# Roving Blue® GO3™ Users Manual


Updated 02.04.2021

READ, FOLLOW AND SAVE THESE INSTRUCTIONS. THERE ARE NO USER-SERVICEABLE PARTS. EXPOSING PARTS IN THE POD WILL VOID YOUR WARRANTY. **INTERNAL PARTS SHOULD NOT BE EXPOSED OR TAMPERED WITH.** DO NOT USE IN ANY OTHER MANNER THAN AS DESCRIBED IN THIS MANUAL.

**Introduction:** This user guide is written to assist in the operation and maintenance of your GO3™ Water Bottle Pod. Please read this manual carefully and in its entirety before operating.

Failure to follow these instructions could result in personal injury, damage to the equipment, or reduced product performance. In our ongoing effort to improve reliability and operating efficiency, Roving Blue®, Inc. may find it necessary to make changes to its products. The information contained in this guide may not conform in every respect to earlier versions. If you have any questions, please contact the Roving Blue® service department:

Email: service@rovingblue.com
Roving Blue®, Inc.
5220 St. Patricks Road
Lena, Wisconsin USA 54139
Website: www.RovingBlue.com
Tel: (920) 621-2163 (If no answer, please leave a message and a representative will return your call ASAP)

**Intended Use:** The GO3™ Water Bottle Pod is designed to ensure safer drinking water from taps or other clear water sources such as rainwater or clear lakes and streams. It does this by infusing the water with dissolved ozone. Water that is visibly clouded with dirt, silt or algae should be allowed to settle and/or should be pre-filtered.

**Warranty:** Your pod comes with a one-year warranty, and the serial numbers are recorded at time of shipment. If you purchase the pod from one of our authorized dealers, the serial number will have been recorded in the dealer's name. Please consult with your dealer if you have any warranty issues.

**Overview:** The Roving Blue® GO3™ Water Bottle Pod makes water safe to drink by using dissolved ozone as a sanitation agent. Ozone, or "O3", is the most powerful oxidizer available that can be safely used in water treatment.[1] Ozone is a strong oxidant that is widely recognized as a biocide, and has the ability to achieve more than 99.9% pathogen kill rates. Treatment with ozone is a proven and long-accepted method for disinfecting drinking water. Users of ozone technology include municipal water treatment plants, water bottling companies, hospitals and hotels.

- In 1997, the FDA approved the use of ozone as an antimicrobial agent with indirect contact with foods.
- In 2002, the FDA approved ozone for use on food contact areas and directly on food with its "Generally Regarded as Safe", or (GRAS) designation.

[1] *Water Quality Association , "Ozone for POU, POE and Small Water System Water Treatment Applications," Lisle, IL 1999

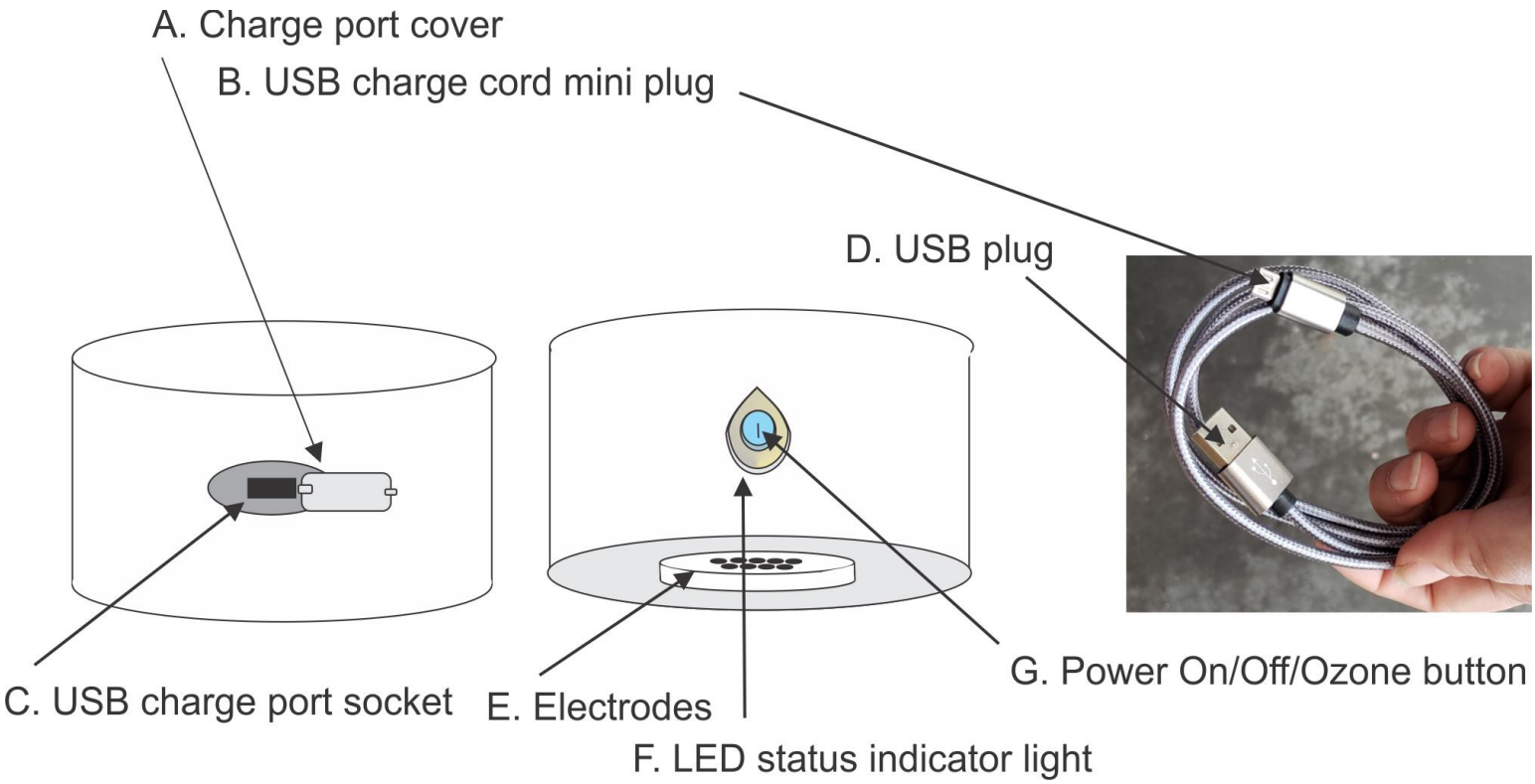
- Today, the Organic Foods Production Act (OFPA) identifies aqueous ozone (ozone dissolved in water) as a substance that is allowed for use in *organic* crop and livestock production.

Ozone has been shown to be effective in a variety of drinking water applications including: disinfection, iron (Fe) and manganese (Mn) reduction, hydrogen sulfide removal, as well as odor reduction and taste improvement.

Ozone can also reduce formation of disinfection by-products such as trihalomethanes (THMs) and halo acetic acids (HAAs). Ozonation is effective for removal of difficult to treat pathogens such as giardia and cryptosporidium. The amount of O3 generated by the GO3™ will vary depending on water temperature, chemistry, conductivity and pH.

**IMPORTANT- BEFORE YOUR FIRST USE - FOLLOW THE INSTRUCTIONS BELOW AND RUN THREE FULL CYCLES.** This will take 10 minutes. This will ensure the electrodes are fully primed for use . You should also use this time to learn the smell of ozone. It has the fresh smell of the air after a thunderstorm, as that is produced when lightning meets oxygen in the air we breathe. A quick "sniff test" is the one of the best ways to know that your pod is working properly.

Dispose of the water. Your unit is now ready to use.




**INSTRUCTIONS FOR USE:**

Your unit comes equipped with a lithium ion rechargeable battery. Prior to use, you will want to fully charge the GO3™ Pod. Open the charge port cover (A) Plug the USB charger cord mini plug (B) into the plug port socket (C). Then, Insert the USB plug (D) into any 5V USB power supply to charge.

To show that the unit is charging, an LED light (F) will illuminate. When charging the light will be a pulsing yellow in color, which turns greenish, then to a solid blue when fully charged. Charging will take up to 5 hours depending on the charge state of the battery pack. When charging is complete, remove the power cord and replace the dust cover.

**Before Use:** Fill your water bottle with ordinary tap water. If you have a water purification system such as an R/O or reverse osmosis system, put a pinch of salt in the water. (The water may be too pure, the salt ensures that there is enough "stuff" in the water for the ozone to react with). Surface waters or unfiltered tap water normally contain plenty of substances for the ozone to act upon.

1) Make sure the unit is fully charged.
2) Place the cap on the water bottle, and tighten it. Invert the bottle so that the electrodes (E) are fully submerged.

3) Firmly press the small ON/OFF/Ozone power button (G), and hold it in for 3 seconds. An LED indicator light (F) will come on and flash several times, when the flashing stops, the pod is ready for use. This light will be bright Blue or Green when the unit is firmly charged. After about 25 uses, the light will switch to a YELLOW Color. The unit will continue to operate until the battery is in a critical state. It will then flash RED and may shut down. It is time to recharge your unit.

4) Next, firmly press the ON/Off/Ozone power button (G) one time for one second. This will start a treatment cycle. Each push is timed for a 3 minute runtime "dose". A blue LED light will come on in the bottle and pulse (slowly go on and off) while the cycle is running. **This light may be difficult to see in bright daylight, so it is also a good practice to visually check for bubbles being produced**.

5) Observe that bubbles are emanating from the electrodes (E). If you do not see bubbles, try the pinch of salt method to ensure that the water is conductive.

6) Gently agitate the water in the bottle with a rocking motion during the treatment cycle. Make sure that you can observe that bubbles are forming and rising. **This is an important safety step to ensure that ozone has a chance to mix thoroughly in the bottle. The laboratory test results showed the best results when mixing occurred than when mixing did not occur.**

7) When the treatment cycle is complete the blue light in the bottle will switch to a yellow color.

8) Wait. After the treatment cycle is complete, let the bottle sit for a minimum of 3 minutes. This will allow the ozone the necessary "contact time", to disinfect the water. It is not harmful to consume the water at this point, however, many people prefer to let the ozone go away completely before consuming. This will take anywhere from 20 minutes to an hour depending on the water's temperature, pH, and other factors. While you can still smell the ozone, the water can actively kill germs, so you can use it to disinfect wounds, rinse your mouth (like a mouthwash), or use it to clean surfaces such as cutting boards, knives and vegetables.

**Shut Down Procedures:** Once you are done, **firmly** press and hold the power button (G) for 3 seconds. The led indicator light will flash briefly to confirm the power off instructions. Remove the pod from the water bottle, and give it a shake to remove the excess water. Optional: lay it out on a clean napkin or cloth to dry fully. Replace the cap on your water bottle and use as desired. For further information, contact your nearest Roving Blue® seller (see the "Where to Buy" Map on our website) or contact us directly at: sales@rovingblue.com

**NOTES:** If the water is very dirty or contains silt, it should be collected in a receptacle (such as a jerry can or bucket) and allowed to settle prior to use, preferably overnight. It is not possible to "over-ozonate" water, so if the water is still suspect, you may repeat doses as many times as you wish for additional peace of mind. A good rule of thumb is that when you can smell ozone - it has reached its saturation point in the water and will start exiting the water and can be detected by smell.

Don't operate the Ozone cycle repeatedly without opening your bottle - Pressure from the releasing O3 will build up and cause water to leak into the unit.
**Caution:** The GO3™ was designed for use with clear tap water, clear lake or stream water, or collected rainwater of unknown safety. Water with debris in it should be filtered through a cloth or coffee filter. (Be on the lookout for our Roving Blue GO3™ water filter currently under development). Once in its treatment container, which we recommend to be clear plastic or glass, examine the water carefully. If there is ***any cloudiness present***, this could be an indicator of high bacteria levels. While ozone is highly effective at killing bacteria, the GO3™ may not generate enough ozone to kill very high levels of bacteria. If in doubt, operate it repeatedly until there is a distinct smell of ozone. It is not possible to "over-ozonate" water, however, you can under-dose it. If you cannot smell the ozone, it is probably being used up by whatever contaminants are in the water. You may need to operate it many times until you can smell the ozone.

**Be Aware:** Infectious microbes can be encountered in many ways. Some other ways that infectious diseases can be spread are through:
• Foods washed in unsafe water • Contact with infected people, animals or objects • Unintentional water consumption, such as when brushing teeth, showering or swimming.

Opportunities for infection are abundant and virtually everywhere so it is important to realize that use of a Roving Blue® device does not guarantee that the user will avoid illness. To avoid microbial infection, one must take a wide range of precautions. Use of a Roving Blue® GO3™ is an important precaution, but not the only precaution that one should take.

**Ongoing Care & Cleaning:** When not in use, the GO3™ should be charged and kept in its "pod pocket". If you only travel a few times a year, plan to charge it at 6 month intervals. A good time is when you check the batteries in your home fire or carbon monoxide detectors. It should not be exposed to temperatures above 140°F/60°C or below -4°F/-20°C. To clean the unit, wash it with a soft cloth and mild soap solution. Do not submerge in water, as the pod is not waterproof and you will damage the internal circuitry. Shake off excess water and return to its pocket.

**Periodic Maintenance:** Water often contains minerals such as calcium carbonate. Like a coffee-maker, these minerals will slowly accumulate on the electrodes, and will cause the electrolysis process to slow down. When the production of ozone appears weak, you may clean the electrodes as follows:

1. Prepare a solution of tap water and regular kitchen vinegar at a ratio of 5 parts water to 1 part vinegar.
2. Place in a shallow bowl so as not to submerge the unit past the USB charge port. Dip the ozone electrode into this solution for 10 minutes. Do NOT apply power.
3. Swirl a few times and remove from the solution. Discard the vinegar solution in your dish and replace with fresh clean water. Swirl the electrode in the water to rinse. After cleaning the electrodes, normal production will resume. If it does not, very heavy deposits may require several treatments.

Enjoy your new GO3 water bottle pod and please consider leaving a 5 Star rating on Google.

**Expected number of uses:** Because this is a new product we have not performed extensive testing in real world field conditions. We would love to hear from you how it performs for you! The units at our HQ that were fully charged and used over the course of 3 days without recharging worked 50+ times before exhibiting the **RED** critical need to recharge light.

**Troubleshooting:**

If you are not able to turn the pod on, depress the button and hold it for a second time for one second before the unit would power the ozone generator to turn on. After pressing and holding the power button for a solid three seconds, The light will come on and briefly flash to indicate a " ready" state but the ozone generator will not power on until you press the button again and hold it for 3 seconds. (it will glow blue inside the bottle) We did this to prevent accidental power ups.

Our ozone generators are vastly different from the bubbler types you see on places like Ebay and Amazon. Our bubbles are very much smaller, and if you are expecting a lot of bubbles you won't see that, they are very small, more like a cloud.

if you are using really pure water, such as from an RO system or other household water purifier - our unit will not work because there is nothing for the ozone to react with - the water *has to have some impurities* -conductivity - in order for our units to work. You can verify this by adding a pinch of salt to the water.