

OtoPet-USA Earigator Setup and Use Instructions



FOR **VETERINARY** USE ONLY

OtoPet-USA is a division of DermaZoo™
8909 Iverleigh Court, Potomac, MD 20854
Office: 301-365-0192 • Fax: 301-983-2369
Email: info@otopet-usa.com
www.OtoPet-USA.com



Introduction

Your OtoPet-USA EARIGATOR is a versatile Irrigation, Suction, and Insufflation system for veterinary clinical use. Use it in conjunction with your OtoPet-USA VetScope for state-of-the-art ear cleaning! The following instructions will guide you through the setup, use and maintenance of the instrument.

The System: The EARIGATOR kit contains the following items:

- EARIGATOR unit.
- Glass collection bottles, special vacuum/pressure approved, 1-liter capacity.
- Bottle cap adaptors—1 for suction and 1 for irrigation.
- 2-button hand piece with attached hose and luer adaptor.
- Power cord.

System Setup and Performance Check:

- Connect the short tubes from the Earigator to the elbow on the corresponding bottle cap that DOESN'T have a tube connected on the bottom. The black, o-rings, if used, should lay on top of the bottle, underneath the white biscuit cap, to help form a better seal. The cap with the long tube should be screwed to the Irrigation side, while the cap with the short tube should be attached to the Suction side.
- Connect the suction long clear tube (with asterisks all along) to the remaining empty elbow on the bottle cap on the Suction side. Connect the other long clear tube to the bottle cap on the Irrigation side.
- Turn the insufflation control fully clockwise.
- Plug the power cord into the power receptacle on the left side of the instrument (See figure 2). Plug the other end of the power cord into a grounded receptacle. For your safety, be sure that any extension cords and power strips have three-prong plugs and outlets, and that the plugs are undamaged.
- Turn the unit ON using the power switch on the left side of the unit next to the power receptacle. The pump should start, and the pressure and vacuum gauges should move from their "0" positions.
- Pick up the hand piece. Depressing the blue button should release air at the luer port. Depressing the white button should cause suction at this port.
- Turn the insufflation control counter-clockwise. Air should flow from the insufflation nipple beneath the control knob. Close the control by turning it clockwise.
- Adjust the SUCTION regulator counter-clockwise to between 10" and 20" Hg by the same means.

Lavage and Suction

Using the EARIGATOR for lavage and suction:

- Be sure the unit is powered OFF
- Unscrew the Irrigation bottle and fill it with irrigation solution, 800 mL max.
- Replace the bottle in the pocket, screwing it firmly into the cap.
- Install the desired irrigation tip on the hand piece luer fitting. (Figure 3)
- Power the unit ON.
- Adjust the IRRIGATION pressure to between 5 and 15 PSI by pulling out the regulator knob or pulling out the red locking ring (depending on model), and turning it clockwise for more or counter-clockwise for less pressure.
- Note that the regulator should be reduced below the set pressure, then increased slowly to just achieve the desired setting.
- Press and hold the BLUE button to discharge irrigation solution from the tip.
- Press and hold the WHITE button to suction fluid back through the tip.
- Adjust Irrigation and Suction pressures to suit your tip size and preferences.

Observe These CAUTIONS:

- Do not over-fill the Irrigation bottle! Stop at the 800 mL mark!
- Be sure to power the unit OFF before removing either bottle!
- Be cautious when using high irrigation pressure to avoid spraying or flooding!
- If a bottle should chip, crack otherwise become damaged, replace it ONLY with an approved pressure and vacuum certified spare from OtoPet-USA.
- Allow residual pressure and vacuum to drop to "0" before re-starting the unit.

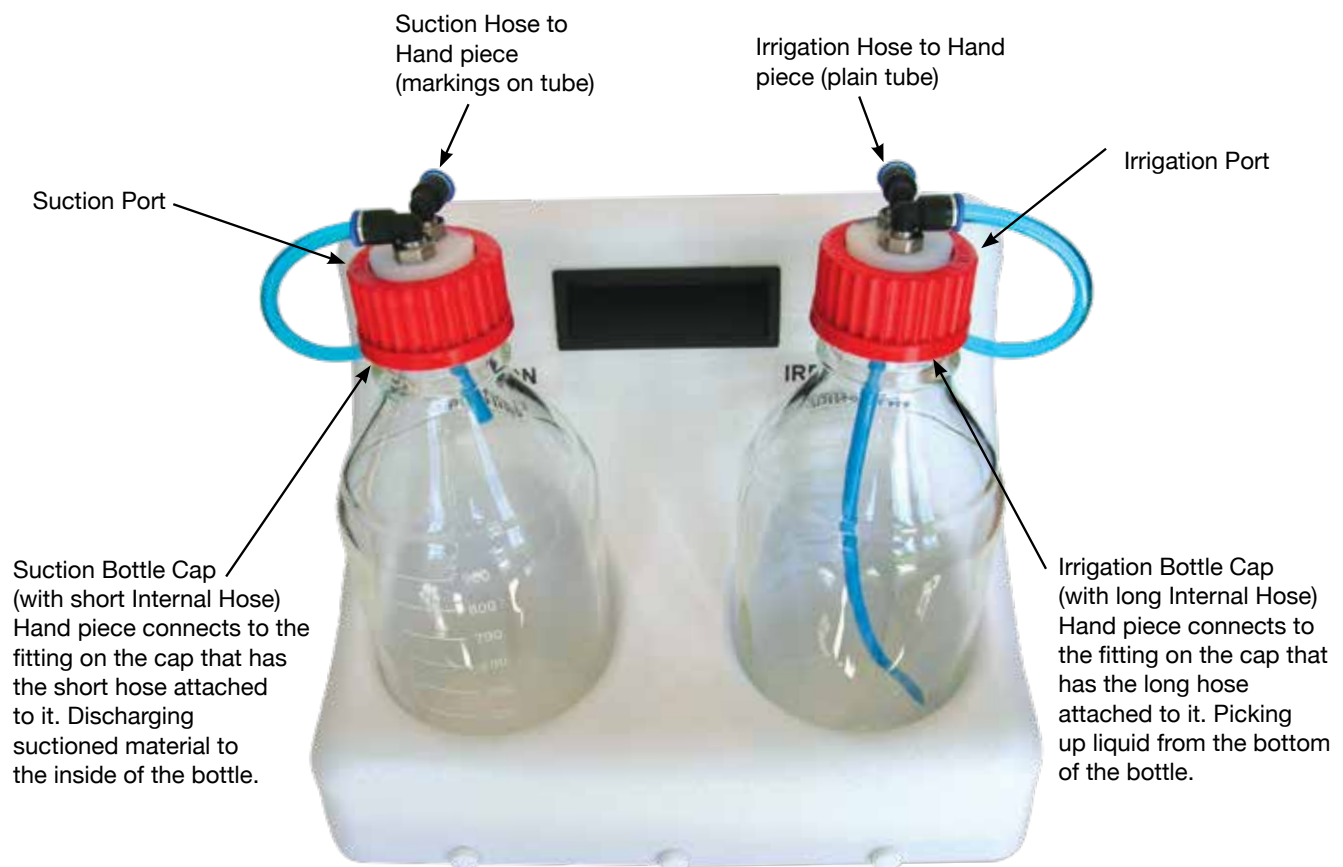
Insufflation

Using the EARIGATOR for insufflation:

- Turn the insufflation control fully clockwise to the OFF position.
- Power the unit ON and adjust the Irrigation pressure to 2-3 PSI. Open the insufflation valve to release the pressure, then close it and make sure that the pressure regulates to 2-3 PSI. Adjust and repeat as necessary to regulate this pressure.
- Connect the insufflation apparatus to the nickel plated hose barb on the front of the unit.
- Insufflation is now applied by SLOWLY AND CAREFULLY opening the insufflation valve to achieve the desired inflation.
- Use of a filtered insufflation kit is recommended.
- Be sure to turn the Insufflation valve off (full clockwise) after use.

Connection of the Bottles and Ports

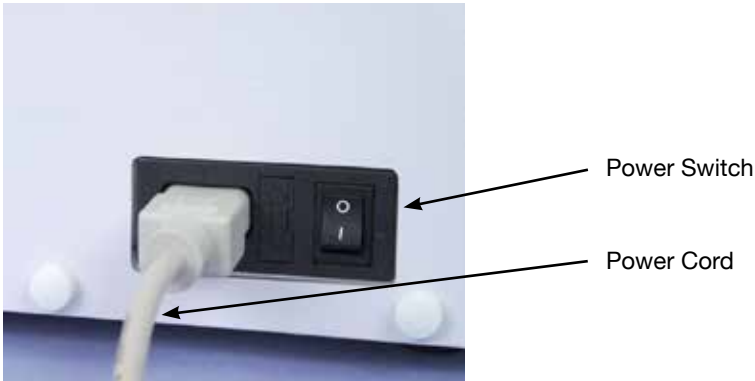
Figure 1



NOTE:

Hose Connections to the unit are the bottle caps are disconnected by pressing the blue collar while pulling the tube straight out. To connect the tube, press it straight in without touching the blue collar.

Power Cord and Switch



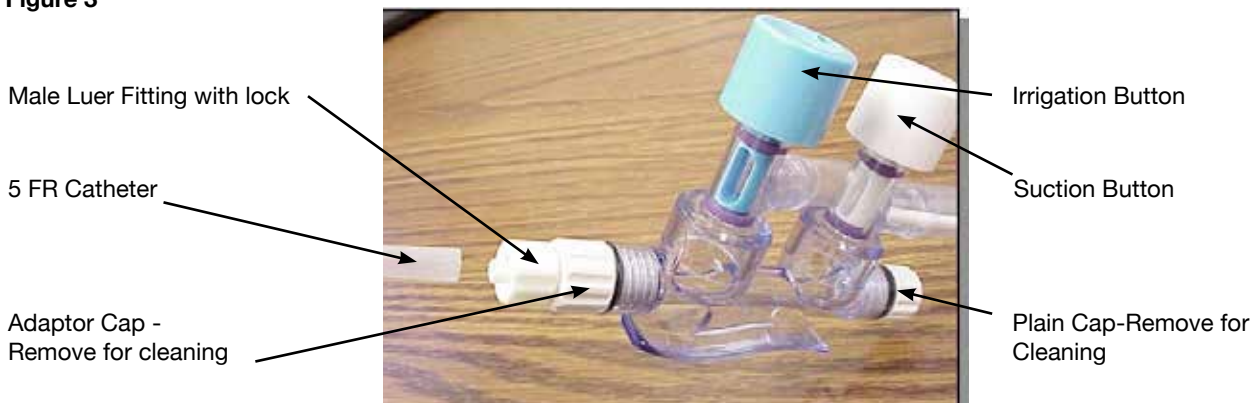
Earigator Front Panel Controls

Figure 2



Installing the Irrigation Tip

Figure 3



ATTENTION:
The trumpet valve is a disposable product. If cleaned and cared for it may be used multiple times.

Please order replacement valves from





Trumpet Valve Cleaning & Maintenance

Perform after each use

1. To clean the irrigation tube, fill the irrigation bottle with 500ml of hot tap water. Also be sure the suction bottle is empty.
2. Turn the machine on, set the irrigation control to 9, and set the suction control fully counterclockwise.
3. Remove any attachments on the front port of the trumpet.
4. Press the irrigation button and pump all of the solution into a clean container.
5. To clean the suction tube, press the suction button and draw all of the water back through the trumpet into the suction bottle. Do not overfill suction bottle.
6. Repeat with clean water as necessary.
7. Hang suction tubes to dry after each use for best results.
8. For quick and easy cleaning - empty suction jar and fill irrigation jar half way with hot water. Turn on - and place finger over the luer lock nipple to stop flow and depress both buttons. This will do a closed loop cleaning from one jar into the other jar.

If trumpet valves are sticking

Turn the machine off and follow the attached picture sequence



1. Squeeze the sides of the button to release the catches.



2. Pull the button/valve/seal assembly straight out. Do not remove the metal compression springs.



3. Clean the button assembly with straight "Dawn Dishwashing Liquid" on a washcloth or toothbrush. Rinse well with hot tap water.



4. Clean the trumpet housing with straight "Dawn Dishwashing Liquid" on a small bottle brush. Rinse well with hot tap water.



5. Put a small film of "KY Jelly" on your finger and thumb to lubricate the seal rings.



6. Assemble the button/valve/seal by pressing it into the appropriate port. The button will snap into place when it is inserted properly.

Earigator Trouble Shooting

LOW SUCTION:

1. With the machine on, and regulator fully counter clockwise (for maximum suction), and the suction gauge is showing low suction, pinch the twin tubing sharply to cut airflow. The suction gauge should read 20 to 25 inches of vacuum.
2. With the twin tubing pinched if the suction gauge does read between 20 to 25 inches vacuum, then the suction button of the trumpet valve is probably sticking slightly open. Go to "Cleaning the Trumpet" to fix this.
3. With the twin tubing pinched if the suction gauge reads lower than 20 inches vacuum, then the suction bottle cap is probably loose, the cap seal may be contaminated or damaged, the bottle mouth may be chipped or the suction side of pump may be malfunctioning – call OtoPet-USA at 301-365-0192.
4. Always empty suction jar before full, or pump damage can occur.

LOW IRRIGATION PRESSURE:

5. Before any checks, ensure that the middle insufflation knob is turned fully clockwise. With the machine on, and the pressure regulator fully clockwise (for maximum pressure), and the pressure gauge is showing low-pressure pinch the twin tubing sharply to cut any airflow. The pressure gauge should rise to approximately 15-PSI pressure.
6. With the twin tubing pinched if the pressure gauge does read at least 15 PSI pressure, then the irrigation button of the trumpet valve is probably sticking slightly open. Go to "Cleaning the Trumpet" to fix this.
7. With the twin tubing pinched if the pressure gauge reads lower than 15 PSI pressure, then the irrigation bottle cap is probably loose, the cap seal may be contaminated or damaged, the bottle mouth may be chipped or the pressure side of pump may be malfunctioning – call OtoPet-USA at 301-365-0192.