is a vulture.
- There are no "silver bullets" solutions for all pest birds behaving badly in all situations. You may need to combine our products with other solutions to attain reasonable control. Complete control is almost impossible under semi-enclosed spaces unless you have access to a money tree and can afford to cover the entire space with a dome, screen, or bird netting...

14. Using Other EcoBird Fluids to Compliment the use of the BirdHazer-P®

- Consider spraying EcoBird 14.5 water soluble bird repellent as needed in and around the surrounding areas to help reduce pest bird activity inside the target air space. It can be diluted as concentrated as 5:1 and sprayed using a one-gallon hand pressurized sprayer for example on the surrounding bushes, shrubbery, hardscape areas and any other area allowed by the product label.
- Consider using EcoBird 14.5 bird repellent spray can for spot treatments inside the target air space and even on the birds.
- Using the BirdHazer-P[®] in combination with both EcoBird 14.5 bird repellent products will help reinforce the properties of the active ingredient used in the BirdHazer-P[®] and may help with a few persistent individual pest birds.
- Cans could also be sold to the client for their use between service visits.
- In either case, refer to Product Labels for use restrictions and additional information or reach out with any questions.
- These EcoBird 14.5 products are available through various distributors, or by visiting www.BirdHazer.com

15. Warranty and After-Sale Service

- We want to ensure you have a positive experience with all our BirdHazer.com® products.
- This BirdHazer-P[®] device is warranted for one year from the ship date against defects in materials and workmanship.
 - Void if water damaged or the plastic housing shows damage from a fall.
 - Void if both serial number stickers on the BirdHazer-P® have been tampered with or removed.
- EcoBird fluids should be used within two years of purchase to maximize their effectiveness.
- Reach out for any technical questions regarding its uses, placement, programming, if you need help servicing the unit or need to file a warranty claim.
- We are committed to your success and would love to hear about your success stories.
- Reach out if you need additional help with your unique pest bird challenge. We will point you in the right direction, even if the best solution is not ours.

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