

# HydroGenie® Operation Manual

Congratulations on your purchase of the **HydroGenie**<sup>®</sup>! You have just acquired the world's most advanced and efficient technology for the production of Molecular Hydrogen and Oxygen mixed gas on-demand, in a form that conveniently sits on a counter-top and is easily portable.

Each **HydroGenie** is hand-made in the U.S.A. with the highest quality materials and to exacting standards for a long life with very little maintenance.

Your **HydroGenie** comes completely assembled and ready for use. It has been thoroughly tested prior to shipment, so there may be moisture in the Molecular Hydrogen generator. This is normal. Simply add distilled water!

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Your HydroGenie is very safe to use and has helped thousands of people. However, there are a few things that you need to be aware of to use your HydroGenie safely. Before proceeding, please read the following warnings and information:

# Warnings:

# **Hydrogen Gas Warning**

WARNING: Hydrogen is an extremely explosive gas. This Molecular Hydrogen Generator splits Water (H<sub>2</sub>O) into Hydrogen and Oxygen. Although Hydrogen dissipates very rapidly into the surrounding air, the gas



produced is <u>ALWAYS</u> in an explosive state when in the proper concentration. <u>NEVER use in the presence of open flames or where sparks may occur. NEVER Smoke when using this device.</u> Failure to follow these instructions can irreversibly damage the Molecular Hydrogen Generator, voiding the warranty and may cause personal injury. All precautions have been taken to make this Molecular Hydrogen Generator safe for you to use. However, if you abuse it and ignore these warnings, injury may occur. Please use Common Sense!

# **Electrolyte Warning**

WARNING: The packet of electrolyte mix contains Sodium Hydroxide (NaOH, commonly known as "Lye" or Caustic Soda) which is a strong base and is a corrosive irritant and can cause skin burns. *DO NOT EAT*. If you accidentally spill any dry



electrolyte or come into contact with the mixed electrolyte, wash the affected area with Vinegar and immediately flush with water. If it touches your skin and your skin isn't as sensitive and you experience no "itching", reddening or burning, you can simply rinse with cold water until the "slippery" feeling goes away. Long sleeves, gloves and eve protection are strongly recommended when handling the electrolyte mix. Always mix in a well-ventilated area or outdoors. DO NOT **INHALE** fumes when mixing, doing so can cause lung inflammation and throat swelling. PLACE ELECTROLYTE MIX DIRECTLY INTO THE GENERATOR as described in the setup instructions. DO NOT ADD WATER to dry electrolyte mix outside of the generator. Mixing Sodium Hydroxide in water is an exothermic (gives off heat) chemical reaction and will cause the water to become warm. This is normal. Sodium Hydroxide is used in making soap and can be handled very easily and very safely when using the instructions above.

NOTE: As a comparison, Sodium Hydroxide is much less corrosive than normal household bleach, but should still be treated with respect.

#### **Carbon Monoxide Detector Information**

VERY IMPORTANT: If you have any Carbon Monoxide (CO) detectors in use in the areas where the HydroGenie is being used, the Hydrogen gas created MAY cause a FALSE POSITIVE reading on the detector, and the detector will signal an alarm condition. This is a well-known problem with Carbon Monoxide detectors that utilize electrochemical detectors in the presence of Hydrogen Gas.

The topic of other gases causing FALSE Carbon Monoxide alerts in detectors has been discussed in "Fire Engineering" magazine, as well as being documented in other industrial settings where Hydrogen gas is in use.

The Carbon Monoxide detector will not be damaged and will return to normal function once the Hydrogen gas has dissipated and is no longer in the area.

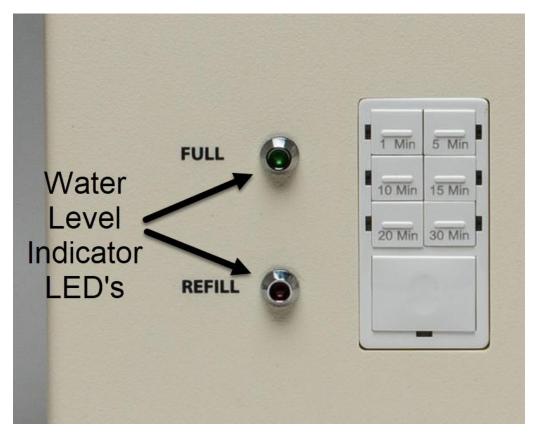
Now, that the warnings are out of the way, you're ready to take a tour of the HydroGenie!

# **HydroGenie Parts Tour:**

The following pictures show the parts of the **HydroGenie**, followed by their descriptions:



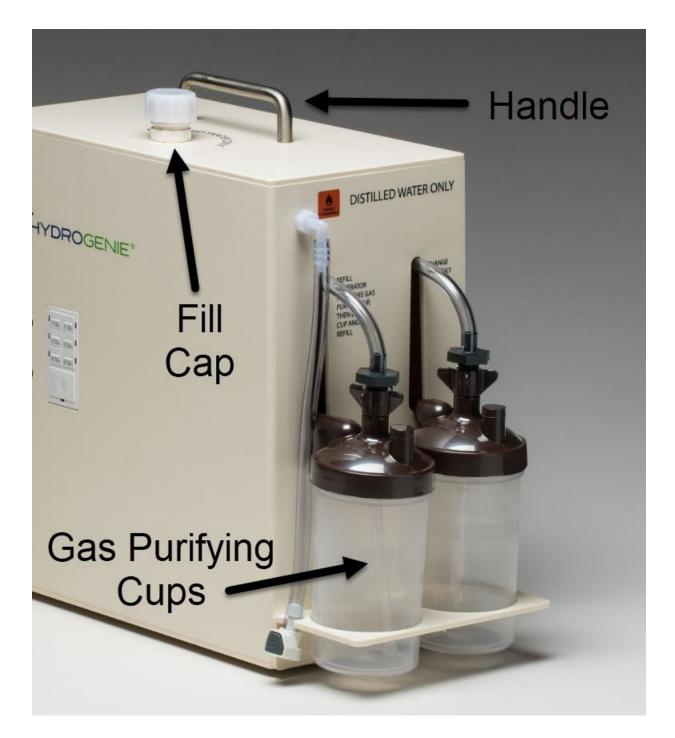
- Timer Switch
  - a. 1, 5, 10, 15, 20, 30 minute settings
  - b. Constant On mode available
- Gas Output Connector
  - a. All HydroGenie Accessories are connected here



- Water Level Indicator LED's
  - o **FULL** Illuminated Green indicates Full Water level
  - o **REFILL** Illuminated Red indicates HydroGenie should be refilled
- **Important Note:** No LED's illuminated means that the water level is above the Refill level, but below the Full level. This is where the HydroGenie will generally spend most of the time.
- **Important Note:** The HydroGenie will continue to run even with the Red "REFILL" LED illuminated, however, the HydroGenie should be refilled when you notice the "REFILL" LED is lit.

#### Additional Notes:

- Due to the way that the HydroGenie functions, the indicator lights may flicker and/or turn on/off
- o The water level rises slightly when the HydroGenie is started, this will cause the following behavior with the LED indicators. Both situations are normal!
  - Green will be on, when full, and might turn off when the HydroGenie completes its run time. It might turn back on when the HydroGenie starts again.
  - Red will be on after a timer cycle finishes, and if the HydroGenie is started, it might turn off again. You can refill the unit then.

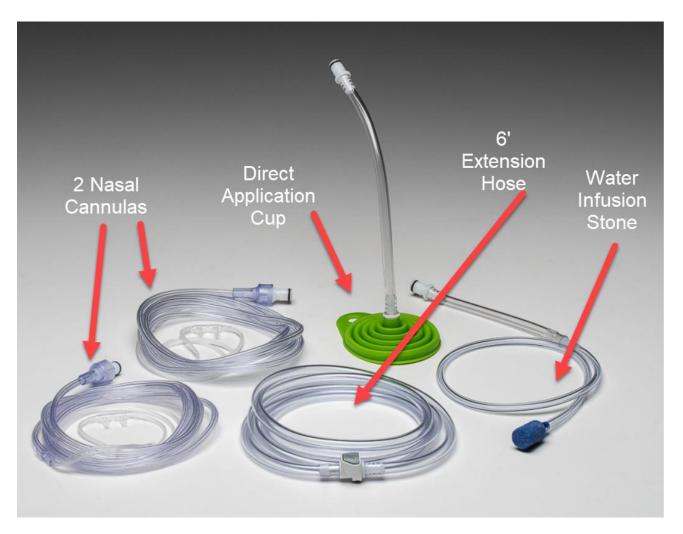


- Threaded Fill Cap
- Gas Purifier Cups
- Carrying Handle

Not Shown: 10 foot Power Cord

# **Accessories:**

The following picture shows the basic accessories available for the **HydroGenie** which are included with every order. We have other optional accessories available, and also add new accessories from time to time. For the latest list, see the **HydroGenie** website:



- 1. Two Nasal Cannulas (for Inhalation)
- 2. 6 foot Extension Hose
- 3. External Gas Applicator
- 4. Water Infusion Stone

Each accessory comes complete with a medical-grade connector that connects to the main **HydroGenie** gas output connector.

# **Assembly and First Use:**

Prior to beginning, please watch the "Setup and First Use" video on the "How To Use" page on the http://gethydrogenie.com/how-to-use/ web page. Alternatively, you can watch this video on the HydroGenie YouTube channel. Go to YouTube and search for "hydrogenie" until you see our videos. Once you've watched the video, you may proceed with setup as detailed below.

- 1. Unpack the **HydroGenie** and all accessories from the shipping box.
- 2. Check for any damage.
- 3. Place the **HydroGenie** on a level surface.
- 4. Locate the packet of electrolyte mix in the gas purifier cup on the far right of the **HydroGenie** 
  - a. ELECTROLYTE PACKET WARNING:
    - i. DO NOT EAT ELECTROLYTE
    - ii. DO NOT PUT ELECTROLYTE IN MOUTH
  - b. Carefully remove the cap by unscrewing the cup while holding the cap, and remove the packet.
- 5. IMPORTANT: Before accomplishing the following, read the **WARNING** above about Sodium Hydroxide on page 4.
- 6. Remove the fill cap on the top of the **HydroGenie** by unscrewing.
- 7. Place a towel over the **HydroGenie** to protect it from any accidental spills.
- 8. Carefully open the packet of electrolyte mix.
- 9. Using the supplied funnel, slowly and carefully pour the entire contents of the packet of electrolyte mix into the **HydroGenie** without spilling.
- 10.Plug in the HydroGenie before proceeding
  - a. IMPORTANT: The LEDs will not function without power
- 11. Notice that the "Refill" LED (Red) is illuminated
- 12. Measure about 28 oz. / 800ml of water
- 13. Slowly pour the water into the **HydroGenie**
- 14. Keep pouring slowly until the Red LED goes out.
- 15. Continue to pour until the Green LED illuminates
  - a. This indicates that the HydroGenie is full
  - b. IMPORTANT: Do Not Overfill the **HydroGenie**
- 16. Replace the fill cap and tighten hand-tight.
- 17. Fill the two plastic Gas Purifier cups with Distilled Water. (see image following instructions for proper fill level)
  - a. Only use **Distilled Water** for the Gas Purifier cups
  - b. Carefully lift one cup out of the cup holder
  - c. While holding the cap, carefully rotate the cup to unscrew
  - d. Fill cup to within ½" of the top ring (see image below).
  - e. Screw cup back onto the top and insert back into the holder.
  - f. Repeat with the second Gas Purifier cup

- g. When re-attaching the cups, make sure that the caps are not cross-threaded, which can cause leaks.
- h. Make sure that the tubing is not kinked or twisted.

#### 18. Pressure Test your **HydroGenie**

- a. Attach the Water Infusion accessory to the Gas Output fitting
  - i. Attaching the Water Infusion accessory will cause a slight pressure to build up and will verify that no leaks exist
- b. Place the Water Infusion accessory into a glass of drinking water
- c. Press the "1 Min" button
  - i. Within a few seconds, gas bubbles should begin to form in the Molecular Hydrogen generator and become visible in the clear tube.
  - ii. The gas will also begin to bubble through both of the Gas Purifier cups
    - 1. If bubbles do not appear in both Gas Purifier cups, ensure that the fill cap is properly seated and tightened.
    - 2. If bubbles still do not appear, make sure that the lids are seated correctly and not cross-threaded.
  - iii. Gas will begin to bubble through the Water Infusion Stone into the glass of drinking water.
- d. Press the "Off" button (large button at bottom of timer)
- e. Disconnect the Water Infusion Stone
- f. Press the "30 Min" button and allow the electrolyte to finish completely dissolving.

i. NOTE: The **HydroGenie** can be used while the electrolyte fully

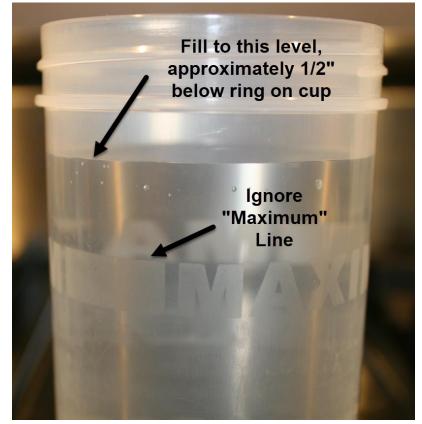
dissolves.

Congratulations!! Your **HydroGenie** is set up and ready to use!

# **Proper Fill Level of Gas Purifying Cups:**

Ignore "Maximum" line

Fill with Distilled Water to approx. ½ inch below ring at top of the cup



# **Using the Timer Switch:**

When first plugged in, the Timer Switch will flash all of the LEDs 3 times and then the LED light near the "1 Min" and large "On/Off" button at the bottom will illuminate.

The following times are available:

- 1 Minute
- 5 Minutes
- 10 Minutes
- 15 Minutes
- 20 Minutes
- 30 Minutes
- "Constant On"

To start the **HydroGenie**, simply press the desired time button. The LED associated with that time will illuminate, the light near the large On/Off button at the bottom will turn off and the **HydroGenie** will begin operation for the time selected. 10 seconds before the timer stops, the illuminated light will flash several times.



To stop the **HydroGenie** while it is running, simply press the large On/Off button at the bottom or unplug the unit.

**CONSTANT ON MODE:** To operate the **HydroGenie** in "Constant On" mode, press and hold the large On/Off button at bottom of timer switch for 4 or more seconds. The **HydroGenie** will start and NO LIGHTS on the timer will be illuminated. The **HydroGenie** will continue to run until you press the On/Off button again, or power is removed.

# Normal Usage of the HydroGenie

Your **HydroGenie** is designed to be used for 3 different types of applications:

- Inhalation
- Infusing Water
- Direct Gas Application

Before we discuss the 3 different types of ways that Molecular Hydrogen can be used for health, based upon studies, we offer a recommendation about one aspect:

Studies have shown that the hormone Ghrelin has a lot of great effects in the body. However, it is only expressed by the body when Hydrogen hits your stomach. The only way to get Hydrogen directly into your stomach is to infuse water, and then drink it. It is recommended to drink 16 oz. of infused water, once per day - at a minimum, even if your intention is to use Inhalation as your primary mode of delivery of the Molecular Hydrogen to your body.

Once again, from studies, here are the effects that Ghrelin creates in the body:

- Well known to function as an appetite stimulant (useful for Chemotherapy) if appetite is not working correctly it does not cause you to get more hungry if you are already healthy
- Secretagogue\* for Growth Hormone
- Neuroprotective (protects nerves)
- Enhances Cognition
- Favorably impacts vascular health
- Exerts anti-inflammatory activity (useful in autoimmune disorders)
- Is markedly Hepatoprotective (protects the blood)

Now, let's discuss the 3 ways that Molecular Hydrogen can be used to increase your health!

<sup>\*</sup> A secretagogue is a substance that causes another substance to be secreted

# **Inhalation:**

The gas that the **HydroGenie** produces has been shown to be completely safe through many studies and even testing by the U.S. Navy for deep diving without exposing divers to the risks of Decompression Sickness, commonly known as *The Bends*.

Inhaling the gas gives the body an enormous amount of Molecular Hydrogen and makes it immediately available to the body by having the lungs directly transmit it into the blood. One minute of inhalation is equivalent to the power of 30+ liters (quarts) of infused water for drinking!

To inhale the gas, simply connect a Nasal Cannula to the unit and insert into your nose, with nasal tubes pointing downward. Then gently position each side of the tubing over the top of your ears and let it fall down the back side of the ears, and hang under your chin. You're now ready to experience the power of direct inhalation!

Before stating the recommendations, let's start with the fact that Molecular Hydrogen is a gas that is already known to the body - it is made in the intestines each day in a quantity of about one liter. It is not a foreign substance and the body knows what to do with it. There has been no unsafe upper limit determined, and several customers have added it to their sleep regimen, breathing it the entire night. However, as with anything new, it is always prudent to start slowly, and then increase over time.

**Starting Out:** Because Molecular Hydrogen is highly available in the gas and so easily absorbed through the lungs, it is recommended to begin breathing 1/2 hour per day in the beginning. After a few days, you can increase to 1/2 hour in the morning and 1/2 hour in the evening.

**Daily Usage:** Once your body has experienced the Molecular Hydrogen gas for the first week with the *Starting Out* protocol, you may begin to increase the time, if you desire. If possible, breathe the gas at least 1/2 hour morning and evening, or as you desire throughout the day. Results will happen faster if you can breathe 1-2 hours (or more) per day. The eyes are the organs most susceptible to oxidation stress. People who breathe the gas longer have reported sharpening of their vision in as little as four weeks.

**Advanced Usage:** You can continue to increase the time as you feel right for your body. Some customers will use the Nasal Cannula while they work at their desk, as it doesn't interfere with work, or even with speaking on the phone. Another way to use it is to sleep with the Nasal Cannula attached and enjoy Molecular Hydrogen the entire night. Experiment to find out how you'd like to use it to enhance your life!

**Some Thoughts on Inhalation Time and Duration:** Each breath you take provides your body with 78% Nitrogen, 21% Oxygen, and 1% other gases. These go into the

lungs, are absorbed into the blood and then are circulated to cells in the body. However, that one breath does not reach all of the trillions of cells in your body instantaneously. The body is replenished only over time - with a continuous stream of the gases that the body needs. The blood is also removing Carbon Dioxide and other gases on each breath exhale, as well, so things are really busy. In similar manner, Molecular Hydrogen is available only while it is dissolved in and circulating in the blood. Studies show that within 12-15 minutes, the blood becomes saturated with Molecular Hydrogen and the blood can carry it to the trillions of cells in the body - but, once again, one breath does not reach all cells - it is a constant availability that allows the Molecular Hydrogen to start to reach into the recesses of the body and do its job. Think about the time that you're willing to commit to changing your life with Molecular Hydrogen. When attempting to make serious changes in the body, studies show that *longer is better...* 

**Cleaning the Nasal Cannula:** Go to the sink, hold the nostril holes down, and let the water run over it. Then gently rub it between your fingers. Dry it with a towel and your Nasal Cannula is now ready for the next usage.

**Odors and Smells:** The new Nasal Cannulas might have a slight "plastic" odor when it is first used. This will go away over time. If you are sensitive to this odor, simply hook the Nasal Cannula up to the **HydroGenie**® and let it run for several hours until the odor is eliminated. Molecular Hydrogen has no odor or smell, but Oxygen does. You may notice the smell of Oxygen as you're breathing, and this is expected and normal.

**Breathing CAUTION:** It is important to breathe *normally* when using the

**Nasal Cannula.** Over-breathing (similar to Hyperventilation - breathing too often, too deeply and too fast) can lead to light-headedness. When you are breathing too much, too fast or even too deeply on each breath, you can cause an imbalance in the blood chemistry known as Alkalosis of the blood. This occurs when the body removes too much Carbon Dioxide from the blood. This is not the Molecular Hydrogen causing the lightheadedness, but simply too much breathing. Relax and breathe normally and this will not occur.

# **Infusing Water with Molecular Hydrogen:**

**HydroGenie** makes it simple to infuse Molecular Hydrogen into drinking water. Infusing the water will accomplish the following:

- Infuse (dissolve) Molecular Hydrogen into the water
- Raise the pH of mineral waters (8.5 or more)
- Lower the ORP (get ORP reduced to -407 in 10 minutes!)
- Infuse (dissolve) Oxygen into the water
- Greater hydration is possible with this water, as the surface tension is reduced
- Other benefits that science is just starting to understand

To infuse the water, connect the infusing stone accessory to the **HydroGenie** and place the infusion stone into a glass of clean water. Hydrogen dissolves more readily into colder water, so feel free to refrigerate the water prior to infusing, for maximum absorption of Molecular Hydrogen into the water. However, even at room temperature, great infusion rates occur, as show below.

**Recommendation:** Fill a 16 oz. (500 ml) glass with water and press the "5" minute button. Our testing has shown that this has the greatest benefit in the least amount of time. Infusing longer will provide more available dissolved Hydrogen and Oxygen, but the table below shows the amount of time needed for greatest benefit in the shortest time. Infuse and drink this water TWICE per day, **at a minimum**.

If you have 2 people that want to drink the water, put the infusing stone in a quart (32 oz./1 liter) of water and bubble for 10 minutes, then share.

**Tip:** When pouring the infused water, treat it like a fine Champagne, and gently pour down the sides of a glass. Agitation will remove the dissolved gases, similar to any carbonated beverage. Gentleness is recommended for maximum retention.

Here is a chart that lists the times for optimum water infusion with the **HydroGenie**<sup>®</sup>. If water is warmer, increase the time:

Quantity (@ 68 degrees F)	Recommended Time
8 oz / 250 milliliters	5 minutes
16 oz / 500 milliliters	5 minutes
32 oz / 1 liter	10 minutes
64 oz / 2 liters	10 minutes
1 gallon / 4 liters	15 minutes
5 gallons / 20 liters	30 minutes

Drink the water as soon as possible, as the dissolved Hydrogen will begin to escape immediately after infusion. Similar to how soda loses its "fizz" when left open. Complete dissipation occurs over time, with the half-life of infused Hydrogen being about 2 hours (at 2 hours, only one-half of the infused Hydrogen remains in the water), if left undisturbed. The Hydrogen will escape more quickly with agitation or large surface area.

To gain the full health benefits of drinking this special water, it is recommended that you use "Well" water, Natural Spring water, Reverse Osmosis water, or filtered water for this. It is not recommended to use normal "City" or "Tap" water with chlorine, flouride, etc. Use that only as a last resort, if you have no access to the other waters mentioned. If you are considering using Distilled water, that is fine, also.

**Recommendation:** For even better infusion rates, use metal (Aluminum\* or Stainless Steel) drinking water bottles. Hydrogen will not escape as quickly because metals (Aluminum, specifically) more effectively contain Hydrogen.

\* Important Safety Note: There has been a lot of concern about Aluminum and Alzheimer's. However, because of the nature of drinking water and Aluminum, unlined Aluminum bottles are not a concern, as Aluminum oxidizes in drinking water immediately. This oxidation process places a protective barrier between your drinking water and the Aluminum metal - the container is "lined" with a layer of protection. The Aluminum of the unlined drinking water bottle never comes into contact with your drinking water. Therefore, you are not in danger of getting Aluminum particles or ions in your water. If you are still unsure, you may use Stainless Steel - but it will not be as effective in containing the Hydrogen in the water for longer storage. See our YouTube channel for the results of the Aluminum test we did after 51 hours of water exposure in an unlined Aluminum bottle. Always buy a high-quality Aluminum drinking water bottle and enjoy the extra potency of the infused water.

#### **Novel Uses for infused water:**

- You can water your plants with the infused water and watch what happens!
- Use as a skin toner after washing your face, neck and hands. Splash/spritz on, and let air dry
- Use to help with minor burns (Sunburn, 1st and 2nd degree). Soak in infused water for several minutes or apply to burned area and keep moistened by wetting occasionally and enjoy the results! When immersed, results happen within a few minutes, when moistening skin, changes can occur in as little as 30 minutes.
- Place wash cloth on sore muscles and soak with infused water.
- Use after shaving to reduce skin irritation and redness.
- Bug bite and stings: Apply water to area and keep wet. Pain can subside in a short time.

Apply to wounds to promote faster healing. The water contains Oxygen in an active state which studies show may also promote healing. <u>WARNING: DO NOT RELY SOLELY ON INFUSED WATER FOR WOUND CARE.</u> Infused water is NOT a substitute for proper wound care. If you experience redness around the wound, immediately consult your physician, or if you have any other medical questions.

And now, a word about how long the Hydrogen Gas will last in containers:

#### **Dissolved Hydrogen Water Test Results**

**Test Conditions:** All water was close to room temp (approx 68F / 20c) - with "cold start" (room temperature) of the unit, so it was producing the least amount of gas that will be produced during normal usage. This means that even more will be available to dissolve when the generator is heated up and producing maximum gas. In studies, .5 PPM is the accepted minimum for therapeutic effects.

**10 minutes: .504 PPM** (over the rapeutic recommendation \*\* of .5 PPM)

**15 minutes: .662 PPM** 

<sup>\*</sup> In testing, Aluminum amplifies the dissolved Hydrogen concentration by quite a bit, so this is lower than expected with Aluminum. I'm not aware of any convenient 1 Gallon size Aluminum containers, so these are real-world numbers.

<sup>\*\*</sup> In studies, effectiveness was shown to occur when dissolved Hydrogen levels were over .5 PPM

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#### Shelf-Life Test - "Storing and Giving To Neighbors Test"

Well Water, 1 Liter Aluminum container, bubbled 10 minutes (assumed starting concentration of approx. .861 PPM, which was not tested because agitation needed for test would cause loss of dissolved Hydrogen), container sealed with plastic cap and stored upside down (turned over gently to minimize disturbing the dissolved Hydrogen) to minimize Hydrogen leakage through plastic cap:

**Aluminum Bottle 1 -- 12 Hours: .604 PPM** (approx. 30% loss) **Aluminum Bottle 2 -- 24 Hours: .439 PPM** (approx. 50% loss)

50% drop in 24 hours, yields a 12-fold increase in storage time vs. the standard "2 hour" half-life of dissolved Hydrogen. But, even stored in Aluminum and upside-down, it gets out quickly...

#### "H2 Blue" Drops and Other Hydrogen Testers

The "H2 Blue" drops available for sale on the internet for measuring dissolved Hydrogen **WILL NOT WORK** with water infused with the HydroGenie. The reason for this is that the chemicals in the H2 Blue drops are meant to read the amount of "reducers" in a solution (Hydrogen is a reducer) and the solution cannot have any oxidizers (Oxygen is an oxidizer) present, otherwise the chemical test will not work accurately – in fact, it will be WAY OFF and not reliable.

The HydroGenie infuses BOTH Hydrogen and Oxygen, and therefore, both Hydrogen and Oxygen are dissolved and present in the water, once infusion has occurred.

We have reached out directly to the manufacturer of the H2 Blue drops, and they told us that the H2 Blue drops will not work when dissolving both Hydrogen and Oxygen.

This same situation happens with the "Hydrogen Meter" out of Japan (costs a couple-hundred dollars). That Hydrogen meter is a glorified "ORP" (Oxidation-Reduction Potential) meter that, once again, cannot read Hydrogen accurately in the presence of Oxygen.

We reached out to Tyler LeBaron of the Molecular Hydrogen Institute for clarity on this issue, and he recommended using a Hydrogen meter that ignores all other items in the water and compares the based upon his information located

Since portable testers in the U.S. run \$10,000-\$15,000 each (they are used in the nuclear power industry to test streams, etc.), we purchased a tester from Russia for a more reasonable (4-digits) price, after discussing the mechanism that it uses with Tyler LeBaron. It tests against a known concentration (Sulfuric Acid) and Tyler was confident it would give proper results, as that is what is required.

This meter ignores EVERYTHING else but Hydrogen, and this is the tester we used

for the concentration tests above.

Lastly, here is a quote from their website selling H2 Blue drops:

"It [H2 Blue] is not a laboratory grade solution and is not 100% reliable as there are meters and electronic devices that cost hundreds to thousands of dollars to test the presence of molecular hydrogen and its concentrations properly. H2 Blue is a more cost effective way of testing molecular hydrogen but should not be relied on to prove concentrations, present in water."

# **Direct Gas Application:**

Some wonderful things have been observed when applying the gas directly to areas of pain, etc. Hook up the Extension Hose and then connect the flexible Gas Applicator. Once connected, use it to apply the gas to a particular spot. Results that last can happen in as little as 10-15 minutes.

You may also use a re-sealable plastic storage bag to place your hand or foot into, and then, connect one end of the Extension Hose to the **HydroGenie**, and place the other end of the Extension Hose into the bag and seal it down so that the gas cannot freely escape. Placing the open side of the bag facing down will let the gas collect in the bag so that it can be applied to the hand or foot.

When you have pain that is acute, apply the gas directly to the point of pain. When you have finished applying the gas there, it is recommended to also place the Applicator Cup underneath the area having pain, and let the gas flow UPWARDS through the location. This is particularly important for joints, etc. In this way, the gas has a better chance of getting into the area that needs help.

Research has shown that Molecular Hydrogen as produced by the **HydroGenie** may assist the body's natural healing processes in the following conditions:

- Muscle aches and pain
- Tight muscles
- Joint pain
- Arthritis Pain (including Rheumatoid)
- Contusions
- Bumps
- Bruises
- Gout
- Inflammation
- Lumbago

- Unknown Reason for Joint Weakness/Pain
- Proprioceptor mis/dysfunction
- Instability of Joints in doing certain activities

For help with hands, attach the Extension hose to the Gas Output and place into a baggie (zippered baggies work well). The following picture illustrates how to do this:



Experiment with direct application and let us know what you find helpful.

# **Portability:**

The **HydroGenie** is extremely portable. Not only is it lightweight, allowing you to move it about your home, but it also will work in an automobile with an AC power inverter adapter. **ONLY a "Pure Sine Wave" inverter will work consistently. DO NOT purchase a "Modified Sine Wave" inverter.** You can find the correct AC inverters online - they are the more expensive version of an inverter, and not the cheap variety that are available everywhere. As long as it is kept upright, you can take your **HydroGenie** with you when you go on the road. Some people have used inhalation even while driving, to experience the benefits of Molecular Hydrogen while they travel. Please be careful not to tip it over, or spill. Storing on the floor behind the driver's or passenger's seat is a stable place for travel. In an automobile, use a 20 Amp fused circuit to provide ample power.

# **Very Important Power Source Information:**

The HydroGenie is factory-set for the AC power source that you specify when ordering. Either **120v 60hz** or **240v 50hz**. When set to 240v, if the HydroGenie is plugged into 120v, the generator will not function, and no power will be supplied. **However, if set to 120v and plugged into 240v, the power supply will be instantly destroyed as soon as you press the Timer Switch. This voids the warranty on the power supply, and the HydroGenie will cease to work. If this occurs, we can sell you a replacement power supply.** 

#### The Cooling Fan:

The cooling fan is designed to keep the **HydroGenie** cool so it does not exceed its operating temperatures. Please make sure that the fan is not blocked and can provide a cool breeze to the **HydroGenie**!

# A Word About "Vitamin C":

Because of the selective anti-oxidant nature of Hydrogen, we recommend that people avoid taking additional synthetic "Vitamin C" supplements. Esther C and other forms of synthetic Ascorbic Acid should be avoided. The reason is that these supplements are chemicals that indiscriminately interact with any oxidation radicals that they encounter. The body relies on oxidation radicals to do many jobs, and they are not all the enemy. The enemy is actually imbalanced oxidation stress – something that Hydrogen balances and restores to working order.

By taking synthetic chemicals, you are "shooting yourself in the foot" in the battle against oxidation stress, so it is best to avoid it entirely. If you are under the care of a health professional, please feel free to discuss this information with them, as they may not be familiar with the life-changing nature of Hydrogen.

To be clear, we're not discussing Lemons, Limes, Oranges, Melons, Kiwis, etc. These are all forms of NATURAL and real Vitamin C, including all of the healthful bioflavonoids. Eat all you want of these!

If you are currently taking a multi-vitamin that contains Ascorbic Acid, don't worry too much about this, as these are usually only about 200mg. Avoid mega doses of synthetic forms and see what amazing things can happen when true homeostasis is allowed to reign in your body's cells!

# Maintaining your HydroGenie

There are no customer serviceable parts on the **HydroGenie**. However, with proper maintenance, your **HydroGenie** will provide years of high-quality Molecular Hydrogen production. The main activities are:

- Refilling your **HydroGenie**
- Changing the Gas Purifying Cup water
- Deep Cleaning the Generator

#### Refilling your HydroGenie

During the course of normal operation, Water  $(H_2O)$  is broken down into its components of Hydrogen and Oxygen, creating the gas that exits the machine, and the water level will decrease. When this occurs, *the electrolyte remains in the generator*, but more distilled water needs to be added.

When it is time to add more distilled water, the Red "Refill" LED will illuminate.

**IMPORTANT: Only use Steam** Distilled water to refill the **HydroGenie generator.** If you ever take off your cap and see a "gray" build-up, this is an indication that the distilled water you're using is not pure. Some stores are selling Reverse Osmosis (purified) water as "distilled" – however, unless you see the words "Steam Distilled" or "created with steam distillation". that water should never be used in your HydroGenie. Here is what the inside of the fill cap looks like when using "purified" water that is not truly distilled:



#### To Refill, follow these steps:

- 1. Always use a towel to protect the HydroGenie from accidental spills!
- 2. Remove the fill cap on the top of the **HydroGenie** by unscrewing.
  - a. Rinse the cap thoroughly in the sink
  - b. Wipe the threads on the **HydroGenie** fill port with a damp cloth
- 3. Make sure that the **HydroGenie** connected to a power source (plugged in), but not turned on. This allows the "Refill" and "Full" indicator lights to illuminate.
- 4. Using a funnel, carefully add distilled water until the Green "Full" LED illuminates.
  - a. Be careful to not add the water too fast and cause the fill port to overflow
- 5. Replace the fill cap and tighten hand-tight.
  - a. DO NOT OVERTIGHTEN it doesn't take too much to seal the cap, just a firm twist of the cap.
  - b. While running the machine, tighten the cap just enough so that bubbles begin to appear in the Gas Purifier cups.
  - c. If no bubbles are showing up in the Gas Purifier cups, you may need to tighten the cap a bit more.
  - d. If the cap it tightened, and no bubbles are coming out, you may have a cross-threaded lid on the Gas Purifier cup.
- 6. Finally, hook up your Infusion Stone and do a "pressure test" to make sure everything is properly connected.
- 7. You are now ready to continue using your **HydroGenie**.

#### **Changing Gas Purifier Cup water:**

It is very important to change the water in the Gas Purifier Cups. Refilling the generator from the Gas Purifying Cup indicated will accomplish this task. These instructions are written on the HydroGenie near the Gas Purifying Cups. Additionally, changing the other Gas Purifying Cup at the interval recommend will ensure that the purity of the Molecular Hydrogen gas will be maintained for greatest health benefits.

Why are the Gas Purifier Cups necessary? The Gas Purifying Cups, as the name implies, are there to purify the gas coming out of the generator. There can be an odor that comes out of the generator, caused by a mist of water vapor when the generator is running full-blast caused by bubbles of gas popping at the top of the column of water. The gas is pushed out of the generator with some speed, and will sometimes carry a bit of this electrolyte vapor with it. This especially happens when the water level is very high in the generator (Full level), and decreases as the water level lowers as it is disassociated and turns into gas. The Gas Purifying Cups are designed to capture and remove any remnants and odor from this vapor. The gas then exits the last Gas Purifying Cup and is delivered for use.

If you smell any odor, this is only the odor from the water in the Gas Purifying Cups, and it signifies that they are getting saturated with impurities and should be changed. It is NOT the electrolyte from the generator. Generally speaking, the interval of refilling the generator will suffice to keep the water clean, as you refill from the indicated cup, and then discard and refill. If the cup still has an odor, the manual recommends rinsing and drying, then refilling before attaching to the generator.

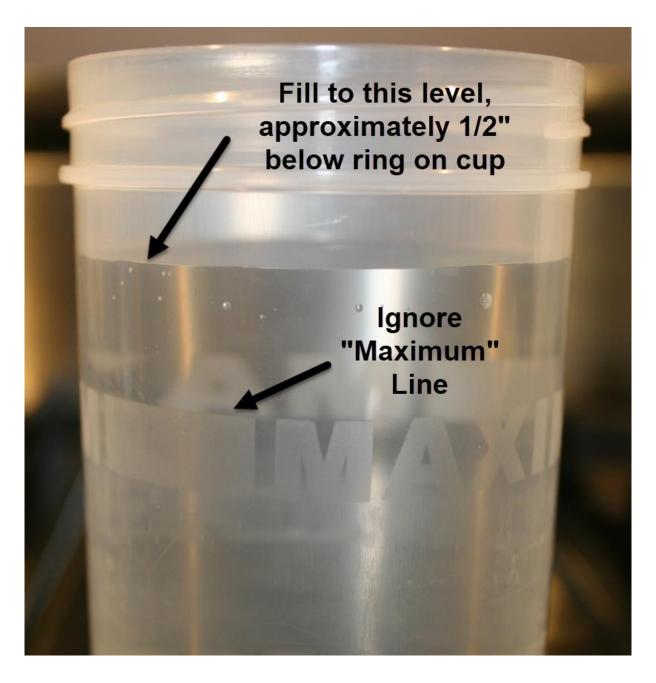
#### **ONLY USE DISTILLED WATER** for the Gas Purifier cups.

**IMPORTANT**: If you ever smell any odors or see bubbles lingering at the surface in either Gas Purifier Cup, change the cup immediately. This indicates a high concentration of impurities.

To change the water in the Gas Purifier cup, follow these steps:

- 1. Carefully lift one cup out of the cup holder
- 2. While holding the cap, carefully rotate the cup to unscrew
- 3. Refill the generator until "Full" LED illuminates, then discard the remainder down the drain.
  - a. If either cup being changed has an odor after discarding the water, please rinse the cup out at a sink and then dry before refilling
- 4. IMPORTANT: Only use Distilled Water for the Gas Purifier cups
- 5. Re-fill the cup with water to about 1/2 inch above the "Maximum" line
- 6. Screw cup back onto the top and insert back into the holder.

- 7. Repeat with the second Gas Purifier cup
- 8. When re-attaching the cups, make sure that the caps are not cross-threaded, which can cause leaks.
- 9. Make sure that the tubing is not kinked or twisted.
- 10. Check to make sure that the system is working properly by attaching the Infusing stone and bubbling some water for a few seconds (pressure test). If any of the Gas Purifying cups are cross-threaded, this will tell you immediately.



#### **Deep Cleaning the Generator:**

It is very important to Deep Clean the **HydroGenie** at the intervals indicated below for maximum gas output and generator life:

	Clean:	If you use:
•	Every 8 – 12 Months	Less than 2 hours per day
•	Every 4 - 6 Months	Up to 4 hours per day
•	Every 2 - 3 Months	Over 4 hours per day

Deep Cleaning will remove any sort of build-up\* on the internal parts of the Hydrogen Generator, restoring full functionality and maximum Hydrogen gas production. If you notice a decrease in bubble quantity, this is usually a sign that a Deep Cleaning needs to take place. Please purchase a Deep Cleaning package on the website that includes a packet of cleaner and a fresh packet of electrolyte.

Directions for deep cleaning the **HydroGenie** are included when you purchase the Deep Cleaning kit.

\*A word about the process of Electrolysis: Electrolysis is a surprisingly violent process of running Direct Current (DC) through metal plates and an electrolytic solution, thereby disassociating the water into its parts: Hydrogen and Oxygen. During this process, a natural side-effect is to draw Carbon and Iron (used in making Stainless Steel) out of the Stainless Steel plates themselves. These particles of Carbon and Iron, are non-reactive and stay in the generator and will not cause any contamination of the gas. A Deep Cleaning cycle will remove these Carbon and Iron deposits from the generator surfaces and rinsing will remove them from the HydroGenie.

# **Troubleshooting:**

The **HydroGenie** is designed to be extremely simple to operate, but sometimes things can go wrong.

**GFI/GFCI Outlet is "tripping":** An outlet equipped with GFI (Ground Fault Interrupt) or GFCI (Ground Fault Circuit Interrupt) is an outlet that compares current going out, to current coming back and will disconnect the circuit (like a circuit breaker) if it senses something is not right with current flow. If this is happening when you plug in the **HydroGenie**, please unplug the HydroGenie® and examine the wires on the **HydroGenie** to ensure that they are properly connected and did not get bumped during shipment, and that no wires are touching across terminals. If any wires are loose or broken, be sure to unplug the HydroGenie® and loosen the screw for that wire, and re-insert the stripped wire back into the terminal block.

If no wires were damaged during shipping, try another non-GFI/GFCI outlet to make sure that everything is working. GFI/GCFI outlets sometimes go bad. The **HydroGenie** pulls very little power, so it should not "trip" the outlet under normal circumstances.

If the **HydroGenie** still will not function, please contact us immediately.

**No bubbles in Purifier Cups:** If the unit is running, but no bubbles are appearing in the Gas Purifier Cups, attempt to tighten the fill cap slightly.

If the fill cap is tight, but bubbles are not appearing, hold a finger over the Gas Contraction Valve. If this fixes things, see Gas Contraction Valve maintenance below.

**Bubbles in the back Purifier Cup, but not the front**: If bubbles are in one Gas Purifier Cup, but not the other, check to make sure that the Gas Purifier Cup lid is not cross-threaded and is secure.

Bubbles appearing in both Purifier Cups, but nothing coming out of the Infuser: If bubbles are appearing in both Gas Purifier cups, but the Infuser is not bubbling, check to make sure the front cup is not cross-threaded.

# **HydroGenie Pressure Test:**

The HydroGenie Pressure Test will ensure that ALL connections are properly sealed and the system is working. It is recommended to do this test after all water changes or adding water to the **HydroGenie**. To perform the **HydroGenie** Pressure Test, follow these steps:

- 1. Connect the Infusing Stone to the **HydroGenie**
- 2. Place Infusing Stone into a glass of drinking water.
- 3. Turn on the **HydroGenie**
- 4. After a few seconds, the Infusing Stone should begin to bubble in the glass of drinking water.
- 5. If the Infusion Stone bubbles in the glass, the test is done.
- 6. If the Infusion Stone does not begin to bubble, check the following:
  - a. Fill Cap make sure it is threaded correctly and tight
  - b. Make sure bubbles are in both Gas Purifying Cups
    - i. Check both front and rear cups
  - c. Make sure Infusion Stone is correctly attached to the Gas Supply Port
- 7. You are now ready to use the **HydroGenie**

# Warranty:

The **HydroGenie** comes with:

- 3 year warranty on the Molecular Hydrogen Generator\*
- 1 year warranty on the electronic power supply, timer switch and cooling fan.

\* The Molecular Hydrogen Generator is designed and built to last for a very long life - even with many hours of daily usage. Proper maintenance, including periodic Deep Cleaning will allow the Generator to function for many years.

**Important Health and Legal Disclaimer:** The FDA has not evaluated any of the statements in this manual. The HydroGenie is not a medical device and is not meant to diagnose, treat or cure any disease in the legal, medical definitions of those terms. Please see your doctor if you think you need to get medical advice.

For more information about health and conditions that Molecular Hydrogen has been found useful for, search "molecular hydrogen" on the internet.

#### For other accessories and more information:

http://www.gethydrogenie.com

For instructional videos, visit our website:

http://www.gethydrogenie.com/how-to-use/

You can also visit our YouTube channel:

https://www.youtube.com/channel/UCxTQ9zJobjis6UdqIZCWGWQ

(or go to YouTube and search for "hydrogenie" and the channel and videos will appear for you to click on)